THE MUSEUM INNOVATION MODEL: 
A MUSEUM PERSPECTIVE ON OPEN INNOVATION, 
SOCIAL ENTERPRISE AND SOCIAL INNOVATION 

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Thesis Abstract

The Museum Innovation Model: A Museum Perspective on Open Innovation, Social Enterprise, and Social Innovation

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This PhD research has aimed to contribute towards building a museum perspective of innovation, a contribution that preserves the essence of the term but more importantly takes into consideration the unique role of museums in society. Hence, this research identifies museum innovation as the new or enhanced products, processes or business models by which museums can effectively achieve their social and cultural mission. To our knowledge, this is the first attempt for a museology research to provide a definition for innovation.

Furthermore, this research presents a possible model of innovation in museums, called the Museum Innovation Model (MIM). The theoretical framework of the model is based on three concepts, open innovation, social enterprise, and social innovation, each of which, the research observes, are growing trends in the museum sector. These three concepts are interconnected and together can present a formula for innovation in museums. The formula is expressed simply as: museums that adopt social enterprise business model and utilize open innovation strategies are capable of achieving social innovation. The model aims to make innovation in museums scalable, replicable and feasible to start and operate.

This research, also attempts to supply the museum studies literature with some terminologies and conceptual frameworks related to innovation. These new entries can bridge ideas and create common grounds with other disciplines such as business studies, which can facilitate future collaborations between academics and practitioners from both sides. Additionally, the clarity of innovation related concepts and terminologies within the museum context can provide the museum sector, internally, with a clearer, more effective, and eloquent way of communicating ideas, projects, goals, objectives, and expectations.
Acknowledgements

I cannot express enough thanks to Sebastian Chan, Chief eXperience Officer at the Australian Centre for the Moving Image (ACMI); Richard Evans, President of EmcArts; Robert Stein, Deputy Director of Dallas Museum of Art; Robert Janes, Editor-in-Chief Emeritus of the Journal of Museum Management and Curatorship; Toni Kiser, Assistant Director of Collections & Exhibits/Registrar at the National WWII Museum; Tony Butler, Director of Derby Museums; Jesse Alter, Web Producer at Imperial War Museums and all the participants for their valuable contributions to this body of research. Special thanks and appreciation to Dr. Henry Chesbrough, Professor of Business Studies at Haas School of Business, University of California, Berkeley for his insightful comments and for sending me a draft of his article, Social Open Innovation almost a year before it was published in his latest book, New Frontiers in Open Innovation.

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This work is dedicated to my daughter, Lilah Eid and my son, Zayd Eid for being the light of my life. I am deeply in love with you.
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Chapter 1

Introduction

1.0 Research Question

In recent years, innovation has become a topic of significant interest among museums and has dominated the discussion in museum conferences, workshops, and seminars. Typical of this interest, in spring 2015, a group of fifty museum professionals, academics, thinkers, and policymakers met at the University of Cambridge to discuss the topic of innovation in museums. The conference was organized by the UK-based Museums Computer Group (MCG), an independent organization that provides a forum for practitioners working in museums, galleries, and archives as well as academics, officials and other stakeholders to meet and discuss timely and important topics in the museum sector.

Of all the challenges and crucial issues that face museums now, on which this influential community of practice could have focused, the MCG chose to discuss innovation in museums - wondering in particular if innovation has become the “Emperor's new clothes?”, and reflecting how “innovation” had become the official regalia that some museums may need to have in order to appear as leaders in the sector. Such was - and continues to be - the draw, timeliness and significance of this issue for the sector.

This thesis attempts to address the topic of museum innovation asking a clear and precise primary question: how can museums cultivate innovation? Subsequently, in its objective to address the primary question, posing a set of secondary questions becomes necessary. For example, what is “innovation” in the first place? How is it defined? Why are some museums succeeding in adopting innovation, while others are struggling to do so? And, moreover, how can museums plan, implement, and evaluate innovation?

As the research questions are being considered, it is probably relevant here, at the outset, to clarify two points which will have important implications as to the direction this research will take. The first is that most of the business innovations we know have been developed in the enterprise sector, a reality that creates an umbilical link between
innovation and enterprise. In other words, enterprise seems to be the typical and natural context in which innovation has been historically nurtured and thrived. The second point is, theoretically, innovation as a topic has received a great deal of attention in the literature of business studies, resulting in a wealth of knowledge and a huge number of conceptual frameworks. These two reasons make “innovation” a business-oriented concept, associated with enterprising values such as profit making, market share, competitive advantage, and business models.

The Principal Business Resource for the Australian Government, for example, suggests that “innovation generally refers to changing or creating more effective processes, products and ideas, and can increase the likelihood of a business succeeding.” Innovation in essence is about capitalizing on creative ideas by creating new values or exploring new markets. It is tightly linked to performance and growth through improvements in efficiency, productivity, quality and competitiveness. In business, innovation can be defined as “the development of new customer’s value through solutions that meet new needs, inarticulate needs, or old customer and market” (Patil & Athawale, 2014). The Business Dictionary puts it in clear and bold terms, “To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need”. Hence, the concept of innovation is directly linked to the success of the company in increasing its profit and expanding its market share.

Given this context, this research seeks to understand how innovation in museums can possibly be different from the business conceptualization of innovation. Thus, the overall objective of this work is to contribute to the ongoing efforts to build a museum perspective of innovation – a contribution that builds on what has already been accomplished, preserves the essence of the term and, more importantly, considers the unique values of museum work. This contribution is represented in two major areas:

- **Definition of museum innovation:** this research suggests that museum innovation can be defined as *the new or enhanced processes, products, or business models by which museums can effectively achieve their social and cultural missions.*
- Museum Innovation Model: this research introduces a possible model for innovation in museums based on three essential concepts: open innovation, social enterprise, and social innovation. It is argued that these concepts are interconnected and together can present a formula for innovation in museums. The formula might be expressed simply as: “museums that adopt social enterprise business model and utilize open innovation strategies are capable of achieving social innovation” (Eid, 2016).

2.0 Research Context

Drawing upon theories from the literature of museology, business studies, and digital media, this research is a multidisciplinary investigation to understand how museums can possibly cultivate innovation, with a special interest in digital innovation.

Within the museum context, due to economic and political motives, museums in the United States and United Kingdom have been encouraged, and sometimes pressured, to embrace innovation. This is represented, for example, in Ed Vaizey’s keynote speech at the 2010 Association of Museums Conference in Manchester (UK), in which he tried to persuade museums to cultivate “innovative thinking” (Vaizey, 2010). Vaizey is the former Minister of State for Culture and the Digital Economy in the United Kingdom. In his address, he challenged the sector to reconsider how museums operate and to spend more efforts in order to embed innovation in their work. The UK museum sector, at that moment, was confronted with a key government minister, encouraging them to adopt a concept (i.e., innovation) that has not been conceptually part of mainstream discussions within the museum discourse.

Additionally, funding schemes on both sides of the Atlantic continue to feed this innovation trend among museums through specialized grants and programs. The American Alliance of Museums project, Museum Innovation Lab, for instance, encourages museums “to design, research and prototype innovations, testing novel approaches to field-wide challenges in a laboratory-like setting” (EmcArts, 2012). The examples of what is observed as an innovation movement among US and UK museums are numerous as will be discussed in detail in the next chapter. To name one, Dallas
Museum of Art established a $300,000 project to create a Laboratory for Museum Innovation, which aims to “produce focused and highly innovative digital projects that will positively impact visitor experience at the DMA and offer a broad application to the global museum community” (DMA, 2012). This innovation movement aims, according to the AAM’s Center for the Future of Museums, to create the necessary tools for museums “in order to successfully navigate the rapidly changing landscape of the 21st Century”.

However, this movement among museums is faced with very limited conceptual frameworks in the museum studies literature, underscoring the ambiguity of museum innovation as a concept, and a gap between the practice community and academia, which can potentially hinder the aspiration of museums to embrace innovation.

According to Johnson (2001), the clarity of what innovation is (along with enterprise and entrepreneurship) is crucial to achieve a successful performance. He also argues that “confusion and uncertainty leads to lower levels of competitive output” (Johnson D., 2001). Add to this the point that innovation is a business-oriented concept that deals with business factors such as the organization’s competitive advantage, market share, revenue streams, business models, and R&D. On the other hand, museums are social institutions, which operate (or at least most of them aim to operate) as non-profit organizations and the concepts attached to innovation, from a theoretical point of view, might be thought to be at best challenging, and at worst anomalous or incompatible. This dilemma can make innovation a problematic concept for some museums. With a sensibility to this context, this research seeks to contribute towards building a museum perspective to innovation, and, subsequently, to reducing the gap between the ways museum innovation is being conceptualized in the literature, and the ways the community of practice within the sector can innovate.

This research takes guidance from the wealth of literature produced in the business studies discipline around innovation starting from Joseph Schumpeter (1934), the pioneer Austrian-American economist who served as Finance Minister of Austria in 1919, famously known for his theory, the “Creative Destruction”, and is one of the earliest researchers who studied and wrote about innovation. Schumpeter’s work is considered to be “central to contemporary theories” on innovation (Coombs, Saviotti, & Walsh, 1987). This research also benefits (particularly in Chapters 3 and 5) from the business studies
conceptualization of product innovation, process innovation, business model innovation and the works of Christensen (1995) on disruptive innovation, which he defines as “an innovation that helps create a new market and value network, and eventually goes on to disrupt an existing market and value network” (Christensen C., 2014). Additionally, this research (particularly in chapters 3, 5 and 7) takes a special interest in what Henry Chesbrough (2003) theorized as open innovation emphasizing its applications in the social sector, and the related work conducted by Nesta in “The Open Innovation Programme”, which encouraged ten large UK charities, including National Trust, to “work in new ways, with new partners and test their innovative ideas” (Nesta, 2013).

Furthermore, this research situates itself as part of the recent efforts by many researchers, especially in the business studies discipline, to theorize and highlight possible and new business models for non-profit organizations. These new models are based on using business strategies, market power, and innovative approaches to improve the ability of non-profits to achieve their social missions. More specifically, the research draws (as we shall see particularly in Chapter 4) upon the works of Dees (1998), Defourny (2001), Kerlin (2006), Defourny and Nyssens (2009) on social enterprise, social entrepreneurship, and social innovation.

Moreover, the research investigates how these ideas are echoed in the museum studies discipline through the theorization of Robert Janes (2013) in his book, *Museums and the Paradox of Change*, as well as his conceptual framework about the “mindful museum” (Janes, 2010). We look also at the work of Stephen Weil, who progressively saw the museum as social enterprise, and the more recent work of Tony Butler at the Happy Museum in the UK. Finally, this research takes into consideration and benefits from the work of Ross Parry (2013) on the “postdigital” and the “normalization of digital” within museums, which is reflected in some of the case studies in this research, and more importantly, in the proposed museum innovation model that is considered in Chapter 7.

Drawing on this mixed set of theoretical tools and informants, this research situates itself as a crossing point between business studies (more specifically in relation to innovation, business models, and public administration), and museology (in relation to the social responsibility of museums, normalization of digital, the mobilization of communities, audience engagement, and museum governance and administration).
Even though the thesis begins and ends with the idea of museum innovation in a wider sense, it has chosen to take digital innovation as its particular example and focus. This research has preferred to utilize museum digital teams in its case studies in order to understand some of the strategies, techniques, and business models these teams use to innovate or improve their innovative capabilities. Although the research community accepts the common fact that digital and innovation are not the same thing, we find that the use of digital to study innovation is a common phenomenon in the business studies discipline. Chesbrough’s open innovation theory, for example, was born as a result of his research work at Xerox in relation to “technology”, as reflected in his definition.¹ The applications of the open innovation theory, however, have influenced innovation in general. This is noted not only in the case of open innovation, but also with many other theories which investigated innovation within the context of digital; then, the concept is broadened to include digital and non-digital frameworks. For instance, Harvard business professor, Clayton Christensen introduced his disruptive innovation theory based on his study of the disk drive industry. When Christensen first introduced the theory in 1995, he used the term “disruptive technology” that was later broadened to “disruptive innovation”. To date, both terms are still being used to refer to the same concept.

The reason that makes digital the preferred context for many researchers to study innovation refers, possibly, to the innovative nature of technology. As we can observe, technology evolves rapidly, and what is new and innovative today can be replaced with new technology tomorrow. This alone makes digital an interesting area to investigate innovation. In line, therefore, with many other studies on innovation, this research has made a strategic decision to study museum innovation within, specifically, the digital context, with the intention to extrapolate the implication of the study on museum innovation in general. Therefore, the museums used in the case studies (i.e., Cooper Hewitt, Smithsonian Design Museum, the National WWII Museum, and Imperial War Museums) were chosen based on their reputation as being innovative as it will be explained in more detail in the next section.

¹ Open innovation is “a paradigm that assumes that businesses both can and should use external ideas as well as internal ideas, and internal and external paths to market, when seeking to advance their technology” (Chesbrough H. W., 2003).
3.0 Research Methods

This research attempts to understand the topic of innovation within the museum context and to produce a theoretical framework that can help museums develop their innovative capabilities. This is consistent with how Slesinger and Stephenson define research. They state that research is “the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art” (Kothari, 2004). More specifically, this research uses two case studies and three data collection methods to investigate the concept of museum innovation (Figure 1).

- **Research Design:**

  As Figure 2 shows, this research used a multi-strategy approach that combined literature research (in both business studies and museology) as well as quantitative and qualitative methods in what is known as “Triangulation.” According to Patton (2002), “Triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches.”
Research shows that the strength of triangulation relies on the different methods researchers use to validate and confirm their data. Originally, “[t]he concept of triangulation is borrowed from navigational and land surveying techniques” (Given, 2008) but became widely used in social science research.

This research benefited from the existing knowledge and theories in business studies and museology about open innovation, social enterprise, and social innovation. This knowledge could have practical applications on how the museum approaches some core functions including museum management, funding strategies, partnerships, and the social role of museums. Consequently, those elements suggest that this research can be categorized as applied research.

Quantitative data was used in this research to guide later discussions during interviews and help interpret data found in museum documents. One of the areas that quantitative data has proven useful is measuring the attitude and beliefs of some selected museum digital teams towards innovation. According to Gunderson (2002), quantitative research is “Explaining phenomena by collecting numerical data that are analysed using mathematically based methods”. For instance, data extracted from this research showed that 67% of participants agreed that museums are innovative institutions, and 87% agreed that museums should innovate, while 53% identified funding as the most common reason which prevents museums from innovating.

This research also used a qualitative approach to collect data. According to Ely (2003), qualitative research is “an interactive process in which the person studied teaches the researcher about their lives.” Kwi, Nyamongo, and Ryan (2001) offer a more broad definition stating that “qualitative research involves any research that uses data that do not indicate ordinal values.” Furthermore, several scholars, such as Bogdan and Biklen (1982), Lincoln and Guba (1985), and Lofland and Lofland (1984) argue that “qualitative research is better understood by the characteristics of its methods than a definition” (Ely, 2003). In this particular research, the qualitative method was used to learn about specific innovation.

\(^2\) HZ University of Applied Sciences defines applied research as “the methodic search for solutions to practical problems of the modern world. The main motivation in applied research is to apply the knowledge and solve practical problems for companies and all kinds of institutions”.

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2 HZ University of Applied Sciences defines applied research as “the methodic search for solutions to practical problems of the modern world. The main motivation in applied research is to apply the knowledge and solve practical problems for companies and all kinds of institutions”.
strategies that some museum digital teams use, and the dynamics by which some initial ideas turn into real projects. This understanding contributed to gain in depth knowledge about how open innovation, social enterprise, and social innovation are contextualized in museums.

- **Data Collection:**

The research presented in this thesis was based on the collection of data through three case studies at three internationally-recognized museums in the United Stated and the United Kingdom. These museums are Cooper Hewitt, Smithsonian Design Museum in New York City, the National World War II Museum in New Orleans, and the Imperial War Museums in London (IWM). Perhaps, it is important to note here that the research was interested in and looked at how the digital teams at these museums approached innovation, and did not intend to conduct a comparative study between the US and the UK. Perhaps, a comparative study can be another interesting research project; however, it may require another set of tools and another research design approach. This research utilized Thonas’ (2011) definition of case studies, which he expressed as the:

> analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame – an object – within which the study is conducted and which the case illuminates and explicates (Thonas, 2011).

The phenomenon being studied here is innovation and the environment that can make innovation thrive. Generally, it is noted that more researchers have been using case studies to carry out their research (see Hamel, 1992; Perry & Kraemer, 1986); however, the nature of the questions for this research suggest that case study is the most suitable method to investigate how museums can cultivate innovation. This suggestion is supported by several views including, for example, those of Yin (2003), who argues that “[i]n general, case studies are the preferred strategy when “how” or “why” questions are being posed, when the investigator has
little control over events, and when the focus is on a contemporary phenomenon within some real-life context” (Yin, 2003).

It can be noted that all Yin’s elements mentioned above are present in this research from the nature of the primary research question that posits the question, “how can museums cultivate innovation?” to the lack of control over the museum environment, and the contemporary context of innovation, making case study an ideal technique for data collection.

- **Selection Criteria of Museums**

After studying the literature and identifying open innovation and social enterprise as the main concepts for investigation, each case study was carefully designed to address a specific concept. For example, the case study at Cooper Hewitt, Smithsonian Design Museum investigated the existence of open innovation inbound and outbound strategies used by the museum’s digital team. This is because the digital team at Cooper Hewitt has a track record of overcoming the organizational and sectorial boundaries and working with a variety of external institutions and stakeholders. This alone makes the team an ideal environment to study open innovation in a museum context.

On the other hand, the case studies at the National WWII Museum and IWM aimed to study the museum’s social enterprise business model and the role digital played in sustaining the model. The initial investigation during the first year of this research revealed that IWM is one of the earliest (and perhaps the fewest) museums in the UK to establish a commercial division, called IWM Trading Company Ltd., which is ultimately responsible for running and managing the commercial activities of IWM. Similarly, the National WWII Museum in New Orleans has to run a variety of commercial activities to support its operation. This is not an easy task for the museum especially when we know that the museum does not receive direct funds from the state or the federal governments. These facts about the IWM and National WWII Museum make them an interesting case study to investigate how museums are utilizing social enterprise business model and its impact on the museum’s innovative capabilities.
In addition to the previous criteria, all three museums mentioned above are involved in different digital experimentations and have contributed to the museum sector some innovative products and services. All these factors make Cooper Hewitt, IWM and the National WWII Museum fertile environment to study museum innovation. The following table shows the two case studies and the research logic behind each case study.

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Selected Museum(s)</th>
<th>Investigation</th>
<th>Specific Criteria</th>
<th>Common Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Study 1</td>
<td>Cooper Hewitt</td>
<td>Open Innovation</td>
<td>Track record of overcoming the organizational and sectorial boundaries and working with a variety of external institutions and stakeholders.</td>
<td>Museums are involved in different digital experimentations and have contributed to the museum sector some innovative products and services.</td>
</tr>
<tr>
<td>Case Study 2</td>
<td>IWM and National WWII Museum</td>
<td>Social Enterprise</td>
<td>Both museums run a variety of commercial activities to support its operation.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Selection Criteria of Museums

This research has used three data collection methods: questionnaires, interviews, and documents analysis (such as annual reviews and meeting minutes), including published and unpublished documents. The following section will examine the rationale behind using each method and its conceptual dimension.

- **Questionnaire:**

  Generally, questionnaires and interviews are part of survey research which, according to Shaughnessy, Zechmeister and Jeanne (2011), can be used to obtain qualitative data to assess thoughts, opinions, and feelings. The questionnaire is also, considered an effective tool to collect quantitative information, as they are “ubiquitous in social sciences research”, according to the University of Leicester’s Research Centre for Museums and Galleries (RCMG). The questionnaire in this research targeted museum digital teams and museum professionals who are involved in innovation work to answer structured and predefined (including open-ended and close-ended) questions to produce both quantitative and qualitative data. The total number of participants who filled out the
questionnaire is fifteen, some of whom were interviewed after filling out the questionnaire. The questionnaire meant to harvest an initial overview of some of the practices and beliefs around innovation at a number of museums selected for their reputations as innovative. Furthermore, it was used to guide the identification of themes and the segmentation of qualitative data during the interviews. For example, more than 90% of participants identified “collaboration” as a major factor that help their teams to innovate. As a result, the theme of “collaboration” was thoroughly discussed and investigated during the interview phase.

The design of the questionnaire as well as the scope and verbalization of each question passed through several stages of reviews and considerations in order to present clear questions that would produce reliable data. This practice is informed by Brace’s (2004) research, in which he argues,

A questionnaire that is going to provide accurate, good-quality information needs to be thought about and planned, before a single question is written. The sequence of different topics that may be covered by the questionnaire, the sequence of individual questions and the sequence in which promoted responses are given can all dramatically affect the accuracy and reliability of the collected data (Brace, 2004).

The questionnaire is made available in hardcopy and digitally online. Only those who are invited and given the survey link were able to access and participate in the survey. Both versions (i.e., paper and digital) included a preview of research ethics, a briefing on the nature of the research, and the actual questions. Throughout a full commitment was made (and continues to be made) to the confidentiality and anonymity of respondents’ contributions unless they permitted otherwise.

- Interview:

Interviewing has been considered the pipeline for transmitting knowledge in many disciplines. Some experts estimate that 90% of all social sciences investigations utilize interview data (Briggs, 1986). McCracken (1998) points out that interviews are good tools to obtain quantitative and qualitative data in the field of applied social sciences in various
topics such as “innovation for management.” This research has collected data through interviewing 21 museum professionals involved in museum innovation work; of these, 5 interviews were carried out as part of the pilot study at Dallas Museum of Art, 9 interviews were undertaken in connection with the three case studies at Cooper Hewitt, Smithsonian Design Museum in New York City, the National WWII Museum in New Orleans, and Imperial War Museums in London, and finally 7 interviews were conducted with individual museum experts. Below is a list of the participants, organized by institution and then alphabetically by last name:

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Participant</th>
<th>Position</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chan, Sebastian</td>
<td>Director of Digital &amp; Emerging Media</td>
<td>Cooper Hewitt, Smithsonian Design Museum, New York City, New York, USA</td>
</tr>
<tr>
<td>2</td>
<td>Cope, Aaron Straup</td>
<td>Head of Engineering (Internets &amp; Computers)</td>
<td>Cooper Hewitt, Smithsonian Design Museum, New York City, New York, USA</td>
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<td>Walter, Micah</td>
<td>Developer and Digital Strategist</td>
<td>Cooper Hewitt, Smithsonian Design Museum, New York City, New York, USA</td>
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<td>4</td>
<td>Arnold, Kris</td>
<td>Senior Web Developer</td>
<td>Dallas Museum of Art, Dallas, Texas, USA</td>
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<td>Barber, Barbee</td>
<td>Director of Visitor Services</td>
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<td>Engelman, Mandy</td>
<td>Director of Creative Services</td>
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<td>Forbes, Nicole Stutzman</td>
<td>Chair of Learning Initiatives</td>
<td>Dallas Museum of Art, Dallas, Texas, USA</td>
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<td>Forbes, Ted</td>
<td>Multimedia Manager</td>
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<td>Molinaroli, Brooke</td>
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<td>Stein, Robert</td>
<td>Deputy Director</td>
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<td>Alter, Jesse</td>
<td>Web Producer</td>
<td>Imperial War Museums, London, UK</td>
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<td>Lohse, Ludvig</td>
<td>Digital Media Manager</td>
<td>Imperial War Museums, London, UK</td>
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<td>13</td>
<td>Ottevanger, Jeremy</td>
<td>Technical Web Manager</td>
<td>Imperial War Museums, London, UK</td>
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The participants gave their consents to state their names and associated institutions.
The interviews were designed to be semi-structured in order to provide more in-depth data collection and opportunities for follow-up questions. Kvale and Brinkmann (2009) argue that interview for research “goes beyond the spontaneous exchange of views in everyday conversations, and becomes a careful questioning and listening approach with the purpose of obtaining thoroughly tested knowledge”. Also, this research adopts Kvale and Brinkmann’s seven-stage interview strategy, which consists of “(1) thematizing an interview project, (2) designing, (3) interviewing, (4) transcribing, (5) analyzing, (6) verifying, and (7) reporting.” A total of 11 interviews took place at different museums where the interviewees work and 10 interviews were conducted over Skype to accommodate participants’ time and work schedule. According to King and Horrocks (2009), “Qualitative researchers tend to use remote interviews for one (or more) of three reasons: physical distance from participants, availability of participants, and the nature of the interview topic.” The interviews had a twofold purpose: to validate data obtained from the survey and the analysis of documents, and to generate new knowledge, which can later be validated and scrutinized (i.e., triangulation).

**Document Analysis:**

This research used document analysis in combination with other data collection methods (i.e., surveys and interviews) to generate and validate data. Glenn A. Bowen
(2009) explains that “[d]ocument analysis is often used in combination with other qualitative research methods as a means of triangulation.” He adds that “[t]he rationale for document analysis lies in its role in methodological and data triangulation, the immense value of documents in case study research, and its usefulness as a stand-alone method for specialised forms of qualitative research” (Bowen, 2009). This particular research used both printed and electronic original/authentic documents as well as both published and unpublished documents from museum records to solicit and confirm data. The documents were appropriately and ethically acquired and necessary procedures were followed. In the case of the National WWII Museum, for example, an official approval was obtained to access the museum documents related to the Dog Tag project (which is discussed in further details in Chapter 6). Examples of these documents include museum annual reports, project records and documentations, email communications, meeting minutes and agendas, evaluations of prototypes, and scripts and graphs. As a matter of practicality and efficiency, the research focussed on documents that correspond with the themes previously identified in the questionnaire and the interviews. The documents were, then, closely analyzed, interpreted, and confirmed against other data on hand. Ultimately, the documents used throughout this research fulfil Bowen’s (2009) condition, which mandates that documents should “have been recorded without a researcher’s intervention.”

The qualitative and quantitative data derived from interviews, surveys and museum documents was analyzed carefully and manually. Themes, cross-referencing, overlaps, and gaps in the data have been identified, studied, and synthesized. The figure below shows the research plan including research design, data collection, and data analysis.

- **Research Ethics**

This research has been carried out in accordance with the University of Leicester’s Code of Research Ethics. Prior to conducting any fieldwork, this research’s data collection methods were approved on 16 October, 2013 by the Ethics Officer at the School of Museum Studies, University of Leicester. Moreover, participation in this research was entirely voluntary, and participants were free to withdraw from the project at any time.

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4 Please find the approval letter in the appendix
Each participant was given an information sheet, explaining the nature of the research, their role in the research, and their rights. Additionally, each participant signed a consent form to declare their agreement (or disagreement) for their name and affiliated institution to be associated with the information s/he gives during the course of the research. They were also given a link to the University of Leicester’s Code of Research Ethics and the contact information for the Ethics Office at the School of Museum Studies in case they wanted to learn more about rules, policies, and procedures.

- **Pilot Study**

  This research conducted a pilot study at Dallas Museum of Art to test its data collection methods. Originally, as part of the data collection methods, the plan was to conduct field observation of digital teams along with interviews and questionnaires. The Department of Psychology at California State University, Fresno, defines observational research as “type of correlational (i.e., non-experimental) research in which a researcher observes ongoing behavior” and according to Bromley (1990), it is a “systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest.” In that case, the “phenomenon of interest” would have been museum digital innovation.

  The intention was to conduct observational research to witness and document work-related behavior of museum digital teams at their workplaces to gain in-depth knowledge about the digital innovation process in a museum setting. According to the literature, there are different approaches to conduct observational study. For example, the researcher may choose not to identify him/herself by either mingling with the subjects undetected, or by observing them from a distance. This approach is idealistic to capture the natural behavior of the participants but surely has some ethical concerns (such as not receiving the participants’ written consent). Another approach is when the researcher identifies him/herself to participants, explains the purpose of the observations, and obtains participants’ consents. The problem with this approach is participants may modify their behavior when they know they are being watched. They may prefer to portray their “ideal self” rather than their true self which may lead to deceiving data. Both types of approaches can be identified as “naturalistic observation” which refers to the collection of data without
manipulation of the environment by the researcher. The goal of naturalistic observation is to study the behavior of participants in their natural settings.

Naturalistic observation, also known as nonparticipant observation, has no intervention by a researcher. It is simply studying behaviors that occur naturally in natural contexts, unlike the artificial environment of a controlled laboratory setting. Importantly, in naturalistic observation, there is no attempt to manipulate variables (Department of Psychology, 2013).

It is argued that naturalistic observation is hard to conduct as it should be. That could be true because “the very presence of the investigator, as well as the data recording techniques that are used, must remain unobtrusive; that is, no characteristics of the observation itself should have any effect on the behavior of the organism under study” (University of Connecticut).

Considering the advantages and limitations of observational study, the researcher, originally planned to conduct his research and record his notes without the interruption of the natural work flow. Although most of the participants in the pilot study have officially given their consents to be observed, further discussions with participants revealed huge disadvantages of gathering data using observational study. Participants reflected that the large amount of screen time during the work of museum digital teams as well as the substantial portion of communication that goes on digitally makes physical observation an ineffective method. As a result, the research took another approach for data gathering, suggesting that participants would fill out a form and submit it on a daily basis. The form intended to provide information about how and where museum digital teams spend their time and what tasks are involved in their work. It is probably a moral duty to state that although the museum administration at Dallas Museum of Art was very supportive throughout the pilot study and facilitated generous time and space for this research to take place, it expressed some concerns about the nature of the reporting, as suggested in the form, and positively recommended “to identify a different measure to get inside the nature of digital innovation.” This is probably because the report may reveal some sensitive information related to outside collaborators, future projects, financial matters, and possible internal and external tensions. The
dynamics and positive environment in which the pilot study was conducted helped tremendously to refine and develop effective research collection methods. Hence, a decision was made to dismiss the observation and reporting methods altogether and replace them with document analysis which has, subsequently, proved extremely successful in obtaining some primary and secondary data.

4.0 Structure of the Thesis

This thesis is structured around three main sections. The first section, consisting of Chapter 2, Chapter 3, and Chapter 4, intends to set up the contextual framework of the thesis and provides both conceptual and practical approaches. More specifically, Chapter 2 attempts to investigate existing initiatives and conceptual frameworks to cultivate and understand innovation in the museum sector, focusing on the United States and United Kingdom. To achieve this goal, the chapter offers two layers of analysis. The first layer draws a macroscopic overview of national initiatives, illustrating the scope to which innovation is preoccupying those who plan sector-wide policies and negotiate funding schemes. The second layer takes us into a microscopic examination, looking more deeply into some specific examples of what many experts in the museum studies discipline consider museum innovations. Both layers are accompanied with an overview of existing museology literature on innovation.

In Chapter 3, the discussion temporarily departs the museum studies world and explores the business studies literature in an effort to investigate the concept of innovation. Although, there are many definitions of innovation in the business studies literature, most of them share the same concepts, which to a large extent removes any possible ambiguity and confusion about what innovation is. The chapter moves on to explore innovation theories, presenting what we observed can be the most influential, and have, it is suggested here, greatly shaped how innovation is being understood today. As we progress in this journey, the discussion tries to follow, as much as possible, a chronological order, starting with Joseph Schumpeter’s theories and the Linear Model of Innovation, and ending with open innovation theory. Finally, the chapter reflects upon the discussion from a museum perspective and carefully unpacks open innovation as a possible conducive paradigm for museums.
The last contextual chapter, Chapter 4, attempts to understand the connection between innovation and the organization’s business model. Within this context, the business studies conceptualization of business model is investigated, with a focus on the social enterprise business model, which has been suggested by many experts to be a possible conducive model for museums. Additionally, we look deeply into how social innovation and social enterprise are interconnected and how the museum studies literature understands both terms, especially with respect to the writings of Stephen Weil and Robert Janes.

The second section of the thesis then provides two analytical chapters (Chapter 5 and Chapter 6) based on fieldwork research at three internationally-recognized museums. Chapter 5 presents an investigation of what the chapter suggests is the presence of open innovation inbound and outbound activities at Cooper Hewitt’s Digital and Emerging Media department. The chapter shows, through empirical data gathered at the museum, the existence of three paths: 1) “open sourcing” (making source codes available for developers); 2) “open reflection” (between self-reflection and receiving feedback); and 3) “collaboration” (realizing internal resources, identifying needs, and targeting purposeful partnerships with external organizations).

Chapter 6 then reaches back to the concept of “business models”, and investigates how specifically social enterprise business models are empirically structured in Imperial War Museums in London and the National WWII Museum in New Orleans. The fieldwork underpinning the discussion is informed by the conceptual frameworks of social enterprise, as discussed in Chapter 4 including, specifically in Dees’ (1998) double bottom lines (social mission and profit making) paradigm for social enterprise as well as in Janes (2010) regarding the “mindful museum”.

The last section of the thesis consists of Chapter 7 and Chapter 8, in which the research is used to propose a Museum Innovation Model. Chapter 7 used the conceptual knowledge acquired throughout this research in relation to open innovation, social enterprise, and social innovation as well as the analysis of data collected from the in-depth fieldwork conducted at three major museums (Cooper-Hewitt, Smithsonian Design Museum in New York, the National WWII Museum in New Orleans, and Imperial War
Museums in London) by introducing a model for innovation in museums, i.e., the “Museum Innovation Model” (MIM). The model seeks to make innovation in museums scalable, replicable, and feasible to start and operate. Within this context, the case studies were revisited and new evidences were presented to illustrate the structure of the model and its possible applications in museums.

Chapter 8 offers possible contributions to the museum studies field, limitations, and possible directions for future research. The contributions are highlighted in four themes including, 1) definition of museum innovation; 2) the museum studies’ acquisition of innovation terminologies and conceptual frameworks; 3) contribution towards building a museum’s conceptualization of open innovation, social enterprise, and social innovation; and 4) proposing the Museum Innovation Model, which has emerged as a result of the intensive and serious conceptual and fieldwork studies conducted over three years. The thesis closes by recognizing the limitation of the study and looking forward to future research that might now logically follow, and build upon, this study.
Chapter 2

Innovation in Museums: Current Practice and Future Aspiration

1.0 Introduction

This chapter attempts to investigate existing initiatives and conceptual frameworks to cultivate and understand innovation in the museum sector, focusing on the United States and United Kingdom. To achieve this goal, the chapter offers two layers of analysis. The first layer draws a macroscopic overview of national initiatives, illustrating the extent to which innovation is preoccupying those who plan sector-wide policies and negotiate funding schemes. The second layer takes us into a microscopic examination, looking more deeply into some specific examples of what many experts in the museum studies discipline consider museum innovations.

It was observed here that although some recent studies in the field of museums have attempted to provide practical and conceptual frameworks for museum innovation, these studies seem to be very limited in number and scope. Nonetheless, these studies are important steppingstones for other researchers who seek to contribute to the topic of museum innovation. Finally, the chapter concludes by recognizing that innovation is increasingly becoming an important subject in the museum field. However, a close examination of the innovation projects in the museum field shows the growth of two apparently separate types of innovation; digital innovation and social innovation. The conclusion suggests that within this increased activity and interest, there may be an advantage in turning specifically to the literature of business studies in order to navigate how the subject has been conceptualized outside of the museum sector, and how this knowledge may help museums to crystallize their own perspective of innovation.

For our thesis, overall, this chapter will help clarify the current status of our understanding and implementation of innovation in the museum sector. It also provides essential knowledge about major trends in museum innovation, important institutions that are leading the efforts in developing innovation in museums, and finally some of the lead thinkers on the topic. Based on that knowledge, the research turned to specific museums
and individuals to seek their contribution to build an understanding of what innovation in the museum context can possibly mean.

2.0 National Initiatives and Big Projects

Economic and political motives have encouraged, and sometimes pressured, museums to embrace innovation. Ed Vaizey, the former Minister of State for Culture and the Digital Economy in the United Kingdom, conveyed an important message to the museum sector in his keynote speech at the 2010 Association of Museums Conference in Manchester. In his short message, Vaizey focused on two major concepts; innovation and enterprise in museums. Concerning innovation, Vaizey stated, for example, that Renaissance funding “will only be applied to efficient, imaginative and innovative museums” (Vaizey, 2010). The Renaissance was a major funding scheme for museums with a budget of £43.6 million.

According to Vaizey (2010), the funding scheme sought “to drive improvement and innovation” and “will continue to promote innovative ideas”. Innovation, as Vaizey envisions it, is not just related to one specific funding scheme; rather it is a quality that should be nurtured and embedded in the museum work. He was clear in his message: “I want to encourage bold and innovative thinking” and “we need to continue to grow innovative cultural leaders” (Vaizey, 2010). Vaizey’s focus on innovation in museums seems to be consistent with a bigger political vision that sees innovation and enterprise as important components in improving the UK’s economy. In fact, besides his responsibility at the State Department for Culture, Vaizey was also responsible for the Department for Business, Innovation and Skills (BIS). Combining both responsibilities shows the depth and level of commitment by the UK government to integrate innovation and business skills in the cultural sector including museums.

Within this context, Vaizey (2010) asked museums to reexamine their business model and “develop a stronger instinct for partnership, mergers, commercial ventures and new approaches”. According to Camarero and Garrido (2012), “Linking innovation to financial and operational innovation is considered essential, and reflects a more general conviction that a sustainable arts organization without a viable business model is impossible” (Camarero & Garrido, 2012). Vaizey (2010), clearly warned the museum
sector that “driving forward will take courage and ingenuity”, and that “The state cannot afford to subsidise those who are unable to help themselves.” That may not be good news for many museums but it is the reality that museums will have to face. Addressing the leaders in the museum sector, Vaizey (2010) stated, “Those who fund museums and those who govern and lead them need to consider fresh strategies to ensure stability in the years to come” (Vaizey, 2010). It cannot be more clear, bold, and straightforward. According to Vaizey, museums have to find ways to be more innovative and enterprising. Vaizey’s view corresponds with the new conceptual context that museums are experiencing. Carmen Camareroa, María José Garridoa, and Eva Vicenteb from University of Valladolid, Department of Business Administration and Marketing, for example, state that

The current need for museums to augment their own revenue and improve their performance coupled with the transformation of cultural models towards more experiential services has led many to adopt a consumer orientation in an effort to make museums and their collections increasingly accessible to visitors (Camareroa, Garridoa, & Vicenteb, 2015).

The model Camareroa, Garridoa, and Vicenteb are describing here is somewhat controversial and seems to be at odds with the mainstream museum business models. This is probably because museums are not used to running their operation from a business perspective that includes “augmenting their own revenue” or developing new services with business in mind. As we progress in this study, we intend to unpack the two connected concepts, innovation and enterprise, and try to understand how they may relate to museums. Hence, this chapter intends to investigate innovation within the museum context, while Chapter 4 will try to examine the concept of enterprise and how museums have attempted to deal with it.

Regarding innovation, the case in the United States’ context is quite similar; museums are enticed to innovate in order to receive funding. The American Alliance of Museums’ Center for the Future of Museums believes that “museums need to innovate in order to successfully navigate the rapidly changing landscape of the 21st Century” (American Alliance of Museums, 2013). Through funding from MetLife Foundation, both CFM and EmcArts have created “a major new initiative designed to enable selected museums to design, research and prototype innovations, testing novel approaches to field-
wide challenges in a laboratory-like setting” (EmcArts, 2012). EmcArts is a consulting firm based in New York City that works with individuals, cultural organizations, and communities to help them find creative solutions to complex challenges. Through workshops and training EmcArts, “create the space and conditions to test innovative strategies and build cultures that embrace change” (EmcArts, n.d.). EmcArts understands innovation as “primarily a process, not a product, fueled by discipline, focus, and a strong will for change. It requires letting go of what is no longer useful and experimenting your way forward”. Both CFM and EmcArts are the founders of The Innovation Lab in Museums program, which consists of four stages that run for 18-24 months and awards each participating museum $40,000 to create prototype projects.

On both sides of the Atlantic, innovation has rapidly become an important topic in many museum conferences, workshops, publications, and social media discussions. Responding to the growing trend, more museums have become interested in innovation and have striven to model innovation in their practice. Dallas Museum of Art (DMA), for example, announced in June 2012 a $300,000 project to establish a Laboratory for Museum Innovation. The initiative is supported by AT&T, Texas Instruments Foundation, and Forrest and Cynthia Miller. According to the DMA (2012), “The Laboratory will produce focused and highly innovative digital projects that will positively impact visitor experience at the DMA and offer a broad application to the global museum community”. During the pilot study for this research, Robert Stein, Deputy Director of Dallas Museum of Art stated, in response to a query as to why museums need to innovate:

You can either be a rock in the stream or you can be a leaf. The world is the stream and it is changing. It is flowing by us. You can either be anchored and left behind, or we could change with the world (Stein R., 2014).

Stein’s logic is sound, but how can museums flow with the stream when existing innovation theories are fundamentally business oriented? They deal with business factors like the organization’s competitive advantage, market share, revenue streams, business models, and R&D. On the other hand, museums are social institutions, most of which

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5 Definitions of innovation and museum innovation will be discussed in further details in Chapter 3 and Chapter 5
operate as non-profit organizations and the concepts attached to innovation, at least from a theoretical point of view, are quite peculiar. This dilemma can make innovation a difficult concept for many museums. Within this context, it may be crucial to clarify at an early stage that this research does not attempt to make the case for museums to be innovative. To the contrary, it assumes, based on political and economic motivations as well as observations of trends in the museum sector that museums are striving to figure out possible ways to undertake innovation.

After clarifying this point, it may be helpful, in this circumstance, to introduce the work of Morten K. Søndergaard and Niels E. Veirum (2012) who provided both conceptual and empirical motives for museums to carry out innovation. Their article, ‘Museums and culture-driven innovation in public–private consortia’, published in the *Journal of Museum Management and Curatorship* presents a “joint venture model for culture-driven innovation in a public private consortium” consisting of museums, SMEs, and universities. They argue that “[w]hile normally considered beyond the realm of conventional innovation policy, the strategy of drawing museums (social and cultural institutions) into innovation systems is legitimized when innovation is considered a social process” (Søndergaard & Veirum, 2012). They also introduce a case proving that within the cultural sector museums are positioned to “framing the context of contemporary innovation”. Through “cultural brokerage” and “open innovation alliance” between museums, SMEs, and universities, the authors argue that the consortium increases innovation “capabilities among participants” (Søndergaard & Veirum, 2012).

Although the study of Morten K. Søndergaard and Niels E. Veirum is crucial in the growing trend of museum innovation, the literature of museum studies remains relatively weak in addressing the topic, which leads to a degree of uncertainty and ambiguity in the practice community. In February 2015, this state of uncertainty and ambiguity around museum innovation was illustrated in a themed museum conference in the United Kingdom. The UK-based Museums Computer Group released a call for papers for its Spring Meeting at the McDonald Institute for Archaeological Research, University of Cambridge. The conference invited proposals to address the conference theme, “Innovation: the Emperor’s New Clothes?” Notably, the title of the conference reflected how “innovation” had become the official regalia that some museums may need to have in
order to be able to appear as leaders in the sector. The implication here is that ‘innovation’
might be seen as the touchstone word for gaining funding and administrative support.

“Have you ever been aware of pressure - from funders, from senior management, or from
elsewhere - to come up with an innovative project?” the Call for Paper (CfP) asked. The
Call for Paper continued by presenting some provocative but very timely questions,

“Association with the innovation 'label' can be great in the short term for getting funding,
but there is no point in 'innovation for the sake of it.' Or is there?” The CfP wondered,

“Why are some projects described as 'innovative' while others aren't?” The list of questions
did not stop there, it continued,

When you look back at all the projects described as innovative, the reality is that
only some of them have brought lasting value. What does innovation mean for
museums? Does it go beyond new technologies to include new ways of organising
our work or interacting with audiences? How do we assess which innovations are
useful and which are distractions? Do you have any examples where the term
innovation has proved positive in the short term and/or in the long term? Does
innovation have to be revolutionary, or can it be evolutionary? Are you aware of
any innovative ways of evaluating digital projects, or evaluating projects in general,
using digital technologies or methodologies?

Although each of the questions carries thoughtful inquiry and legitimate concerns,
the answer may not be that easy. More importantly, what these questions show, in fact, are
the sincere efforts by the museum sector to understand innovation and how it may apply to
the museum as an institution.
To put things in perspective and understand the task the museum sector is embarking upon, it might be appropriate to review a recent study conducted by The Listening Post Project at Johns Hopkins University. The study is devoted to exploring innovation among American nonprofits, including museums.

Figure 4: Share of nonprofits unable to adopt an innovation in the past 2 years (n=340)

The organizations were asked to report any implementation of innovative programs or services within the past five years. The results show that museums were less likely than other nonprofit organizations in the survey to introduce innovations (68% vs. 82%) and, at 83%, the highest to report incapability to adopt innovation in the previous two years of the survey (Salamon, Geller, & Mengel, 2010). This statistic may be alarming and reflect the scope of the challenges museums face in their pursuit to embrace innovation.

As part of sincere efforts to change the state of innovation in museums, Museum Identification (Museum ID), a private organization based in the UK and dedicated to serving the international museum community contributed to the museum innovation momentum through a series of articles and books. Nicholas Poole, Chief Executive of The Collections Trust states that “Museum-iD has become the place to go for fresh thinking,
new ideas and interesting perspectives on the world of museums” (Museum ID, n.d.). Two pieces of literature on the subject of museum innovation provide a useful illustration of Museum ID commitment to this discourse and area of practice. The first text is an article by Robert Stein, Deputy Director of Dallas Museum of Art, and the second one is a book in the process of publication edited by Gregory Chamberlain. Stein’s article is entitled “Museum Innovation: Risk, Experimentation and New Ideas”. In the article, Stein tries to answer a tough question, “How can the museum itself become a living laboratory of innovation?” Stein suggests that museums may have to embrace risk and accept failure in order to allow some type of innovation to happen. He argues,

Recognize that by attempting innovation you expose yourself to risk. The freedom to innovate can only happen when museum leaders remove the stigma of failure from the process. Instead, celebrate failure as a badge of honor and a key component needed to break old models and embrace innovation (Stein R., 2013).

Innovation in essence is about change and creative solutions that essentially require departure from current practices. That process could be risky and success is not always guaranteed. What Stein is referring to here is if museums are afraid of taking the risk to depart from old practices it becomes hard, if not impossible, for innovation to take place. Stein eloquently expresses the possible reasons that may lead some museums to resist innovation. He states,

A common pitfall for museums is an unhealthy addiction to monumental undertakings. When massive projects loom with ties to outside support and countless staff hours invested in a single deliverable, it becomes very difficult to admit the possibility of failure. As a result, we shy away from risk, mitigate the probability of embarrassment, and crush innovation in the process (Stein R., 2013).

Stein’s proposed resolution is to engage museum staff in smaller but significant projects and try to experiment new solutions bearing in mind that failure can occur.

The other piece of literature published by Museum ID in September 2015, is the second volume of a book called Museum Ideas: Innovation in Theory and Practice edited by Gregory Chamberlain. Building on the success of the first volume, which was published
in 2013 and illustrated creative ideas and valuable experiences of 100 leading museum professionals and innovators from 16 different countries, both volumes aim to provide conceptual and practical frameworks for museum innovation and highlight how innovation could be utilized in various museum areas of interest including,

- participatory practice, leading-edge digital innovation, original storytelling,
- interpretation and exhibition design, groundbreaking public engagement, inventive and inclusive programming, integrated visitor experiences, plus pioneering thinking for education, audience development, partnerships, sustainability, collections, leadership, curatorial practices and the future of museums (Museum ID, n.d.).

The second volume of the book was in the process of publication at the time of writing this thesis. However, the broad spectrum of the innovation topics covered in the first volume and proposed themes in the second volume in Chamberlain’s book are an indication that innovation can be embedded across the museum as an institution, and it is not just a quality of a single department or individual within the museum. Among the contributors in the first volume are Robert Stein, Deputy Director of Dallas Museum of Art and Seb Chan, Director of Digital & Emerging Media at Cooper Hewitt, Smithsonian Design Museum, both of whom also greatly contributed to this PhD research. Both Stein and Chan were interviewed during the course of this research when the pilot study was conducted at Dallas Museum of Art, and Chan’s team was reviewed as part of the case study in Chapter 5.

More related to digital innovation, and under the motto; “making innovation flourish” National Endowment for Science, Technology and the Arts (Nesta) in the United Kingdom established a pilot funding scheme, Digital R&D Fund for the Arts to support research and development in arts organizations including museums. The initiative encourages the exploration of new business models and innovative ways to engage a wider audience. In an open innovation model, the £500,000 Digital R&D funding project mandated the collaboration between art organizations and technology companies. “As a collaborative R&D fund, arts and cultural organisations were required to connect with technology companies when putting together their proposals” (Bakhshi & Pugh, 2011). According to Nesta’s report, “An analysis of applications for the Digital R&D Fund for
Arts and Culture”, the fund received 494 applications, of which less than 10% were from museums.

Figure 5: Percentage of museums that applied to the Digital R&D Fund (Bakhshi & Pugh, 2011)

The report also shows that most of the eligible applications proposed the innovation of new digital products or services, which led the report to be ambitious about possible commercial applications to innovation in art organizations.

This suggests that, although the R&D fund’s primary aim is to support innovation in arts and cultural organisations through the creation of valuable knowledge, the possibility that the fund also supports the generation of valuable intellectual property or potentially commercially viable services cannot be discounted (Bakhshi & Pugh, 2011).
The report here makes two points that could be very significant. The first point is that innovation, even in arts organizations, can lead to the creation of a new product or service, which is a basic concept in business studies. In more specific terms, business studies regards innovation as a new or improved product or service that can be commercially sold for a profit. Both product and process innovation will be discussed in the next chapter. Secondly, the previous quote confirms Vaizey’s (2010) proposal to the museum sector which, as we noted above, connects innovation and enterprise. This connection will also be investigated throughout the research.

Additionally, what is worth noting here is that although the overall museum participation in the scheme is relatively small (less than 10%) compared to other institutions in the Arts sector, 88.6% of eligible applications by museums have proposed the innovation of new digital products and services. This is higher than their counterparts in the commercial side of the business (commercial arts/cultural organizations and creative business). This is quite phenomenal for museums and may be an important indication of the potential for museum innovation.
The report concluded that “[t]he Digital R&D Fund for Arts and Culture appears to have uncovered a high demand from arts and cultural organisations to explore how digital technologies can expand their audience reach and enable new business models” (Bakhshi & Pugh, 2011). As a result, Nesta has made £7 million available for the Digital R&D Fund for Arts and Culture over the period 2012-2014/5 for projects up to £125,000. Examples of the museums that received funding include Imperial War Museums to use crowdsourcing tools for co-curation and discussion, and Nottingham City Museums and Galleries to create an augmented reality app for museum visitors to experience Nottingham's national reform bill riots of 1831.

Another national initiative to support digital innovation in the UK is IC Tomorrow. Unlike Digital R&D Fund for Arts, IC Tomorrow cultivates digital innovation in different disciplines across the UK, including education, entertainment, advertisement, and culture. Established in 2012, IC Tomorrow is a program under Innovate UK (formerly,
Technology Strategy Board), which “stimulates innovation and economic growth in the digital sector, by breaking down barriers and opening doors for a new generation of entrepreneurs” (IC Tomorrow, n.d.). Recognizing the needs and potentials, IC Tomorrow established two contests for the culture sector, Digital Innovation Contest – Culture; and Digital Innovation Contest – Culture 2. The idea of both contests is to connect digital companies with museums and arts organizations to work together in creating innovative digital projects. For example, in 2015, the Digital Innovation Contest – Culture paired National Museums of Scotland and Thought Den Ltd, a digital studio based in Bristol to create “an innovative approach to the use of location within a gallery environment” (IC Tomorrow, n.d.). Previous winners include the Birmingham Museums and Art Gallery (BMAG) from the museum sector and The Connected Set, a TV production company. The project aimed to link all 9 BMAG museums together and equip their sites with fun and rewarding experiences to increase access to visitors. Also, the British Museum partnered with IPL, a digital company based in Bath to develop a “tool which allows digital publishers to use the museum’s content for free, but generates revenue through advertising” (IC Tomorrow, n.d.). Again, we notice in the previous project how innovation is connected to enterprise and money making, a linkage that appears in many conceptual frameworks and actual projects.

In the U.S. context, the mission of the Institute of Museum and Library Services (IMLS), which is the federal organization responsible for supporting museums and libraries in the United States, is “to inspire libraries and museums to advance innovation, lifelong learning, and cultural and civic engagement” (IMLS, n.d.). IMLS offers several grant programs for museums, one of which is called The Sparks! Ignition. The program provides funds for museums to encourage them “to prototype and evaluate specific innovations in the ways they operate and the services they provide” (IMLS, 2014). Funded projects are expected to “offer valuable information to the museum field and the potential for improvement in the ways museums serve their communities” (IMLS, 2014). The funding scheme is designed to help museums develop “rapid prototyping and testing of new ways to engage learners”, “innovative new types of services or new service options”, and explore “the potential of highly original, experimental collaborations” among other things. We observe here that similar to Nesta’s R&D Digital Funds for Arts and Culture,
the funder is interested in developing new or the improvement of existing services, which is essentially what innovation is about. The Sparks! Ignition program also encourages the collaboration between the museum and different institutions in the community to address “community challenges through new types of partnerships” (IMLS, 2014). Creating purposeful partnerships and using both internal and external ideas to innovate is thoroughly investigated in Chapter 4, when open innovation is discussed.

The role of digital innovation in the current museum business model, which focuses on generating more revenue as well as attracting and engaging wider audiences, is crucial. In their article, “Achieving effective visitor orientation in European museums: Innovation versus custodial” Camareroa, Garridoa, and Vicenteb (2015) argue that “technological innovation has a positive impact on revenue and economic performance” in museums, which corresponds with the findings of this PhD study. Additionally, they recognize that “[a]lthough an orientation to innovate geared towards satisfying visitor needs would seem the logical way for museums to increase visitor numbers, an approach involving too much innovation, often leading museums to becoming shows, has been widely criticized” (Camareroa, Garridoa, & Vicenteb, 2015). Perhaps, it is not very common for both academics and museum professionals to come across “too much innovation” in museums. What Camareroa, Garridoa, and Vicenteb might refer to is “digital” (not innovation) and the museum’s overuse of digital in some cases, which, as they mentioned, has received much criticism. The context in which the term “innovation” is used here drives us to think whether the terms “digital” and “innovation” are used (and considered to be) as synonymous within the museum discourse. We mentioned in Chapter 1 how digital has been frequently used in business studies as a laboratory by many researchers to study innovation, which created a duality between the two terms that seems to cross disciplinary boundaries, reaching the museum studies literature. However, it may be relevant while we recognize this phenomenon to be conscious that not every digital activity in the museum can be considered innovation. For example, if a museum just started to use Twitter to disseminate information about its programs and exhibitions, it may be hard to consider this digital activity innovation. Although within the institutional context using social media, as our example here, can be revolutionary by comparing it to the rest of the sector it may be a much delayed catch-up. Therefore, we may have to be
aware of the context in which “digital” and “innovation” are being used and the circumstances that allow both terms to be exchangeable versus distinguished and separated.

The previous discussion about innovation and digital inspires us to wonder whether or not small and medium sized museums are at a disadvantage to innovate since what matters is the sector context and not the institutional perspective. Looking at the business studies literature, there has been a continuous debate about the relationship between the size of the organization and its ability to innovate. The debate goes back more than half a century when Schumpeter (1942) argued that bigger organizations are in a better position to innovate than smaller organizations. Researchers such as Cohen and Klepper (1996), and Bertschek and Entorf (1996) favor Schumpeter’s theory. They indicated that larger organizations enjoy better resources and larger capital which can put them at an advantage. Other researchers such as Shefer and Frenkel (2005), Stock et al. (2002), and Laforet (2008) provided empirical data that proves otherwise. They argued that smaller organizations are more flexible and agile, and do not have as much bureaucracy as bigger organizations, which is advantageous when it comes to innovation.

Contrary to the business sector, according to Camarero, Garrido and Vicente (2011), “in the non-profit sector, this relationship remains largely unexplored.” In their article, “How cultural organizations’ size and funding influence innovation and performance: The case of museums,” they provide evidence that larger museums are positioned to cultivate digital and organizational innovation. They argue that “Larger museums have more human and financial resources available to engage in change, whereas the flexibility evidenced by small organizations in other settings does not seem to play such a key role in museums” (Camareroa, Garridoa, & Vicenteb, 2011). The literature of museum studies does not have enough studies to support or challenge the findings of Camareroa, Garridoa, and Vicenteb.

On a macroscopic scale, we have looked at some major national initiatives in the United States and United Kingdom to cultivate museum innovation as well as related conceptual frameworks. The rest of this chapter will microscopically examine specific projects, which many experts in the field have regarded as innovative. Through this analysis, we may be able to articulate a deeper understanding of how innovation is understood and implemented in the museum sector.
### Practical Examples of Current Innovation Projects:

As mentioned above, one of the pioneering programs in the United States which support museum innovation is the AAM’s Innovation Lab in Museums. The program consists of four stages that run for 18-24 months and awards each participating museum $40,000 to create prototype projects. According to AAM, lessons learned from these projects are expected to benefit the whole museum sector and cultivate the culture of innovation in museums. The first round started in January 2012 and so far three rounds have been executed. Three museums won the bid in each round, so that a total of nine museums participated.

<table>
<thead>
<tr>
<th>Round</th>
<th>Museum</th>
<th>Location</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Levine Museum of the New South</td>
<td>Charlotte, N.C</td>
<td>The Latino New South Project</td>
</tr>
<tr>
<td>1</td>
<td>Yerba Buena Center for the Arts</td>
<td>San Francisco, CA</td>
<td>Youth Arts: Present/Future</td>
</tr>
<tr>
<td>1</td>
<td>Nelson-Atkins Museum of Art</td>
<td>Kansas City, MO</td>
<td>Beyond Museum Quality</td>
</tr>
<tr>
<td>2</td>
<td>Madison Children’s Museum</td>
<td>Madison, WI</td>
<td>KidShare: Collecting, Presenting and Preserving Children’s Culture and Creativity</td>
</tr>
<tr>
<td>2</td>
<td>Mississippi Art Museum</td>
<td>Jackson, MS</td>
<td>Unpacking Museum Membership: A new model for participation</td>
</tr>
<tr>
<td>2</td>
<td>National Trust for Historic Preservation</td>
<td>Washington, DC</td>
<td>Re-imagining the Historic House</td>
</tr>
<tr>
<td>3</td>
<td>The Jane Addams Hull-House Museum</td>
<td>Chicago, IL</td>
<td>The Slow Museum: the museum as a transgressive site of leisure, recreation, reflection and respite from the busyness of life</td>
</tr>
<tr>
<td>3</td>
<td>Museum of International Folk Art</td>
<td>Santa Fe, NM</td>
<td>Museum/Market Alliance: to harness the social entrepreneurial power of the marketplace</td>
</tr>
<tr>
<td>3</td>
<td>Oakland Museum of California</td>
<td>Oakland, CA</td>
<td>Exceptional Learning: Transcending the “Common” in Youth Education</td>
</tr>
</tbody>
</table>

Figure 7: The Museums Participating in the CFM’s Museum Innovation Lab
A close examination of Figure 6 shows that all chosen projects have a very strong social context, which has been recognized and valued by the funders.

The applications were thoughtful and thought-provoking, asking questions about what is the role of the museum in a changing community. What is the role of a curator, of an authority? How can a museum be representative of all the members of a community? Can it be a place for change? For sanctuary? For the education of everyone, regardless of their age, ethnicity or language? (EmcArts, 2012).

For example, in round 3 the Jane Addams Hull-House Museum in Chicago proposes “The Slow Museum Project.” The project observes that museums are moving at a fast-pace, in their pursuit of audience, competing with entertainment industries such as cinemas, theaters, and sports: with “increased financial pressures, museums endeavor to maintain visitors’ interest with rapidly changing exhibitions, media and technology, participatory activities and cafes” (AAM, n.d.). Although these solutions may help museums to attract audiences, it contributes to a bigger problem: a society that is over saturated, according to the Jane Addams Hull-House Museum. Robert Janes (2015) refers to this phenomenon as “the museum as mall” in which Janes criticizes the current museum business model. Janes suggests that museums should be more “mindful” of their surroundings. He states, “The contemporary museum business model based on consumption, entertainment and ancillary education is increasingly unsustainable and irrelevant in this context” (Janes R. R., The Mindful Museum, 2010). Inspired by the Slow Food movement, the Jane Addams Hull-House Museum in Chicago seeks to “re-envision the museum as a transgressive site of leisure, recreation, reflection and respite from the busyness of life” (AAM, n.d.). The project claims that this approach will “ultimately result in a museum that is more sustainable and socially engaged.”

Close analysis of the innovative projects introduced by the Innovation Lab for Museums can be classified as organizational innovation where museums ask questions about how they deliver their programs, create exhibitions, and engage their visitors. This type of innovation does not involve the creation of new product or service. Also, interestingly, none of the nine funded museum innovation projects throughout the three rounds of the Innovation Lab for Museums is digitally related. This, perhaps, reflects how
EmcArts, the project’s consulting firm, conceptualizes innovation and how it can be applied in museums. The paradigm by which EmcArts understands and designs its innovation programs for museums and cultural organizations will be discussed with Richard Evans, President and CEO of EmcArts, in Chapter 5.

In another project, which combines three major components, digital, innovation, and the museum social mission, Tim Ritchie, President of The Tech Museum of Innovation in San Jose, CA, proposes the museum as a community resource, where members of the community can utilize the museum as a laboratory to make and create things. He argues that this approach will lead The Tech Museum to “grow from traditional museum experience to really where the museum becomes a community resource” (The TechMuseum, 2013). For example, as part of the 2014 Tech Award Program, Technology Benefiting Humanity sponsored by Nasdaq OMX and Accenture, the museum held a workshop called Social Innovation: Mobile Apps for the Homeless. Radha Basu, Director of Frugal Innovation Lab at Santa Clara University, led the workshop. According to Basu (2014), the workshop has been a great opportunity to look at “how mobile technologies, mobile devices, [and] applications can be used to address issues related to homeless people” by bringing young people together to learn about the challenges homeless people face and subsequently find creative solutions to these challenges. This research takes a special interest in the social innovation concept and its applications in the museum context. The Center for Social Innovation at Stanford University defines social innovation as “a novel solution to a social problem that is more effective, efficient, sustainable, or just than present solutions and for which the value created accrues primarily to society as a whole rather than private individuals.” Social innovation is a fairly new term originated in the business studies discipline and a major component of the Museum Innovation Model as will be explained in Chapter 7. What is worth noting at this point is the growing interest among museums in social innovation and their attempt to discover how the concept can benefit their work (Eid, 2015). The MIM argues that social innovation can be identified as the ultimate objective of museum innovation. Another concept closely associated with social innovation which will be discussed in this research is social enterprise.

One of the projects that has been experimenting with the concepts of social innovation and social enterprise is The Happy Museum Project, which “looks at how the
UK museum sector can respond to the challenges presented by the need for creating a more sustainable future” (The Happy Museum Project, n.d.). Essentially, the project encourages museums to examine the needs within their communities, try to help find creative solutions, and contribute to the wellbeing of their societies. In other terms, the project attempts to redefine the museum’s role in society and reconfirm the social dimension of the museum’s mission. Tony Butler, Director of the Happy Museum explains the objectives of the project:

What the Happy Museum Project is trying to do is to show that the context is now different. Environmental change, pressures on the planet’s finite resources and awareness that a good, happy society need not set economic growth as its most meaningful measure offers a chance to re-imagine the purpose of the museums. Museums should realise their role as connector, viewing people not as audiences but as collaborators, not as beneficiaries but citizens and stewards who nurture and pass on knowledge to their friends and neighbours (Butler, n.d.).

Butler’s views align with Robert Janes and with Stephen Weil, both of whom envision the museum as a place to enable social change. Those views, in themselves, can be seen as innovation in the traditional museum’s business model.

The Happy Museum has funded 21 projects in the UK. The projects range from exploring local hydro-electric heritage to working with mental health users, and creating a dialogue with local communities to improve the building and agricultural skills of local elders. Some of the funded projects and museums are listed in the table below:

<table>
<thead>
<tr>
<th>Museum</th>
<th>Project Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>London Transport Museum</td>
<td>working with St Mungo’s homeless charity to create a Conversation Hub within the museum</td>
</tr>
<tr>
<td>Godalming Museum</td>
<td>connecting with a variety of civic society groups including Transition Godalming to explore the towns hydro-electric heritage</td>
</tr>
<tr>
<td>The Story Museum Oxford</td>
<td>working with psychologists and well-being experts to influence designers and architects as they engineer their new capital developments</td>
</tr>
<tr>
<td>Museum Name</td>
<td>Activity</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The Lightbox in Woking</td>
<td>working with mental health users and landscape painting</td>
</tr>
<tr>
<td>The Manchester University Museum</td>
<td>exploring museums as a place of play</td>
</tr>
<tr>
<td>The Cinema Museum in Lambeth</td>
<td>working with local volunteers to curate from their cinema collections</td>
</tr>
<tr>
<td>Beane House of Art and Knowledge, Canterbury</td>
<td>using a sustainable arts project as catalyst for real dialogue with the community it serves</td>
</tr>
<tr>
<td>Reading Museum,</td>
<td>working with Neighbourhood Action Groups to explore the hidden heritage of their areas and instil a more positive sense of place</td>
</tr>
<tr>
<td>Shakespeare Birthplace Trust</td>
<td>where Anne Hathaway’s cottage garden becomes a focus to inspire local communities to spend time outdoors, be active and value green space</td>
</tr>
<tr>
<td>Chiltern Open Air Museum</td>
<td>making full use of its site and 200 volunteers to tap into the building and agricultural skills of local elders to contribute to a more sustainable future</td>
</tr>
<tr>
<td>Garden Museum, London</td>
<td>working with gardeners, volunteers, schools and local groups to plant, harvest and sell winter bouquets as alternatives to the cut flower industry’s unethical and unsustainable practices</td>
</tr>
<tr>
<td>Imperial War Museum North, Manchester</td>
<td>Using object handling to enable people to connect with each other and society around issues of life and death, how war shapes lives and what, in the future, we might need to be fighting for.</td>
</tr>
</tbody>
</table>

Figure 8: Some of the Participating Museums in the Happy Museum Project

London Transport Museum, for example, created a partnership with St Mungo’s charity to establish a “Conversation Hub.” The Hub aims to serve as a bridge between the museum and vulnerable adults and, more specifically, homeless people. The project seeks to engage the homeless in volunteering with the museum and allows them to build new relationships with other community members. London Transport Museum argues that the project will “develop the resilience and sustainability of our community programme, embedding internal and external partnerships” (The Happy Museum, 2013). The paradigm by which organizations use internal and external resources and partnerships to create social or economic value is crucial and has received great attention in business.
studies literature. This idea will be investigated in more details conceptually in the next chapter and practically in the case study at Cooper Hewitt, Smithsonian Design Museum.

The digital team at Cooper Hewitt, Smithsonian Design Museum is well-known in the museum sector for their innovative work on both sides of the Atlantic. According to Adriana Krasniansky (2014), the newly renovated Cooper Hewitt, Smithsonian Design Museum has brought three major digital innovations. She states, “[t]hese tech innovations—which include information-storing pens, interactive screen tables, and digital wallpaper rooms—are part of a larger strategy to differentiate the design museum from its traditional ‘art’ counterparts” (Krasniansky, 2014). The pen for instance, is an innovative and more interactive solution to museum tours. When the visitor touches any object on display with the pen, the pen will retrieve information from the museum data base related to this object such as object’s designer, year of creation, and material used. Cooper Hewitt Labs worked extensively with external partners such as Local Projects Diller and Scofidio + Renfro to create the pen. Krasniansky (2014) explains,

The digital pen also doubles as a stylus. Visitors can sketch designs on the galleries’ interactive screen tables (see below) and manipulate their doodles into 3D renderings. Designs are saved onto a unique webpage associated with the pen, which visitors can access from a personalized URL printed on the back of their ticket.

In this case, innovation has brought a new product (the pen) and improved a service (museum tour) by making it more fun and exciting. Both, the innovative product and service can have a sector wide impact and change how museums may approach the way they offer some of their services to the public. When we look at some of the criteria set by funders (such as IMLS’ Sparks! Ignition and Digital R&D Fund for the Arts mentioned above) to describe successful innovation bids, we find that the ability to create new or improved products or services as well as the magnitude of the innovation are major evaluation measures.

Camarero Carmen and Garrido María José (2008) from University of Valladolid, Spain, examined the role of technological and organizational innovation in the relation between market orientation and performance in cultural organizations focusing on
museums. Market orientation is a business concept which refers to the ability of the firm to responsively implement marketing concepts across the firm. Kohli and Jaworski (1990) define market orientation as "the organization-wide generation of market intelligence, dissemination of the intelligence across departments and organization-wide responsiveness to it." The article is one of a very few studies that academically discuss museum innovation based on business concepts. Published in the *European Journal of Innovation Management*, the article observes that current museum innovations fall into two groups:

1. Technical and technological innovations, such as those linked to technology applied to products, services or production processes for such products or services.
2. Organizational and management innovations, such as those linked to organizational structure or administrative processes. This would also span all innovations related to the marketing or dissemination of the museum.

This is probably true, not just for museums but also for how innovation is generally categorized. Carmen and Jose (2008) claim that innovation in the business sector is focused on breakthrough innovations which lead to the creation of new products or services. However, in museums, they argue,

the most common innovations are continuous or incremental, such as frequent improvements and changes in certain aspects of the services provided (temporary exhibitions, educational programs, friends programs, and so on.) and advances in the technology used (digital catalogues, virtual visits, or web publications) (Carmen & Jose, 2008).

They also recognize that recent technological advancement in areas such as design, communication, and imaging can help museums develop their innovation capabilities to reach new markets, and create new expectations, interests, and experiences. Carmen and Jose (2008) use Hull and Lio’s (2006) argument, which concludes that “based on the distinct structures, polices and responsibilities of non-profits, we suggest that process innovations are a better fit with the interests of non-profits than are product innovations” suggests that the same concept also applies to museums.
Carmen and Jose’s study is based on survey data collected from 276 museums (135 Spanish and 141 French). The sampling suggests that the business models of the surveyed museums are consistent with the business model of most European museums, which enjoys some differences from most US museums and to a certain extent UK museums. This difference is largely related to the sources of funding and the management and governance systems. For example, Carmen and Jose’s study uses “donor orientation” as one of four dimensions to measure innovation in museums, eliminating the consideration of the museum’s enterprising activities as a possible measure. However, the article encourages museum managers “to allocate human and financial resources to innovation. This innovation might be reflected in the use of new technologies and forms of management but also by developing new services, or by reformulating existing ones” which is consistent with the objectives of many funding schemes discussed above (e.g., Digital R&D Fund for Arts and Culture [UK], and Sparks! Ignition [US]).

4.0 Conclusion

The previous discussion suggests that the topic of innovation is increasingly occupying an important place in the museum sector. Many experts, policy makers, and politicians look at innovation as a possible solution (if not panacea) to current challenges facing museums, including funding, management, and community engagement. Through two layers of analysis, this chapter attempted to provide both macro and microscopic overviews of museum innovation. Also, close examination of the discussion shows that innovation projects in the museum sector seem to be divided into two groups: projects with social focus, and other group of projects with digital focus. This division is also noted in the funding initiatives. It is not clear, however, if this division is intentional, accidental, or, perhaps, a reflection to how the sector has developed. What is worth reflecting upon in this instance is how this may impact museum innovation in terms of the conceptualization of the term and the actual implementation. It seems that we are witnessing the growth of two separate types of innovation in museums, digital and social innovation. While both are significant to museums, it is important to note that any inclusive conceptualization of museum innovation may have to consider bringing both types of innovation closer and perhaps discovering where they can possibly intersect. This is because the attempt to
alienate one of the concepts (i.e., digital innovation or social innovation) may result in a museum that is oversaturated with digital content and no potential of social value is being created, or, to the contrary, a museum with great social awareness but with very limited impact and relevance to current changing society.

Although, in the United States and United Kingdom contexts, national initiatives have been introduced to cultivate museum innovation, there is still a lack of clarity on what innovation actually means in the context of museum. We have seen here how, benefiting from the business world’s conceptualization of innovation, some recent research in the literature of museum studies has looked at museum innovation and tried to provide conceptual and practical frameworks. However, these studies are still very limited both in number and in scope, suggesting that more work is needed to crystalize an understanding of innovation from a museum perspective. It is with this specific point in mind, our next chapter will turn to the business studies literature, with an aim to highlighting how innovation might be more fully defined and theorized for a museum context.
Chapter 3
Innovation in Business Studies: theories and practice

1.0 Introduction:

In the last chapter we discussed current field examples of innovation in the museum sector, as well as related conceptual frameworks. As we noticed, these frameworks are very limited in number and scope; however, most of them have been influenced, to a large extent, by how innovation is conceptualized in the literature of business studies. Being mindful of that, the discussion in this chapter will temporarily depart the museum studies world and dive into the business studies literature in an effort to investigate the concept of innovation.

First, the definition of innovation will be explored. Although, there are many definitions of innovation in the literature, most of them share the same concepts. After reviewing some of the definitions, it becomes quickly apparent that there is no ambiguity on what innovation is. For example, the Principal Business Resource for the Australian Government suggests that “innovation generally refers to changing or creating more effective processes, products and ideas, and can increase the likelihood of a business succeeding.” Acknowledging some of the basic components of innovation, as it is perceived in the field of business, helps us to unpack and explore some different types of innovations such as product innovation, process innovation, evolutionary innovation, and revolutionary innovation.

Then, we will attempt to explore innovation theories presenting what we observed can be the most influential, which have, it is suggested here, greatly shaped how innovation is being understood today. As we progress in this journey, the discussion tries to follow, as much as possible, a historical order, starting with Joseph Schumpeter’s theories and the Linear Model of Innovation and ending with open innovation by Henry Chesbrough.

This thesis takes a special interest in Chesbrough’s Open Innovation (OI) theory and argues that it stands out as a concept which can be conducive to museums. The rationale behind it relies on the fact that open innovation can make it possible for small
organizations that cannot afford to spend a large capital on traditional R&D to seek alternatives through the utilization of inbound and outbound resources. Additionally, the flexibility of open innovation makes it an appealing paradigm for organizations with different sizes and missions. The emergence of Open Social Innovation (OSI) is also discussed offering both theoretical framework and practical examples from the field. The chapter then concludes by acknowledging the wealth of theoretical approaches to innovation in the business studies literature, and confirming the suggested viability of open innovation to museums.

2.0 Definition of Innovation:

“Innovation” is a business term that has been heavily investigated in the field of business studies for over a hundred years. “Innovation” indicates the notion of doing something different (Lat. *Innovare*, "to change"). The Principal Business Resource for the Australian Government suggests that “innovation generally refers to changing or creating more effective processes, products and ideas, and can increase the likelihood of a business succeeding.” Innovation in essence is about bringing ideas to life. It is tightly linked to performance and growth through improvements in efficiency, productivity, quality and competitiveness. It is also about creating new value or exploring new markets. Moreover, innovation can be defined as “the development of new customer’s value through solutions that meet new needs, inarticulate needs, or old customers and markets” (Patil & Athawale, 2014). NYC Economic Development Corporation uses a more detailed definition of innovation. They state that innovation is “[t]he design, invention, development, and/or implementation of new or altered products, services, processes, systems, organizational structures, or business models for the purpose of creating new value for customers and financial returns for the firm” (Strauss, 2013). On the other hand, the Conference Board of Canada, an independent, evidence-based, not-for-profit applied research organization dedicated to “building a better future for Canadians” by making Canadian economy and society “more dynamic and competitive,” defines innovation as “the process through which economic and social value is extracted from knowledge through the generation, development, and implementation of ideas to produce new or improved strategies, capabilities, products, services, or processes” (The Conference Board of Canada, 2014).
From the previous definitions we notice how these different interpretations of innovation share common languages and ideas; more profoundly, the reference to innovation as the creation of a new or improved product, process, or service. Additionally, the previous definitions, also, agreed that innovation has to have economic value and commercial applications. We may notice, however, that the Conference Board of Canada’s definition is unique in considering and referring to the social value of innovation. This is extremely unpopular in the business studies discourse. Generally, business studies sees innovation as the engine that moves the economy forward, creates new opportunities, and improves the firm’s competitive advantage in the market to earn profit. The Business Dictionary puts it in clear and bold terms, “To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need.” Hence, the concept of innovation is directly linked to the success of the company in increasing its profit and expanding its market share.

- **Macroeconomic, Microeconomic, and Innovation:**

Macroeconomic is the branch of knowledge that studies an economy at the collective level. Microeconomic, on the other hand, investigates, at the microscopic level, the economy of subgroups, companies or individuals. Both macro and microeconomic have a great impact on innovation. In macroeconomics, factors such as inflation, unemployment, national GDP and government policies can promote or damage a country’s innovation ecosystem. Also, across countries, the differences in income and wages can be traced back to productivity and innovation. Linking innovation to macro and microeconomics, Valentino Piana argues;

Nonetheless, to the extent firms choose the timing of putting innovation on the market and in the production lines, a certain prevalence of the adoption of cost-reducing process innovation might better takes place during recessions, whereas

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6 The gross domestic product (GDP) is one of the primary indicators used to gauge the health of a country’s economy.
higher-performance expensive innovative products are better sold during boom phases (Piana, 2003).

In microeconomics, innovation is not only perceived as the catalyst to growth and prosperity but also as a way of survival in an increasingly competitive and global market. Ira Kalb, Assistant Professor of Clinical Marketing at the Marshall School of Business at University of Southern California, argues that innovation is crucial to companies. He states that “[w]herever innovations come from, however they are done, and in whatever part of the business they occur, companies need to continuously innovate or risk dying” (Kalb, 2013). The idea to innovate or vanish is deeply rooted in the business community as illustrated in Dr. B’s writings. Dr. B is the associate dean of the MBA Program, and professor of marketing at University of North Carolina’s Kenan-Flagler Business School. He firmly states,

Only companies that constantly challenge what they do, challenge themselves to come up with new and different ways of doing things, and also constantly improve on things that they already do will survive in this new globally competitive environment (Balasubramanian, 2013).

The reasoning behind the “innovate or die” dichotomy seems to be uncomplicated. According to Bessant and Tidd (2011),

Innovation does make a huge difference to organizations of all shapes and sizes. The logic is simple – if we don’t change what we offer the world (products and services) and how we create and deliver them, we risk being overtaken by others who do.

Wulfen (2011) adds, “Innovation is not an option. If you do not innovate, it leads to stagnation whereby good employees may leave the company and before you realize it, it is the beginning of the end.” Hence, it seems like business places innovation at a high level of importance. It enables the company to stay competitive and keep (or increase) its market share or to the contrary, risk its existence altogether, leaving no middle ground. For
example, companies such as Apple and 3M faced challenging times and in both cases were near to closure. In the case of Apple, it needed a $150 million loan from its rival, Microsoft, to stay in business when Steve Jobs took over the company. Many experts thought that was the end of Apple. But that was not the case; Apple was able to learn from its failure and to come back stronger than ever. Ira Kalb (2013) wondered how these two companies were able to change their fate, “[w]hat is the ingredient that brought 3M and Apple from the brink of failure to achieve such an amazing record of success?” Kalb (2013) argues that “[w]hile there are several candidates, the one that both companies clearly had in common is innovation.” Examples like these illustrate the intrinsic value and power that innovation can have on companies and firms working in the private sector.

2.1 Types of Innovations

There are many frameworks within the business studies discipline that help categorize innovation into different types. While understanding as many frameworks as possible is useful, our discussion here will focus on four essential types of innovation: product innovation, process innovation, evolutionary innovation, and revolutionary innovation. Understanding the essence of these four types of innovation will provide us with some basic concepts and terminologies as we continue our discussion about innovation.

Essentially, innovation can be achieved in two modes, product innovation and process innovation. Product innovation is the creation of new products or services, or the improvement of an existing products or services. “It involves taking the initiative to make incremental or even dramatic improvements to the existing product portfolios, replacing some of the current products with new ones, or developing new-to-the-world products for the benefit of existing or new customers” (Rainey, 2005). Product innovation is about the ability to create more sustainable and efficient products. Examples of product innovation may include “a new product’s invention; technical specification and quality improvements made to a product; or the inclusion of new components, materials or desirable functions
into an existing product” (Business Dictionary, n.d.). 3D printers, hybrid car engines and cellular phones are good examples of product innovation.

On the other hand, process innovation refers to the execution of a new or improved method to produce a product or deliver a service. According to Oslo Manual (2005), “Process development (process innovation) is the implementation of new or significantly improved production or delivery methods. This includes significant changes in techniques, equipment and/or software.” With this in mind, we can conclude that process innovation is internal to the organization and intends to improve the ways products and services are being created. Let us examine an example from the car industry. The 1913 Ford’s automobile production line, for instance, has changed the face of the industry by reducing the time it took to build a car from twelve hours and thirty minutes to two hours and forty minutes. Not only that, “[t]he next year, the introduction of chain-driven conveyor cut the assembly time to just 90 minutes” (Smil, 2005). In this case, Ford did not introduce any innovation in the product itself (i.e., the car) but the innovation was in the way cars were being manufactured. Ford’s process innovation in the car industry led to a major cost reduction of cars, which made them more affordable to people and commercially viable.

Also, innovations can be divided into two broad categories, evolutionary innovation and revolutionary innovation. Evolutionary innovation also known as continuous, dynamic or incremental innovation, is “the refinement, improvement, and exploitation of existing innovations” (Narayanan & O’Connor, 2010). It is “a series of small improvements to an existing product or product line that usually helps maintain or improve its competitive position over time” (Business Dictionary, n.d.). The improvement intends to increase the efficiency, speed, affordability or reliability of the product or service. Moreover, evolutionary innovation is not about fundamental changes; it is rather about small and targeted development. In other words, evolutionary innovation accepts current solutions but it addresses and questions the “limitations of existing solutions” (Stibel, 2011). Commercially, incremental or evolutionary innovation requires limited risk and can be highly successful. Some experts argue that many current innovations are considered to be evolutionary in nature. A good example of evolutionary innovation is Google’s email
platform, Gmail. When Gmail was launched, the service was very basic and had few features. Through a series of incremental improvements Gmail was able to compete with other established email providers such as Yahoo and Hotmail. The improvements took place over a period of time and through various stages, one at a time or evolved.

On the other hand, revolutionary innovation, also called radical innovation, is “innovation with features offering dramatic improvements in performance or cost, which result in transformation of existing markets or creation of new ones” (Narayanan & O’Connor, 2010). Revolutionary innovation discontinues current practices and introduces new products or new ways of doing things. According to Stibel (2011), “[r]evolutionary innovators ask questions no one else has thought of.” Examples of revolutionary innovations include the Internet, cell phones, and laptop computers.

### 2.2 Innovation Management

Innovation management is crucial to many organizations and is an essential part of the course offerings at many business schools. The Managing Innovation course at Harvard Business School’s MBA Program, for example, introduces students to “the critical elements of designing and developing innovative products and services, how these can be configured, and how the results are managed” (Harvard Business School, 2014). Innovation management can be defined as the process by which companies effectively administer the sources, outcomes, social context and nature of innovation. “Innovations depend on multiple factors that influence the process from idea generation through development to implementation” (Engen & Holen, 2014). These factors can be tangible such as “focused innovation strategy, a winning overall business strategy, deep customer insight, great talent” (Jaruzelski, Loehr, & Holman, 2011), or intangible such as “corporate culture — the organization’s self-sustaining patterns of behaving, feeling, thinking, and believing” (Jaruzelski, Loehr, & Holman, 2011). Sundbo and Gallouj (2000) describe innovation management as an interactive process, depending on both external and internal factors. Deschamps refers to the same process as “innovation governance” and further explains the dynamics between the tangible and intangible factors, “it [innovation governance] requires promoting a culture that channels creativity, stimulates entrepreneurship, and encourages teamwork. The role of top management is to combine
“hard” business processes and “soft” people factors through an effective innovation governance system” (Deschamps, 2012). Deschamps, a Professor of Technology and Innovation Management at IMD, Switzerland, and a leading scholar in innovation research, stresses the importance of building a culture of innovation among employees:

A comprehensive innovation governance system needs to address at least six fundamental questions, among them, “Why do you want to innovate?” Senior managers may well think that the answer is so obvious that this question is unnecessary, but it needs to be asked; does everyone in your organization think that the answer is obvious? Do all employees know why you need to innovate, and how this imperative relates to your corporate vision and objectives? (Deschamps, 2012).

The internal discussion around innovation can help the organization build a collective vision and promote the culture of innovation. “Such a culture evokes incredible energy, enthusiasm, initiative, and responsibility-taking connected to achievement of extraordinarily high goals” (Frohman, 1998). Frohman provides some practical advice to build a culture of innovation in any organization. For example, he asserts that decisions should be based on “clear goals all of the time,” “people recognize that helping others to be innovative is part of their job,” “people are willing to share ideas because they find others will invariably build on and strengthen the ideas,” “everybody joining a project finds they influence the flow of the situation, so that they become part of every team and group in which they participate,” “experimentation is prized and expected from everyone throughout the organization,” and “mistakes are seen as lessons to learn from; learning is expected and celebrated”.

Setting up metrics helps top-level management to evaluate the innovation culture in the organization. “One of Swedish social entrepreneur Billy Olsson’s output metrics was that he wanted everyone in his organization to break one rule each day” (Strauss, 2013). That could be an unusual metric but his intention was to give his employees the chance “to experiment, and passionately believe that rules, if followed too religiously, would stifle innovation and creativity” (Strauss, 2013). Also, a clear innovation management (or governance) may require organizations to illustrate their innovation goals in mission
statements and implement them through institutional policies. According to Deschamps (2012), “innovation governance provides a frame that defines the mission, focus and implementation of innovation in the company.” These types of institutional manifestos are crucial and instrumental in managing innovation in any organization.

3.0 Innovation Theories

Achieving success and leadership in business requires a company to consistently create value propositions\(^7\) (product or service) that are accepted by the market. Value proposition has become one of the most widely used terms in business markets in recent years (Carter & Ejara, 2008). The value proposition is a plan that identifies the target customers, the nature of the problem, the creative solution, and finally the reasons which make that solution better than existing alternatives. It is expressed in mathematical terms as, value proposition = perceived benefit – perceived cost. Innovation is an essential component of creating a value proposition. It is the mechanism by which new value propositions can be created. Hence, to avoid variability of results and possible failures a control over the process of creating value proposition and, more importantly, innovation must be maintained. Controlling innovation, however, can be a complicated process. Yezersky (2007) explains that when we attempt to innovate in the present we may have to think about circumstances in the future.

Controlling innovation really means to know not what the market’s present needs are, but what they will be in the future. It is analogous to shooting a moving target; nobody tries to shoot at the location where the target is now but where the target will be (Yezersky, 2007).

Therefore, innovation theories are initiated to introduce frameworks for companies to understand and control innovation. Each theory provides a unique insight into innovation and perhaps they should be viewed as complementary rather than in isolation from each other. In the following section, we will shed light on what we perceive

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\(^7\) “A value proposition is a business term that relates to a company’s or product’s promise of benefit to a customer, client or consumer” (Shannon, 2013). It is argued that the value proposition is not about what companies do but rather the value experience they deliver (Barnes, Blake, & Pinder, 2009).
as some of the most influential innovation theories which impacted how innovation is understood today.

- **Joseph Schumpeter’s Theory**

  Joseph Schumpeter, a pioneering Austrian-American economist who served as Finance Minister of Austria in 1919 and is famously known for his theory, the “Creative Destruction,” is one of the earliest researchers who studied and wrote about innovation. “Although since the late 1880s there have been reports of the use of the term ‘innovation’ to mean something unusual, none of first precursors of innovation have been as influential as the Schumpeter” (Sledzik, 2013). His work is considered to be “central to contemporary theories” on innovation (Coombs, Saviotti, & Walsh, 1987). In his theory of Economic Development, he investigated the role of innovation or, as he called it, “the new combinations” and “pioneering entrepreneurs” in promoting economic growth. Schumpeter thought that “new combinations” disturb the normal circular flow of business and create new ones (Schumpeter J. , 1934). He perceived bank credit as a necessity to innovate and create new enterprises. He attempted to correlate the size of the organization with its ability to innovate. In the beginning of his investigation he believed that small organizations have better opportunities to innovate than large companies due to their flexibility and lack of bureaucratic structures. However, a few years later in his iconic book “Capitalism, Socialism, and Democracy,” Schumpeter changed his position asserting that it is easier for larger organizations to innovate. He argued that larger companies have access to better resources and more market power (Schumpeter J. A., 1943). He favored product innovation over process innovation. According to Schumpeter, supplying the market with new technologies is more important than adapting existing patterns of demand. Furthermore, he saw product innovation as the only way that can lead to the creation of new industries. However, Schumpeter did not substantiate his theory with empirical evidence.

- **Linear model**

  The Linear model of innovation is one of the first frameworks developed to understand innovation. The framework is simple: it illustrates that innovation goes through
three progressive steps. It starts with basic research, moves to the development phase, and finally ends with production and diffusion.

![Linear Model of Innovation](image)

**Figure 9: Linear Model of Innovation**

The Linear model of innovation is not attached to a specific author and has been used in the literature of business studies with no reference. Godin (2006) asserts that “the precise source of the model remains nebulous, having never been documented. Several authors who have used, improved, or criticized the model in the past fifty years rarely acknowledged or cited any original source”. As we can see from the illustration above, Research and Development (R&D) is central to the linear model of innovation; therefore, some researchers refer to the model as the “R&D model of innovation.” It “represents innovation as a linear process in which technological change is closely dependent upon, and generated by, prior scientific research” (Mahdjoubi, 1997). We notice here how innovation is expressed within a technology framework and terminology. Mahdjoubi also mentions that in addition to the Linear and the R&D, the model has also been referred to as the “Assembly-line model,” “Pipeline model,” “Ladder model,” and the “Bucket model.” As Landau and Rosenberg explain, the problem sometimes perceived with the linear innovation model is its incapability to capture the complex nature of innovation: “Models that depict innovation as a smooth, well-behaved linear process badly misspecify the nature and direction of the casual factors at work. Innovation is complex, uncertain, somewhat disorderly, and subject to changes of many sorts” (Landau & Rosenberg, 1986). Therefore, innovation research continued to evolve, striving to find comprehensive frameworks, which can possibly illustrate and explain the complexity of innovation.

- **Incremental and Radical Innovation:**
It is hard to trace the origin of the incremental and radical innovation theory. The concept itself has been used by many experts but with different terminologies. Radical innovations can be defined as fundamental changes that represent revolutionary changes in technology. They represent clear departures from existing practice (Ettlie, 1983; Ettlie, Bridges, & O'Keefe, 1984). Abernathy (1978) differentiated incremental from radical innovation. Incremental innovation is improvements to an existing product, service or process to keep its competitive position in the market. This type of innovation can also reconfigure current capabilities to serve a new use or need. Porter (1986) explains a similar concept called continuous and discontinuous technological changes. Other scholars defined Incremental vs. Breakthrough innovations (Tushman and Anderson) and Conservative vs. Radical innovations (Abernathy and Clark) which all refer to the same concept. Examples of radical and incremental innovation were given above in the Types of Innovation section.

<table>
<thead>
<tr>
<th>Term</th>
<th>Synonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radical</td>
<td>Breakthrough – discontinues – Revolutionary</td>
</tr>
<tr>
<td>Incremental</td>
<td>Continues – Sustaining – Conservative – Evolutionary</td>
</tr>
</tbody>
</table>

The following figure illustrates the relationship between innovation (radical innovation and incremental innovation), which is represented in the horizontal line and the market, which is represented in the vertical line. The figure shows that radical innovation creates new markets and produces high revenues for the innovator but it requires a higher level of risk. On the other hand, incremental innovation is less risky but often accompanied by many competitors in the market.
The Australian Institute for Commercialisation (AIC) compares the characteristics of incremental and radical innovation as follows:

<table>
<thead>
<tr>
<th><strong>Incremental Innovation</strong></th>
<th><strong>Radical Innovation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploits existing technology</td>
<td>Explores new technology</td>
</tr>
<tr>
<td>Low uncertainty</td>
<td>High uncertainty</td>
</tr>
<tr>
<td>Focuses on cost or feature improvements in existing products or services, processes, marketing or business model</td>
<td>Focuses on processes, products or services with unprecedented performance features</td>
</tr>
<tr>
<td>Improves competitiveness within current markets or industries</td>
<td>Creates a dramatic change that transforms existing markets or industries, or creates new ones</td>
</tr>
</tbody>
</table>

Figure 11: Incremental Innovation vs. Radical Innovation  

In some cases, it is quite hard to distinguish between incremental innovation and radical innovation, especially in the service industry. However, it is probably crucial to note
that both incremental and radical innovations are important to a healthy innovation ecosystem. “Without radical innovation, incremental innovation reaches a limit. Without incremental innovation, the potential enabled by radical change is not captured” (Norman & Verganti, 2014). To unpack Norman and Verganti’s argument, let us take the innovation of the phone as an example. On March 10, 1876, Alexander Graham Bell made the first phone call from New York to his assistant in Chicago. The phone is seen as a radical innovation that changed the way people communicate and transform information. However, in the beginning, the quality of the service was quite poor. Incremental innovation was necessary to improve the quality of the service, the technology used to make the equipment, and reduce the cost involved in providing the service to the public. In that sense, both radical and incremental innovations complement each other, and together they represent a model that makes innovation a continuous and evolving process.

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8 Innovation ecosystem is a fairly new concept. It is generally defined as the network of “people, institutions, policies and resources that promote the translation of new ideas into products, processes and services” which has been explained in the National Science Foundation website http://www.nsf.gov/news/special_reports/i-corps/ecosystem.jsp and extensively analyzed in Deborah J. Jackson’s article, “What is Innovation Ecosystem?” http://erc-assoc.org/sites/default/files/topics/policy_studies/DJackson_Innovation%20Ecosystem_03-15-11.pdf
Figure 12: Bell on the telephone in New York making the first phone call to Chicago in 1892, Library of Congress, USA

- **S-Curve Pattern of Innovation:**

  The S-Curve is a mathematical model which has been used in many fields to illustrate different phenomena. Business studies researchers have used the S-curve to express the life cycle of technological innovation. “The S-curve or lifecycle model (Foster, 1986) remains a widely used tool for thinking about technological innovation and competition” (Callahan, 2007). Christensen states that it is “a useful framework describing

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9 Technology life cycle is “a cycle that begins with the birth of a new technology and ends when that technology reaches its limits and dies as it is replaced by a newer, substantially better technology” (Williams, 2014)
the substitution of new for old technologies at the industry level” (Christensen C., 1992). The framework classifies innovation diffusion patterns into three stages and possibly a fourth pattern; introduction (or ferment), growth (or takeoff), maturity, and finally discontinuity. At the bottom left of the curve starts the introduction stage.

![S-Curve of Innovation](image)

**Figure 13: S-Curve of Innovation**

During the introduction stage, “emerging technologies develop slowly in their early stages with performance improvements being made at relatively high cost in time and money” (Brown, 1992). The introduction stage takes a longer time, more effort, and larger investment but little technical improvement can be noticed. It is a stage of confusion and ambiguity about the new technology and the market. It is also known in marketing as the “early adopters” stage, where customers who are interested in trying something new use the new technology.

When knowledge is accumulated over time, progress becomes rapid and, once major technical obstacles are solved, an exceptional growth will take place supported by sequential incremental innovations. This is known as the growth phase (or take-off). As the technology reaches its physical limit (maturation), incremental innovation becomes increasingly difficult. At this stage, competition is very limited and the innovation (product or service) dominates the market. During this stage the new technology shapes its major
characteristics, thus becoming completely standardized. The discontinuity stage approaches once a product has reached maturity. The threats in the market come from new technologies (i.e., disruptive innovations). The S-curve can help companies to understand and successfully manage innovation. Callahan (2007) argues that “[t]hinking like this using the S-curve helps managers to ask what if questions and to make forecasting decisions.” Understanding where innovation is in the S-curve helps companies avoid market loss and supports decision enabling them to direct resources wisely and effectively.

Contrary to the wide adoption of the S-curve of technological innovation to represent technology life cycle, Sood and Tellis (2005) provided empirical research which questions the validity of the S-curve pattern of innovation. They argue that

Technologies do not show evidence of a single S-shaped curve of performance improvement. Rather, they evolve through an irregular step function with long periods of no growth in performance interspersed with performance jumps. A jump in performance appears to be largest after a long plateau of no improvements (Sood & Tellis, 2005).

Brice Dattee (2007) also challenged the S-curve patterns of innovation and argued that “smooth S-curve does not properly account for the complexity of the phenomenon.” Based on the previous discussion we can conclude that while the S-curve can be successful in capturing the life cycle of some of the technological innovations, it has failed, as argued by some scholars such as Sood and Tellis (2005) and Dattee (2007), in other instances to reflect the complexity of the innovation.

- **Abernathy and Utterback (A-U) Innovation Model**

In 1975, professors James M. Utterback from Massachusetts Institute of Technology Center for Policy Alternatives and William Abernathy from Harvard University Graduate School of Business Administration presented their seminal paper, “A dynamic model for process and product innovation,” introducing their theory on the technology life cycle. The paper was followed by two more publications; Abernathy and Utterback (1978) and Abernathy (1978). The final model, which has been quoted and adopted by many scholars, is “actually formulated through the accumulation of the three
critical works of Utterback and Abernathy (1975), Abernathy and Utterback (1978), and Abernathy (1978)” (Akiike, 2013). What distinguishes the Abernathy-Utterback (A-U) innovation theory from its precedents, as it appears from the research title, is its dynamic nature where product innovation, process innovation, competitive environment and organizational structure are viewed as interacting players. Another important distinction, according to Akiike (2013) is that “Utterback and Abernathy (1975) adopted the time axis concept and specified the ‘unconnected stage’ as the appropriate time for radical innovation in an industry.” Similar to the S-curve innovation pattern, the A-U model presented three major phases: fluid phase, transitional phase, and specific phase which Utterback (1994) later called “mature phase”. The fluid phase starts with the introduction of a new product to the market and is described as a period of high uncertainty and relatively small markets. In this phase, customers’ patterns of preference are not clearly defined. Also, initial entrants are often small and use different production processes. As an example, Utterback refers to the typewriter industry. He argues that “[typewriter companies, we recall, entered by the dozens with curved keyboards, double keyboards, and other exotica” (Utterback, 1994). Competition is not as intense as in later phases due to technological and market uncertainty. In the fluid phase, there is a high rate of new incoming firms and they usually perform best because they are better than established firms at product innovation.

Figure 14: Abernathy and Utterback (A-U) Innovation Model (Utterback, 1994)
The following phase is the “transitional phase.” In this phase, knowledge is more solidified and producers start learning more about the technology application and about customer’s needs. Innovation is largely accepted by the market and some standardization will emerge. The product starts maturing and prices become more competitive. One major characteristic of this phase is the appearance of the “dominant design,” a major business term coined by Abernathy and Utterback. The dominant design can be defined as “the single basic architecture of product or process that becomes the accepted market standard” (Ettlie, 2007). According to Utterback, “the dominant design product has features that competitors and innovators must adhere if they hope to command significant market share following” (Utterback, 1994). Noticeably, the emergence of the dominant design may take a short period of time, many years or never occurs. For example, the dominant design of the modern fax machine, the GIII, appeared in 1983, twenty-three years after the fax machine was introduced in the market in 1960 (Baum, Korn, & Kotha, 1995). On the other hand, “the dominant design for DVD players emerged just three years after product introduction in 1996” (Srinivasan, Lilien, & Rangaswamy, 2006). Firms vividly compete to lead the dominant design; Microsoft, for example, succeeded to establish Windows as the dominant design for computer operating systems.

The last phase in the A-U model is the “specific phase”. After the emergence of the dominant design, competition takes another route where product performance and pricing become more important and vital than differentiation. In this phase, competing firms already collected enough data about the market and their target customers. The possibility of introducing new radical innovations among competing firms decreases because of the standardization process, subsequently, the rate of both product and process innovation remarkably decreases.

- **The Teece Model of Innovation**

   In 1986, David J. Teece, Professor at Haas School of Business, University of California, Berkeley, introduced a new theory in his iconic paper, “Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy,” which can be used to predict who will profit from an innovation and to speculate what company in the market will have higher incentives to invest in certain innovations.
His theory is based on two main concepts, imitability and complementary assets. Imitability refers to the ability of competitors to reproduce the innovation. Imitability threatens companies and makes it increasingly hard to survive in the market. This is “because their market becomes crowded with equally competent rivals, and survival becomes contingent on fairly small differences between ventures” (Cuervo, Ribeiro, & Roig, 2007). Several tactics can be used to protect innovators from potential imitation; things like intellectual property rights, internal complex routine, and manufacturing secrets can be helpful to prevent imitation. However, in many cases imitators have been able to profit from innovation using their complementary assets\(^\text{10}\) to maximize their market share. Teece gives a clear example of his theory, the introduction of canned drinks. He explains, “RC Cola, a small beverage company that was the first to introduce cola in a can, and the first to introduce diet cola. Both Coca Cola and Pepsi followed almost immediately and deprived RC of any significant advantage from its innovation” (Teece, 1986).

![Figure 15: The Relationship between Complementary Assets and Imitability](image)

According to Teece, if the imitability of a certain product is high and the competitors possess advanced complementary assets, the competitors’ market share will

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\(^{10}\text{Complementary assets are the strategic power the company possesses such as distribution channels, brand name, marketing, customer relations, etc.}\)
increase and consequently the innovator’s profit will significantly decrease. Teece concluded that

If government decides to stimulate innovation, it would seem important to clear away barriers which impede the development of complementary assets which tend to be specialized or complementary to innovation. To fail to do so will cause unnecessary large portion of the profits from innovation to flow to imitators and other competitors (Teece, 1986).

Teece’s model has been used by many companies in the business sector to evaluate their innovations, protect their innovative products and services from imitability and keep their competitive advantage in the market.

- **Architectural Innovation**

  In 1990, Rebecca Henderson, Massachusetts Institute of Technology and Kim Clark, Harvard University introduced architectural innovation in their iconic paper, “Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms.” They argued that “the traditional categorization of innovation as either incremental or radical is incomplete and potentially misleading and does not account for the sometimes disastrous effects on industry incumbents of seemingly minor improvements in technological products” (Henderson & Clark, 1990). They define architectural innovations as those that “change the way in which the components of a product are linked together, while leaving the core design concepts (and thus the basic knowledge underlying the components) untouched” (Henderson & Clark, 1990).

Henderson and Clark viewed a product as a unit which contains several components. While the innovation may not happen in the way the product is produced or in the engineering of the product itself, it may happen, they argue, in the way the components of a product are grouped. They define a component as “a physically distinct portion of the product that embodies a core design concept (Clark, 1985) and performs a well-defined function” (Henderson & Clark, 1990). For example, a fan consists of different components such as a motor, blades, blade guard, control system and mechanical housing. The product architecture refers to how these components work together. Accordingly, they
differentiated between the component knowledge which relates to the concepts and design of each component and the architectural knowledge which relates to how the components are linked together to introduce a coherent product.

Figure 16: Incremental vs. Modular vs. Architectural vs. Radical Innovation


As illustrated in the figure above, Henderson and Clark introduced a new framework to define innovation which produces four types: a) incremental innovation, b) radical innovation, c) modular innovation, and d) architectural innovation. We came across both incremental and radical innovations before, and we just explained here the concept of architectural innovation. The fourth innovation type, as we see in figure 11, is modular innovation, which refers to the process by which a core component of a product is replaced, but leaves the architecture untouched. It is probably important to note here
that the intension behind this classification is not to draw thick lines between different
types of innovation but to understand the different ways in which innovation may occur.

- **Disruptive Innovation**

  In 1997, Clayton Christensen, Harvard business professor, popularized his theory of disruptive innovation in his revolutionary bestseller book, *The innovator’s dilemma: When New technologies cause great firms to fail*. The idea was initially introduced two years before publishing the book in Bower and Christensen’s 1995 article, “Disruptive technologies: Catching the wave.” In the book, Christensen coined the term “disruptive innovation” and demonstrated “how successful, outstanding companies can do everything “right” and yet still lose their market leadership – or even fail – as new, unexpected competitors rise and take over the market” (Christensen C. M., 1997). He defines disruptive innovation as “an innovation that helps create a new market and value network, and eventually goes on to disrupt an existing market and value network” (Christensen C. M., 2014). Both disruptive innovation and disruptive technology have been used in the literature to refer to the same phenomenon; however, Christensen believes that disruptive innovation is more appropriate as it can be a more inclusive term which encompasses the business model.

  Christensen derives his theory from an extensive investigation of the disk drive industry. He specifically chose this industry because of its dynamic nature and complexity. Christensen further explains,

  This industry is an ideal field for studying failure because rich data about it exist and because, in the words of Harvard Business School Dean Kim B. Clark, it is “fast history.” In just a few years, market segments, companies, and technologies have emerged, matured, and declined (Christensen C. M., 1997).

  Disruptive innovation enters the market as a product or service targeting a new set of customers. It is usually lesser in quality and more affordable than other products in the market. It is also simple, easy to use, and technologically straightforward but appreciated by some marginal markets. Then, this technology improves over time and eventually takes over the market eliminating previous technology. Clayton Christensen Institute for
Disruptive Innovation explains, “[i]nitially, a disruptive innovation is formed in a niche market that may appear unattractive or inconsequential to industry incumbents, but eventually the new product or idea completely redefines the industry.” It is probably useful to note that disruptive innovation is not radical or revolutionary innovation. It is a type of technological innovation which is capable of making some products or services more accessible and affordable to a new set of constituents. “They [disruptive innovations] offered a different package of attributes valued only in emerging markets remote from, and unimportant to, the mainstream” (Christensen C. M., 1997).

![Disruptive Innovation Diagram](http://web.mit.edu/6.933/www/Fall2000/teradyne/clay.html)

Figure 17: Disruptive Innovation
Source: Massachusetts Institute of Technology

Clear examples of disruptive innovations are the change from 14 inch disk drives to 8 inch, from 8 inch to 5.25 inch and finally from 5.25 inch to 3.5 inch. In the case of transferring from 14 inch disk drive to 8 inch, for example, the new 8” disk was smaller in size but had low memory capacity, 10 – 40 megabytes compared to 400 megabytes for the 14” disk. Also, although the 8” disk cost more per byte than the 14” disk, some companies did not mind paying more per byte because the overall price was considerably cheaper than the 14” disk. Christensen mentions that companies that produced 14” disk were able to create 8” disk but they were not interested because the market at that time demanded
the 14” disk. In this example, the 8” disk started as inferior in the market but over time technology improved and they were able to offer smaller disks with higher memory capacity that were cheaper to produce than the 14” disk. Not long after, the 8” disk dominated the market and no one was interested in the 14” disk anymore. As a result, many companies that used to lead the market selling the 14” disk lost the market and completely vanished.

- **Open Innovation**

  The term Open Innovation was coined by Henry Chesbrough, Adjunct Professor at Haas School of Business at University of California, Berkeley, and a former student of David Teece who introduced the Teece model of innovation in 1986. Chesbrough who is also the Executive Director of the Center for Open Innovation, Haas School of Business, presented the Open Innovation theory in his 2003 book *Open innovation: The new imperative for creating and profiting from technology*. Chesbrough argues that due to the intense competition in the market, companies used to shield their innovation and the knowledge involved from outsiders’ eyes. The process of innovating a new product, for example, required investing a large capital and many years of intense research and development by researchers, scientists, and technologists. Thus, managing the R&D process internally and protecting any related information from falling into the hands of competitors was crucial for successful innovation. Chesbrough describes this model of innovation as closed innovation. It worked really well for a long time and brought to the world great breakthrough innovations. Chesbrough explains, “[i]n the old model of closed innovation, firms adhered to the following philosophy *successful innovation requires control*. In other words, companies must generate their own ideas that would then develop, manufacture, market, distribute and service themselves” (Chesbrough H. W., 2006). Firms received profits from introducing new innovations to the market and used some of their profit to reinvest in more R&D and subsequently produced more innovations. This cycle had to be protected from competitors.
As illustrated in Chesbrough’s graph (Figure 17), firms worked on many research projects (on the left) but only few of these projects made it to the development phase and then to the market. As a result, a huge number of unfinished projects sat on shelves in many firms’ laboratories. The firm boundaries, represented in solid lines, do not allow any ideas/projects to leave or enter the firm.

According to Chesbrough, the closed model of innovation started to erode and a new model of innovation started to emerge. By the end of the 20th century, it was very hard for companies to continue protecting their ideas and the knowledge that they generated through basic research due to various factors such as the increased mobility of skilled workers, the expansion of venture capital, which made the money necessary to start a new firm more accessible, as well as the external options for unused technologies and increased availability of highly-capable outsourcing partners (Chesbrough H. W., 2003). All of these factors made the closed model of innovation increasingly unsustainable. For example, if a company for any reason decided to discontinue a project, the team that worked on that project now has many options to explore which were not previously available. They can start their own firm and continue working on the project, move to another company and carry with them all the acquired knowledge and expertise, or sell it to another company. “In other words, the boundary between a firm and its surrounding environment is more porous, enabling innovation to move easily between the two” (Chesbrough H. W., 2006).
Contrary to the closed model of innovation, Chesbrough’s model enables ideas or projects to leave or enter the firm. He argues that unused ideas sitting on shelves at many universities and companies can be used by other firms, which help ideas to flourish and the whole economy to grow; “it is a more distributed, more participatory, more decentralized approach to innovation” (Chesbrough H., 2011).

Creating outbound and inbound paths for internal and external ideas/projects to move out and into the organization is an essential concept in the open innovation model. Some researchers refer to these paths as bridges; “open innovation is very much about bridging internal and external resources to make innovation happen” (Lindegaard, 2010). Chesbrough defines open innovation in his own words as, “a paradigm that assumes that businesses both can and should use external ideas as well as internal ideas, and internal and external paths to market, when seeking to advance their technology” (Chesbrough H. W., 2003).

Linus Dahlander, Stanford University, and David M. Gann, Imperial College London (2010) conducted a study to clarify the definition of “openness” pertaining to the theory of open innovation. They identified two inbound processes and two outbound processes as illustrated in the following chart. They also defined each one of the four processes, situated it in current research (before 2010) on open innovation, and discussed their implications (advantages and disadvantages) for the firm.
Chesbrough (2003) argues that new start-ups do not have the “Closed Innovation mind-set” and the challenge relies in how established companies can make the transition from the “Closed Innovation mind-set” to the “Open Innovation mind-set”. He introduced IBM as an example of established companies which successfully made the transition. Furthermore, IBM itself, perhaps unknowingly, participated in breaking the closed innovation model by engaging with Columbia University to create the computer science discipline where some of IBM employees participated in teaching classes. This move helped transfer knowledge and gradually break the barriers. Chesbrough contrasted and compared between the principles of open innovation and closed innovation as follows:

<table>
<thead>
<tr>
<th>Closed Innovation</th>
<th>Open Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of the smart people in our field work for us</td>
<td>Not all the smart people work for us, so we must find and tap into the knowledge and expertise of bright individuals outside our company</td>
</tr>
<tr>
<td>To profit from R&amp;D, we must discover, develop and ship ourselves</td>
<td>External R&amp;D can create significant value; internal R&amp;D is needed to claim some portion of that value</td>
</tr>
<tr>
<td>If we discover it, we will get it to market first</td>
<td>We do not have to originate the research in order to profit from it</td>
</tr>
<tr>
<td>If we are the 1st to commercialize we will win</td>
<td>Building a better business model is better than getting to market first</td>
</tr>
<tr>
<td>If we create the most and the best ideas in the industry, we will win</td>
<td>If we make the best use of internal and external ideas, we will win</td>
</tr>
<tr>
<td>We should control our intellectual property (IP) so that our competitors don't profit from our ideas</td>
<td>We should profit from others' use of our IP, and we should buy others' IP whenever it advances our own business model</td>
</tr>
</tbody>
</table>

Figure 20: Closed Innovation vs. Open Innovation (Chesbrough)
One of the major decisions any innovative company has to take is selecting which projects in its research department phase have potential commercial value and need to move to the development phase. Chesbrough states that both closed and open innovation models have the ability to detect “false positives.” He defines false positives as “bad ideas that initially look promising.” But what open innovation can do and closed innovation may fail to do, is rescuing “false negatives.” Chesbrough defines false negative as “projects that initially seem to lack promise but turn out to be surprisingly valuable” (Chesbrough H. W., 2006). Open innovation, in this case, offers a platform for companies to unlock the potential of the false negatives by moving these projects to other companies or acquiring technologies that can add value to these projects.

Chesbrough argues that “Open Innovation assumes that internal ideas can also be taken to market through external channels, outside a firm's current businesses, to generate additional value” (Chesbrough H., 2004). Companies which focus on internal R&D only miss out on these opportunities. It is painfully damaging for a firm to witness a project, which it previously thought to be a failure, succeed in the market by another company. For example, Xerox’s Palo Alto Research Center (PARC) developed a number of promising software programs that were abandoned because Xerox wanted to focus on producing high speed copiers and printers. Some of these technologies, such as Ethernet and the graphical user interface (GUI), were false negatives and other firms were able to capitalize on these technologies. “Apple Computer, for instance, exploited the GUI in its Macintosh operating system while Microsoft did the same in its Windows operating system” (Chesbrough H. W., 2006).

It may be important to note that open innovation is not the same as open source software. However, open source can be viewed as one of the ways open innovation can be achieved. Open source is based on the fundamental idea of the right to reproduce and redistribute for free. Open Source Initiative (OSI) provides a detailed definition of open source software. On the other hand, open innovation is not about free products or services; on the contrary, it is about collaboration between different parties to maximize the benefit from innovation.

Chesbrough categorized three modes of open innovation; funding, generating and commercialization of innovation which all are important to a healthy open innovation
ecosystem. While some companies and organizations preferred to specialize in one of the modes, other companies decided to adopt two or all three modes. Chesbrough expected the emergence of new modes of open innovation, “all of the different modes will evolve in an open innovation environment, and future ones will probably emerge as well. One possible development is the rise of specialized intermediaries that function as brokers or middlemen to create markets for IP” (Chesbrough H. W., 2006), a function that the Center for Open Innovation at Haas School of Business, University of California, Berkeley, is currently performing.

Open innovation helps companies to reduce the cost of R&D and make it more effective and efficient. Chesbrough summarizes his findings and concludes, “firms that can harness outside ideas to advance their own businesses while leveraging their internal ideas outside their current operations will likely thrive in this new era of open innovation” (Chesbrough H. W., 2006). Many firms, organizations of all sizes, industries, and disciplines have started embracing open innovation. The wide acceptance of open innovation ideas is noted by Lindegaard (2010), who argues that “[c]ompanies around the world are opening up their innovation process to include external partners of all types, including suppliers, customers, academics, competitors, and entrepreneurs with great ideas or unique capabilities”. A company like Sony, for example, announced its strategy for the years 2008 – 2010 committing itself to promote open innovation. The multi-national company states:

Sony is also promoting the concept of “open innovation”, whereby we are looking not only inside the company, but outside for technologies that foster innovation. By combining Sony’s inherent technological strengths with external expertise, we aim to accelerate R&D efficiency and enable the company to effectively respond to rapidly changing customer needs and preferences in the network era (Sony Group, 2008).

The technology company, Philips is another example of companies that use open innovation strategies to meet today’s challenges. Philips explains on its website; “That is why we actively pursue what we call Open Innovation – sharing our expertise and technical abilities with universities, institutes, and other companies so that, together, we can realize the very best ideas” (Philips, n.d.). Furthermore, Philips specifies the channels by which it
achieves open innovation: “[w]e engage in two kinds of Open Innovation. Through “inside-out” innovation, we make our skills and resources available to the outside world.” It adds, “Through “outside-in” innovation, we draw on the capacities of individuals, organizations, and even small start-ups from around the globe” (Philips, n.d.).

Cosh and Zhang (2011) published a report entitled “Open Innovation Choices – What is British Enterprise doing?” The study surveyed a sample of over 1200 manufacturers and companies in fifteen sectors in a two-month period from June to November 2010. Andy Cosh is Programme Director for Enterprise and Innovation and Assistant Director of the Centre for Business Research at the University of Cambridge and Joanne Jin Zhang is UK~IRC Research Fellow at the Centre for Business Research, University of Cambridge. The survey sought information about “inbound” and “outbound” activities in UK firms. One of the interesting findings in the report is that “outbound OI activities were less common than inbound activities among all firms” (Cosh & Zhang, 2011), which is also a common theme in the US.

The trend of embracing open innovation among companies and organizations is rapidly increasing and subsequently changing the way business is being conducted, especially when it comes to idea generation and innovation. Ford, for example, created a new office, Ford New Ideas/Consumer Innovation Office, which invites consumers to submit innovation proposals on the web (http://corporate.ford.com/innovation.html). Ford states that it “receives thousands of ideas each year” from the public. This is a huge number of proposals. Thus, in order to fully benefit from the open innovation strategy, Ford established “a strict process that balances your interests and rights with those of Ford Motor Company” (Ford, n.d.). Another example is Microsoft. In February 2008, Microsoft announced in a press release a radical and unprecedented move to “offer free and open access to detailed technical specifications for all the application programming interfaces and protocols used in its high-volume software products” (Gutierrez, 2008). The announcement explained that Microsoft’s step to make that information accessible is part of its efforts to “transform itself into a more open and collaborative industry player.” Horacio Gutierrez, Microsoft Vice President and Deputy General Counsel for Intellectual Property and Licensing justified the move by stating: “[w]e realized that we had to
collaborate more if we wanted to succeed in this increasingly decentralised and multipolar technology environment”. This is a huge step for the giant company which is well-known for its closed innovation model. Gutierrez (2008) expressed in the press release his understanding that “[f]or many people, Microsoft and open innovation may not seem the most obvious of bedfellows”, but he assured; “that is exactly what they are”. The adoption of open innovation by Microsoft and, as we saw before, by Sony, Philips, and Ford, shows how significant open innovation is for major companies, whose innovations have touched millions of people around the world.

The interest in open innovation goes beyond the private sector; some government agencies have also shown some interest in open innovation and started to use different strategies to embrace it. For example, the National Aeronautics and Space Administration (NASA), the United States government agency that is responsible for the civilian space program, established a new website, http://open.nasa.gov/, to promote open innovation at NASA. It states on its website, “We have a new Open Innovation team to continue NASA’s efforts to meet the White House mandate to set our data free – in a format that is useful for you.” NASA shares some of their data online and invites developers and technologists to contribute to its codes and apps. Across the Atlantic, the European Commission adopted Open Innovation in their Digital Agenda for Europe, A Europe 2020 Initiative: “Open Innovation is an important component of the foreseen European Innovation System, where all stakeholders need to be involved and create seamless interaction and mash-up for ideas in innovation ecosystems” (European Commission, n.d.). Again, what we are seeing here is the different contexts and scale in which open innovation can prove valuable, specially to involve different stakeholders in the innovation process. From companies working in the enterprise sector to government agencies, open innovation has captivated the interest of many organizations.

The research community has been following the open innovation trend very closely and actively participated in developing the concept. Dahlander and Gann (2010) scanned and analyzed research papers on open innovation published in Thomson’s ISI Web of Knowledge (ISI).
The study showed a growing number of published papers on the topic, which reflects how open innovation has gained momentum over time. Six years after Dahlander and Gann conducted their study, the research on open innovation has continued to grow and many specialized centers, conferences, and workshops have been developed to investigate the concept of open innovation. Nokia, for instance, established a research center that uses open innovation as the core paradigm for its research activities. Nokia Research Center defines itself as a center that is actively engaging in Open Innovation through selective and deep research collaborations with world-leading institutions. By sharing resources, leveraging ideas, and tapping each other’s expertise we are able to create vibrant innovation ecosystems, multiply our efforts, enhance innovation speed and efficiency, and derive more value for our organizations and ultimately for our end-customers (Nokia Research Center, n.d.).

4.0 What does that mean for museums?

The discussion above shows how innovation theories are very business oriented. More specifically, we noticed how the definition of innovation focusses on creating new or
improving existing products or services which may have commercial value. We saw, also, how innovation is organically tied with business factors like the organization’s competitive advantage, market share, value proposition, revenue streams, business models and R&D. On the other hand, museums are social institutions, which operate (or at least most of them do) as non-profit organizations and the concepts attached to innovation, at least from a theoretical point of view, are quite popular. In this regard, trying to integrate innovation in non-business-oriented organizations can be challenging and problematic. Therefore, social organizations such as museums may have to benefit from the business studies’ conceptualization of innovation but also take into account the unique characteristics of their role in society as well as the new reality about economy, digital revolution, and social, cultural, and environmental challenges we face today. This may not be an easy task, since it requires accumulative work and sector-wide discussions. Luckily, museums are not facing that challenge alone. Many sectors in the public and non-profit domains have been actively seeking to develop a more social understanding of innovation. Museums can tremendously benefit from their work on the concepts of social enterprise and social innovation, as we will explore in the next chapter.

Also, the previous discussion prompts us to think about the current museum business model. Generally, the business model of any organization reflects its core values, objectives and how it perceives itself in relation to its employees, partners, and the community at large. If a museum is interested in or claims to adopt innovation, that interest or claim needs to be reflected in its business model, organizational culture, and policies. As we concluded from the literature, innovation is not a characteristic of only one unit or group of individuals in the organization; rather it is a culture that needs to be promoted across the organization. Within this context, museums can be more innovative if they can develop an institution-wide understanding of innovation and embed this understanding into different aspects of the museum work. Based on that, out of all the existing innovation theories, open innovation stands out as a concept which can be conducive to museums. The rationale behind this relies on the flexibility of the model and its ability to be as beneficial in different contexts, more specifically, in the social realm. Hence, the discussion will move now to explore the applications of open innovation in the social context.
Towards Building Open Social Innovation Model

Open innovation, as explained above, is a fairly new concept but has been gaining momentum in the past few years. Some researchers, organizations and policy makers are currently investigating how the principles of open innovation can help social organizations to innovate. For example, Nesta (formerly NESTA, National Endowment for Science, Technology and the Arts), in the United Kingdom, developed “The Open Innovation Programme” which encouraged ten large UK charities to “work in new ways, with new partners and test their innovative ideas” (Nesta, 2013). Among the participating organizations are Age UK, Children Society, Mencap, and National Trust, to name some. These social organizations share the aspiration to improve the wellbeing of their communities. Nesta states that “[c]harities have potential to gain through taking an Open Innovation approach - working with external organisations to get a new perspective and to test out new ideas” (Nesta, 2013). In another report based on Nesta’s Corporate Connect programme which aimed at exploring the value of Open Innovation, Nesta concluded that “[i]n the next few years, organisations will become more open and networked. Those unwilling or unable to make the change will be left behind” (Nesta, 2010). This is pretty alarming to those organizations that still operate on archaic principles.

Another project which used the principles of open innovation (but not necessarily naming it), the UK Arts and Humanities Research Council’s (AHRC) Creative Economy Knowledge Exchange programme, funded a project to investigate the barriers and benefits of cross sector collaborations between higher education (HE) institutions, small cultural organizations (SCOs) and small and medium sized enterprises (SMEs). Richard Clay, (then) Senior Lecturer in History of Art at the University of Birmingham, and Ross Parry, Senior Lecturer in Museum Studies at University of Leicester, led the project and researched 19 different teams (or triplets) within the scheme. The project, titled “The Collaborative Arts Triple Helix (CATH),” was based in the Humanities Hub at the University of Birmingham in partnership with the School of Museum Studies at the University of Leicester and took place from April 2013 to July 2014. The SCOs included galleries, archives, country houses, theatre groups, a rugby club and a library. Each participating team included at least one member of the identified sectors and was charged
to use a £4,000 voucher to “develop a digital prototype suitable for public release or further development (e.g., a smartphone or touch tablet app, or a web resource)” (Clay & Parry, 2014). In this example, we see how CATH acted as a mediator to bring together representatives from different organizations and sectors to work together and produce a digital prototype. Chesbrough (2006) expects that in an era of open innovation, “[o]ne possible development is the rise of specialized intermediaries that function as brokers or middlemen to create markets for IP”. While CATH did not act as a broker to match IP with potential buyers, it had actively performed an intermediary role to encourage collaborations between different partners who worked on prototypes. CATH and similar brokerages in the cultural sector provide a crucial platform for museums and cultural organizations to create purposive inbound and outbound paths and utilize inside and outside resources in order to innovate.

In 2007, The Tech Museum of Innovation in San Jose, CA, received $1.5 million from Gordon and Betty Moore Foundation to launch The Tech Open Source museum project or “The Tech Virtual.” The project provided an online platform for museums and experts from different parts of the world to collaborate in designing museum exhibitions. In a paper entitled “Open Innovation and Open Source: A guide for content developers” published at the Museum and the Web 2012, Bob Ketner explained the project goals and mechanism. Most importantly, however, Kenter started his paper defining “Open Innovation” as one of the major concepts for the project. He used a brief definition of open innovation quoting Castro (2010); “a means of production for innovation” and added that Open Innovation “is generally achieved by opening up the organization to allow the contribution of new ideas from outside contributors toward a product or goal” (Kenter, 2012). Although the Tech Virtual is one of the very few projects in the museum sector that have specifically mentioned open innovation as a major concept in its construction, the principles of open innovation, which focus on the power of collaboration, partnership, and collective thinking, seems to be very common in the cultural sector.

Excitingly, Henry Chesbrough, who coined the open innovation theory, saw in the social sector a potentially fertile environment for his theory to flourish. Chesbrough and Minin presented the idea of Open Social Innovation (OSI) in a chapter in Chesbrough’s
new book “New Frontiers in Open Innovation”, which was recently published in November 2014 by Oxford University Press. In the paper, Chesbrough and Minin try to offer insight on how open innovation strategies can help social organizations to innovate. They introduced the term Open Social Innovation (OSI), for the first time, and defined it as “the application of either inbound or outbound open innovation strategies, along with innovations in the associated business model of the organization, to social challenges” (Chesbrough & Minin, 2014). Ultimately, Chesbrough and Minin’s definition of social open innovation is inspired by Chesbrough’s original open innovation theory. The use of inbound and outbound paths has remained in both definitions. However, Chesbrough and Minin added to the SOI definition the following part; “along with innovations in the associated business model of the organization,” which, as we notice, emphasizes the importance of innovating the internal structure of the organization in order for innovation to happen. That emphasis is consistent with other bodies of research that pay great attention to the innovation in the organizational business model. Notably, Chesbrough and Minin recognized the challenge of presenting the new OSI model; therefore, they stated that their research was “exploratory” in nature, acknowledging that to the best of their knowledge “this is the first time that the open innovation framework is being applied to the social sector” (Chesbrough & Minin, 2014).

What we have witnessed here is several attempts in academia and the practice community to mirror the open innovation paradigm in the social sector. Some of these examples, such as Chesbrough and Minin’s OSI model, will be unpacked further in the next chapter and investigate its linkage to social enterprise and social innovation concepts. This link is crucial as we are trying to build an understanding of the theoretical foundation for the Museum Innovation Model, which will be discussed in Chapter 7.

5.0 Conclusion

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11 I remain grateful to Henry Chesbrough for not only giving me early sight of this publication and sharing with me his work in progress on Open Social Innovation but also for his helpful comments and insight on the possible applications of OSI in museums.
The discussion here shows how the concept of innovation received great attention in the literature of business studies. Innovation is perceived as the process by which companies can capitalize on new ideas and profit from introducing to the market new or improved products or services. Realizing the importance of innovation to companies, innovation theories try to present theoretical frameworks to explain, control, strategize or predict innovation. Some of the most influential theories which greatly impacted how innovation is being understood now include; Schumpeter Innovation Theory, Linear Model of Innovation, Incremental and Radical Innovation, Architectural Innovation, S-Curve Pattern of Innovation, Abernathy and Utterback (A-U) Innovation Model, The Teece Model, Disruptive Innovation, and Open Innovation.

Also, it is evident from the previous discussions that existing innovation theories are very business oriented. They deal with business factors like the organization’s competitive advantage, market share, creating new products or services, revenue streams, business models and R&D. On the other hand, museums are social institutions that operate (or at least most of them) as non-profit organizations, and the concepts attached to innovation, at least from a theoretical point of view, are quite peculiar. However, open innovation theory and the emergence of the open social innovation paradigm can potentially provide museums, for the first time, with a conducive theoretical framework for innovation.

In the next chapter, we will try, first, to look at the museum’s business model and identify the nature of the model that can be conducive to museums and their aspirations to carry out innovation, bearing in mind the unique characteristics of the museum as an institution, which differs from those organizations working in the private sector. Within this context we will closely examine the social enterprise model and its theoretical frameworks in both business studies and museology. Secondly, we will attempt to uncover the links between open innovation and social enterprise frameworks, acknowledging that this link will be investigated further in Chapter 7 when the Museum Innovation Model is considered.
Chapter 4

Business Models for Innovation

1.0 Introduction

The last chapter provided an overview of how innovation is conceptualized in the business studies literature and introduced Chesbrough’s Open Innovation and Open Social Innovation theories. Also, this last chapter reflected upon how business’ understanding of innovation has the potential to offer some basic tools for museums to possibly build a better conceptualization of museum innovation.

This chapter has four main objectives. First, it attempts to understand the connection between innovation and the organization’s business model. Within this context, the business studies’ conceptualization of the business model is investigated. A close study of the literature concluded that while the term “business model” is very common in both the practice and the academic communities, there is a lack of agreement among researchers on a definite definition of the term (George & Block, 2009). The second main objective of this chapter is to investigate the conceptualization of social enterprise business model as suggested by many experts to be a possible conducive model for museums. Accordingly, the European and United States’ perspectives of social enterprise is discussed and analyzed. The chapter also provides an overview of two major concepts, social entrepreneurship and social innovation, both of which are tied to the social enterprise framework. Thirdly, the chapter attempts to investigate different conceptualizations of the social enterprise business model within the museum studies literature, especially with respect to the writings of Stephen Weil and Robert Janes – mindful, for example, of how to some commentators, Weil has been “relentless in pursuing the notion of the Museum as Social Enterprise, and in stressing that without social value the museum is nothing” (Fleming, 2006). Finally, based on the literature, the chapter concludes and provides an analysis of how social enterprise in museums is understood through three school of thoughts: 1) socially driven, which advocates for a focus on social issues; 2) business driven, which stresses the importance of using business
strategies and marketplace by museums; and finally 3) those who think that museums are already running a successful social enterprise business model and no need exists for further action to be taken.

2.0 Conceptualization of Business Model

In the business sector, innovation occurs through a standard, but very dynamic process recognized as Research and Development, or R&D. More specifically, R&D refers to a group of scientific or technological activities within an organization to create new, or improve existing products or services, which can be sold for a profit. R&D is considered the legitimate pathway for innovation in any given field. However R&D is only one activity among a whole ecosystem which companies have to build in order to run a successful business. This ecosystem includes, for example, how companies obtain their raw materials as well as how they make, distribute, price, service, or advertise their products. Any framework that wholly or partially deals with any of these business aspects can be called a business model. As a result, the business model significantly differs from one company to another.

Teece (2010) argues that “[t]he essence of a business model is in defining the manner by which the enterprise delivers value to customers, entices customers to pay for value, and converts those payments to profit.” Many discussions exist in academia and the business community about business models, best business model practices, and business models evaluations. However, a close analysis of the business studies literature suggests that there is no coherent understanding among scholars and managers of what a business model really is. According to George and Block (2009), for instance, the term “business model” may have gained widespread use in the practice community, but in contrast, the academic literature on this topic is, to them, “fragmented and confounded by inconsistent definitions and construct boundaries.” Morris, Schindehutte, and Allen (2005) concur, stating how “no consensus exists regarding the definition, nature, structure, and evolution of business models”. Zott, IESE Business School, University of Navarra, Spain, Amit, University of Pennsylvania, and Massa, IESE Business School, University of Navarra, Spain (2011) traced how the term business model has been conceptualized in the literature of multiple disciplines and subject matters. They concluded that scholars do not agree on
what a business model is, and the concept vastly differs according to the researcher’s interests. They state, “[w]e observe that researchers frequently adopt idiosyncratic definitions that fit the purposes of their studies but that are difficult to reconcile with each other. As a result, cumulative progress is hampered” (Zott, Amit, & Kassa, 2011). Usefully, they offer some of the definitions below to illustrate the controversy among researchers on how the concept of the “business model” is understood.

<table>
<thead>
<tr>
<th>Author(s), Year</th>
<th>Definition</th>
<th>Papers Citing the Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timmers, 1998</td>
<td>The business model is “an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues” (p. 2).</td>
<td>Hedman &amp; Kalling, 2003</td>
</tr>
<tr>
<td>Amit &amp; Zott, 2001; Zott &amp; Amit, 2010</td>
<td>The business model depicts “the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities” (2001: 511). Based on the fact that transactions connect activities, the authors further evolved this definition to conceptualize a firm’s business model as “a system of interdependent activities that transcends the focal firm and spans its boundaries” (2010: 216).</td>
<td>Hedman &amp; Kalling, 2003; Morris, Schindehutte, &amp; Allen, 2005; Zott &amp; Amit, 2007, 2008; Santos, Spector, &amp; Van Der Heyden, 2009; Bock, Opsahl, &amp; George, 2010</td>
</tr>
<tr>
<td>Chesbrough &amp; Rosenbloom, 2002</td>
<td>The business model is “the heuristic logic that connects technical potential with the realization of economic value” (p. 529).</td>
<td>Chesbrough, Ahern, Finn, &amp; Guerraz, 2006; Chesbrough, 2007a, 2007b; Teece, 2007, 2010</td>
</tr>
<tr>
<td>Magretta, 2002</td>
<td>Business models are “stories that explain how enterprises work. A good business model answers Peter Drucker’s age old questions: Who is the customer? And what does the customer value? It also answers the fundamental questions every manager must ask: How do we make money in this business?</td>
<td>Seddon, Lewis, Freeman, &amp; Shanks, 2004; Ojala &amp; Tyrväinene, 2006;</td>
</tr>
</tbody>
</table>
What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?" (p. 4)  

Morris et al., 2005

A business model is a “concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets” (p. 727). It has six fundamental components: Value proposition, customer, internal processes/competencies, external positioning, economic model, and personal/investor factors.  

Calia, Guerrini, & Moura, 2007

Business models “consist of four interlocking elements, that, taken together, create and deliver value” (p. 52). These are customer value proposition, profit formula, key resources, and key processes.  

Johnson & Suskewicz, 2009

“A business model is . . . a reflection of the firm’s realized strategy” (p. 195).  

Hurt, 2008; Baden-Fuller & Morgan, 2010

“A business model articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value” (p. 179).  

Gambardella & McGahan, 2010

(Zott, Amit, & Kassa, 2011)

Regardless of the vagueness of the business model definition, many academics and managers would agree that running a successful business model is the key to a thriving business. In this regard, some argue that “great business models can reshape industries and drive spectacular growth” (Johnson, Christensen, & Kagermann, 2008). There are many examples of different business models each of which may reflect one or more aspect of how companies create value proposition. One example is the bait and hook business model (also called razor and blades business model, and tied products business model). In this model, the product is offered at a very low price, often at a loss (the bait). Companies then make their profits by charging their customers compensatory frequent expenses for supplementary products or services (the hook). The bait and hook model can be found in
many industries. Cellular companies, for example, may offer extremely discounted cell
phones for new customers in exchange for signing contracts, which guarantees the
purchase of minutes for a specific period of time. Printer manufactories apply the same
concept by offering their printers for a very low price and make their profit from selling ink
cartridges. The model can be detected also in the software business. Adobe Reader, for
example, is free but in order to create a pdf document users may have to purchase the
pricy Adobe Writer.

Whereas the bait and hook model describes the relationship between the
customers and the products, there are models that emphasize, instead, where the business
operates, whether in a physical place, or virtually. For example, the bricks-and-mortar
model refers to traditional business that only exists in a physical location. On the other
hand, the bricks-and-clicks model is a hybrid business model where customers buy
products online and pick them up from the business’s physical location. Other businesses
exist only on the Web and do not interact with customers in a physical space. Amazon and
eBay are examples of that model. Franchise is another business model which is built
around the use of another firm’s successful business model and reputation for a fee. The
franchise business model is very common in hotel, restaurant, and retail businesses.

Naming and analyzing all types of business models is a huge task and certainly is
not the goal of this particular research. What we can see from the literature, however, is
that from looking closely at different types of business models, we can find many experts
such as Weil (2002) who have strongly envisioned social-enterprise as a potentially
conducive model for museums. Others have gone as far as to argue that museums are
already functioning as social enterprises (Ford, 2012). So what is social enterprise? And
how is the term understood within the museum sector?

3.0 The Conceptualization of Social Enterprise in Europe and United States

Social-enterprise as a conceptual framework is fairly new. In their article, “Social
terrprise: The shaping of a new concept in a comparative regional perspective,” Defourny
and Nyssens (2009) argue that “Whereas a dozen years ago this concept [social enterprise]
was rarely discussed, it is now making amazing breakthroughs on both sides of the
Atlantic.” The term is defined by Social Enterprise Alliance (SEA), the membership
organization for the social enterprise sector in North America as “businesses whose primary purpose is the common good. They use the methods and disciplines of business and the power of the marketplace to advance their social, environmental, and human justice agendas” (“The case for social enterprise alliance,” 2012). Across the Atlantic, Social Enterprise UK, the national body for social enterprise in the United Kingdom, provides the following definition.

Social enterprises are businesses that trade to tackle social problems, improve communities, people’s life chances, or the environment. They make their money from selling goods and services in the open market, but they reinvest their profits back into the business or the local community. And so when they profit, society profits (Social Enterprise UK, n.d.).

In the European context, EMES\textsuperscript{12}: European Research Network introduces nine characteristics of the “ideal” social enterprise: (1) a continuous activity producing goods and/or selling services; (2) a high degree of autonomy; (3) a significant level of economic risk; (4) a minimum amount of paid work; (5) an explicit aim to benefit the community; (6) an initiative launched by a group of citizens; (7) a decision-making power not based on capital ownership; (8) a participatory nature, which involves the persons affected by the activity; and (9) a limited profit distribution (Defourny J., 2001).

Looking at the previous definitions, it appears that the European conceptualization of social enterprise focuses on the democratic structure of the organization. More specifically regarding the governance and the distribution of power (Defourny & Nyssens, 2009), as illustrated in characteristics number 6, 7, and 8 of the EMES definition. This is also supported by Young and Salamon (2002) who argue that “[i]n Europe, the notion of social enterprise focuses more heavily on the way an organization is governed and what its purpose is rather than on whether it strictly adheres to the nondistribution constraint of a formal nonprofit organization.” Also, in Europe, social enterprise can frequently be seen as part of the third sector movement which includes social cooperatives. This understanding

\textsuperscript{12} EMES is a research network of established university research centres and individual researchers whose goal is to gradually build up a European corpus of theoretical and empirical knowledge, pluralistic in disciplines and methodology, around “Third Sector” issues
is largely influenced by the history of the social enterprise movement in Europe as well as the research and empirical work conducted by the EMES. More specifically, in the late 1970s and early 1980s, when the root of the social enterprise movement started in Europe, some factors such as “the persistence of structural unemployment in many European countries, the need to reduce State budget deficits and to keep them at low level, the difficulties of traditional social policies and the need for more active integration policies” (Defourny & Nyssens, 2009) contributed to the creation of social enterprise as part of the third sector.

In the United States, unlike in Europe, the conditions and drivers have been characterized much more by the ability of the organization to generate income by using business strategies and marketplace principles.

The concept of social enterprise in the United States is generally much broader and more focused on enterprise for the sake of revenue generation than definitions elsewhere. This remains true even when considering the definitional divide in the United States between academics and practitioners (Kerlin J. A., 2006).

The focus on revenue generation and other financial components is illustrated in the following figure in which Dees (1998) suggests four stakeholders (i.e., beneficiaries, capital, workforces, and supplies) to map out social enterprise within the non-profit and for-profit spectrum. In the non-profit business model, for example, Dees observes that beneficiaries do not pay for the services they receive, while in the business sector beneficiaries have to pay the market rate price. In the social enterprise business model, however, beneficiaries may pay subsidized rates, or in some cases the organization may choose to mix between full payers and those who pay nothing.
The US understanding of social enterprise has been largely influenced by the views of early academic researchers such as J. Gregory Dees, James Austin, and Kasturi Rangan who came from a business background and had interests in the “Corporate Social Responsibility” concept. Dees, for example, believed that social enterprises should have double bottom lines (social mission and profit making) but stressed the importance of viewing revenue generation as a means, not an end.

In Europe, often, social enterprises have a different set of goals. The first set of these is typically related to the social mission of the organization. The second set is likely to be connected to the organization’s financial goals and its entrepreneurial aspects. And

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13 The United Nations Industrial Development Organization defines Corporate Social Responsibility (CSR) as “a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives (“Triple-Bottom-Line- Approach”), while at the same time addressing the expectations of shareholders and stakeholders”.

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finally, the third set of goals tends to relate to socio-political issues that concern the sector of which the social enterprise is a part (Defourny & Nyssens, 2009). To achieve these complex sets of goals, the social enterprise has to have a clear vision of the essence and purpose of its existence. Those organizations that struggle in defining themselves and their relevance, may also struggle in adopting a successful social enterprise business model.

Another notable difference between the US and European concepts of social enterprise is that European social enterprise is viewed as part of the “social economy”. The discussion in the US, on the other hand deals with social enterprise as part of the regular market economy, eliminating the European distinction. In the UK context, some researchers such as Bull (2008) have argued that “the concept of social enterprise is seen as comprised of ideas from both Europe and the USA.” The UK Department for Business Innovation & Skills defines social enterprise as “a business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profit for shareholders and owners.” The UK definition illustrates the significance of reinvesting the “surpluses” to serve the ultimate social mission of the organization. The European, United States, and United Kingdom conceptualizations of social enterprise, however, agree on some key elements. They envision social enterprise as a business model which enables social organizations to use business techniques, concepts, and strategies to achieve their social, cultural, or environmental mission.

Kerlin (2006) draws our attention to another important distinction between the United States and Western Europe in the conceptualization of social enterprise. Kerlin argues that “the institutional environments for social enterprise in the United States and Western Europe tend to reflect a private/business focus in America and a government/social service focus in Europe” (Kerlin J. A., 2006). In the European context, for instance, governments and the EU have played a major role in advancing the social enterprise movement and legislated laws for that purpose. Taking the UK as an example, Tony Blair, the former UK Prime Minister, supported the social enterprise movement. In July 2003,

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14 Social economy refers to the economic activities produced by the third sector organizations which includes co-operatives, foundations, credit unions, non-profit organizations, charities and social enterprises.
Blair’s administration legislated the “community interest company” as a legal framework specifically for social enterprises. And in May 2006, the UK government established the Office of the Third Sector (OTS) to help “the sector to campaign for change, deliver public services, promote social enterprise and strengthen communities” (Innovation Unit, n.d.). Blair’s support is also shown in his message to the 2006 Social Enterprise Coalition conference where he praised the work social enterprises are doing in communities across the UK. Blair stated,

In areas such as recycling, transport and leisure, social enterprises have pioneered new ways of delivery, helping local authorities improve the quality of the services they provide to the public. By empowering staff, users and other stakeholders, they can do the real joining up on the ground that public bodies often struggle with. I want to see more people benefit from the innovation and commitment that social enterprises bring (Co-operative News, 2006).

In the US, it is not, perhaps, controversial to state that the government has tended, historically, to be less involved in the development of the social enterprise movement. The private sector, on the other hand, initiated several programs to advance the social enterprise movement through funding, training, strategic planning, and research. Established in 1980, Ashoka is one of the largest organizations that have provided a range of services to new and established social enterprises, not only in the U.S. but worldwide. Ashoka’s mission is “to support social entrepreneurs who are leading and collaborating with change makers, in a team of teams model that addresses the fluidity of a rapidly evolving society” (Ashoka, n.d.). Ashoka provides financial support to social entrepreneurs for three years “allowing them to focus full-time on building their institutions and spreading their ideas” (Ashoka, n.d.). Together, Ashoka’s fellows form an international network of social entrepreneurs who communicate with each other to provide opportunities for peer support, partnerships, and professional consultation. The international network currently consists of 3,000 social entrepreneurs in more than 70 countries. According to its website, Ashoka’s fellows are recognized as leading social entrepreneurs who have “innovative solutions to social problems and the potential to change patterns across society. They
demonstrate unrivaled commitment to bold new ideas and prove that compassion, creativity, and collaboration are tremendous forces for change”. The social enterprise work by many of Ashoka’s fellows have had a lasting impact on the wellbeing of their communities. Ravindranath (or Ravi), Ashoka Fellow from India, for example, who is an engineer by training has helped save the lives of thousands of people in his community. Ravi lives in a village in the Northeast of India where flooding is a routine part of life. One of the problems that the people at Ravi’s village face is the difficulty of finding clean drinking water during the flood. Knowing that, Ravi constructed “hand-pump extensions that preserve the availability of potable drinking water during emergencies, the most dangerous threat to life during floods” (Technology in Solidarity, 2009). Additionally, he designed innovative, low cost flood shelters made of bamboo and tarps, through which Ravi has preserved the lives of thousands of people. Not only that, Ravi also was behind a project to develop a warning system using simple tools such as text messages and emails to help people prepare and evacuate before the flood.

The United States’ National Institute of Mental Health points out that “research on mental health epidemiology shows that mental disorders are common throughout the United States, affecting tens of millions of people each year, and that, overall, only about half of those affected receive treatment.” As a social entrepreneur and Ashoka fellow, Tomas Alvarez, a graduate of Smith College School for Social Work, decided to tackle this serious issue. Alvarez uses the power of rap music and hip hop culture as an alternative to traditional talk therapy, which can be both unacceptable by and ineffective for urban youth.

Essentially, Ashoka’s case may deserve further attention and careful consideration. This is because when Chesbrough, the person who coined the open innovation theory, and Minin introduced their Open Social Innovation (OSI) paradigm in 2014, they used Ashoka as one of their case studies, bridging the gap between social enterprise and open innovation. In their article, Chesbrough and Minin argue that social enterprises become more effective and capable of creating a larger social value, if open innovation strategies are applied. They explain the importance of Ashoka’s case,

15 Open Social Innovation (OSI) has been discussed in Chapter 3: Theories and Practices of Innovation.
Still, what makes the Ashoka’s case such an interesting example of OSI is that its success arrived later when the organization truly opened up its original functioning model. Let us consider the details of such transition from a fellow-centered to a collaborative-entrepreneurship based model (Chesbrough & Minin, 2014).

In the last chapter we mentioned that there was a link between open innovation and social enterprise and that link would be identified in Chapter 4 and Chapter 7. What we are seeing here is an exciting connection made by a major theorist (i.e., Chesbrough) between what may seem to be two distant concepts; one is very business oriented (open innovation), and the other one is a crossbreed (social enterprise). This connection between open innovation and social enterprise is crucial in understanding the conceptual framework of the Museum Innovation Model, which will be addressed in detail in Chapter 7. The model sees open innovation as an effective strategy for innovation and social enterprise as a conducive business model that supports innovation.

While social enterprise as a term is new, the concept of using business strategies to achieve social missions is old. One of the oldest organizations that has used the social enterprise concept in the US is Goodwill. The company was founded in 1902 in Boston, Massachusetts by Edgar J. Helms, a Methodist minister who started the company to address the needs of his community as well as provide a steady stream of income for his church. Helms collected goods donated by the rich, and hired poorer individuals from the community to fix, repair, and resell these goods for cheap prices. The mission of the organization states, “Goodwill works to enhance the dignity and quality of life of individuals and families by strengthening communities, eliminating barriers to opportunity, and helping people in need reach their full potential through learning and the power of work” (Goodwill, n.d.). Goodwill over the years has trained millions of people and empowered them with the necessary skills to compete in the job market. Most of these people have special needs and face tremendous difficulties finding jobs. “Goodwills meet the needs of all job seekers, including programs for youth, seniors, veterans, and people with disabilities, criminal backgrounds and other specialized needs” (Goodwill, n.d.). Helms describes Goodwill in his own words as an “industrial program as well as a social service enterprise
[... ] a provider of employment, training and rehabilitation for people of limited employability, and a source of temporary assistance for individuals whose resources were depleted” (Goodwill, n.d.). Confirming Helms’ view, Jim Gibbons, President and CEO of Goodwill Industries International, who was the first blind person to graduate with an M.B.A. from the Harvard Graduate School of Business Administration, wrote an article for Harvard Business Review stating,

Goodwill Industries International has been running a complex social enterprise since long before the term was coined. And for-profit companies have something to learn from our philosophy — by putting social good at the center of their business models (Gibbons, 2011).

Goodwill’s business model can be inspiring to many researchers and other social enterprises. It is inspiring to the point that Giovanni Rodriguez (2013), in an article for Forbes, considered Goodwill “The Most Important Social Enterprise in 2013”. Rodriguez explains,

With all of its storefronts — both physical and digital — Goodwill is raising a massive amount of cash to serve its core mission. Total amount of revenue generated last year by Goodwill’s 165 agencies in the US and Canada (and 14 affiliates in 13 other countries): $4.43 billion. And with more than 80 cents on the dollar going toward its mission, the impact is substantial (Rodriguez, 2013).

It is, probably, inappropriate to speak about social enterprise and social entrepreneurship without mentioning Grameen Bank (or Village Bank) and Muhammad Yunus, who won the 2006 Nobel Peace Prize for his work in fighting poverty. Yunus is a Bangladeshi banker, famously known as the godfather of social entrepreneurship. Yunus’ article in Harvard International Review, “Credit for the poor: Poverty as distant history,” argues that “[t]he poor are the victims of the very institutions that we have built and feel so proud of, and their continuous plight stems from our inability to think beyond the dominant theoretical frameworks of macroeconomics” (Yunus, 2007). Ultimately, Yunus here is referring to commercial banks. Started as a self-initiative and later through Grameen
Bank, which he found in 1983, Yunus has granted very small loans to the poor citizens of Bangladesh in order to start a new, or support existing small businesses. Normally, these individuals are rejected to receive traditional loans from commercial banks. Yunus explained his vision for the social business (social enterprise) in his speech at the 2006 Nobel Peace Prize award ceremony;

Social business will be a new kind of business introduced in the marketplace with the objective of making a difference in the world. Investors in the social business could get back their investment, but will not take any dividend from the company. Profit would be ploughed back into the company to expand its outreach and improve the quality of its product or service. A social business will be a non-loss, non-dividend company (Yunus, Nobel Lecture, 2006).

Now, Grameen Bank has 2,564 branches in Bangladesh, employing 19,800 staff, and serving 8.29 million borrowers in 81,367 villages. “On any working day Grameen collects an average of $1.5 million in weekly installments. Of the borrowers, 97% are women and over 97% of the loans are paid back, a recovery rate higher than any other banking system” (Grameen Bank, n.d.). Yunus’ understanding of social enterprise allows investors to get back their investments but restricts the contributions of any profits. This understanding corresponds with the UK conceptualization which stresses the importance of reinvesting any potential profits to maximize the social agenda of the organization, rather than distributing it to shareholders. Since social enterprises in the US can function in the private sector, distribution of profit to stockholders may be less strict, as long as the social mission of the organization is being achieved.

Both social enterprise and non-profit business models address and strive to meet the social, cultural, and environmental needs of communities. However, “[s]ocial enterprise differs from the traditional understanding of the nonprofit organization in terms of strategy, structure, norms, and values and represents a radical innovation in the nonprofit sector” (Dart, 2004). Some experts argue that traditional non-profit model is being challenged due
to its inability to respond to the new economic reality. For example, Jon Carson, CEO of BiddingForGood\textsuperscript{16} argues,

I think that an awful lot of nonprofits are fragile and at risk, whereas for-profit social enterprises, to the degree that their business models are functioning properly have a workable business model, so they are not coping with this problem of whether donors are going to show up for the big annual campaign (Carson, 2009).

Reviewing the existing legal structures in the United States, we can conclude that it is possible for social enterprise to run under the umbrella of non-profit or for-profit status. But the legal framework, perhaps, needs to be distinguished from the business model which expects social enterprises to engage in commercial adventures to serve their social mission. It may be crucial here to stress that the essence of the social enterprise business model fundamentally contradicts the traditional non-profit framework, which relies solely on philanthropic contributions, volunteers, fundraising, and grant writing to support their operation. In other words, enterprise and commercial activities are not part of the non-profit business model. However, the non-profit framework has been challenged, mostly because of economic reasons. More recently, due to recession, many non-profit organizations have been deprived to a large extent of their traditional sources of revenue and the need for a new model has become necessary.

Some researchers have investigated the possible factors that led to the rise of the social enterprise movement. Dees, Emerson, and Economy (2001), for example, argue that the social enterprise business model has emerged in response to philanthropic resource constraints in the non-profit sector. In the 1960s, the US witnessed a massive expansion in government spending on social and welfare projects including healthcare, human development, education, arts, etc. More specifically, in his efforts to fight poverty and promote social justice, President Lyndon B. Johnson established the Great Society programs. So far, many Americans are still enjoying the benefits of some of these programs.

\textsuperscript{16} BiddingForGood is a social enterprise company which defines itself as “a charitable e-commerce company that connects fundraisers, cause-conscious shoppers, and socially responsible businesses” \url{https://www.biddingforgood.com/auction/biddingforgood.action}
such as Medicare and Medicaid. The U.S. federal government made a strategic decision, however, to channel its funding through non-profit organizations to avoid the bureaucracy and inefficiency of governmental organizations. During that time, the non-profit sector in the U.S. flourished and expanded as funding was accessible. Nonetheless, the situation dramatically changed in the 1970s and 1980s regarding the U.S. economy.

The second “decline” of the U.S. economy took place in the 1970s and 80s. America’s international economic position fell markedly by the end of the 1960s and beginning of the 1970s. In 1970, the export trade of the six countries of the European Community accounted for 27.6% of the world total, more than doubling that of the United States (13.7%). The figure for Japan was 6.2%. In 1971, the United States suffered from a trade deficit, though the amount was small ($2.2 billion). Shortly, it rose to $6.8 billion in 1972, and since then, it occurred almost every year, which was totally different from what was before the 1970s (Dezhao, 2006).

Within this context, Defourny and Nyssens (2009), and Kerlin (2006) argue that the decline in the U.S. economy during the 1970s and 1980s and the government cut back on many social programs led to depriving non-profit organizations of some of their major sources of funding. Consequently, this new situation has inspired many organizations to seek creative commercial activities to keep their programs running and continue serving their communities. Researchers and consultants started to suggest the social enterprise business model as a potential solution for struggling non-profits. With the recent increase of economic pressure and the rise of oil, food, clothes, housing, and healthcare prices, the social enterprise movement has gained huge momentum worldwide. Considering this complex situation, it is, perhaps, crucial to understand that the aspiration to generate income from commercial ventures in the social enterprises business model has not intended to fully replace the philanthropic contributions as a source of income. It is simply a way to diversify revenue sources which makes the organization more flexible, resilient, and independent.

In the end, commercial operations will not—and should not—drive out philanthropic initiatives. Many worthwhile objectives cannot effectively be
pursued by relying on market mechanisms alone. In any case, people tend to get something out of giving that they cannot get out of market transactions. People want to make contributions to the common good, or to their vision of it. The challenge is to harness these social impulses and marry them to the best aspects of business practice in order to create a social sector that is as effective as it can be (Dees, 1998).

The gradual mix of business ideas, management practices, and market principles with the world of non-profits has produced new hybrid organizations (i.e., social enterprises) and presented a new phenomenon. Some experts refer to this phenomenon as the “blurred boundaries” (Kerlin J., 2009).

![Figure 23: The Mix of Business Strategies and Social Missions in the Social Enterprise Business Model (Eid, 2016)](image)

Dart (2004), on the other hand, offers a different analysis of the reasons that led to the rise of the social enterprise movement. He based his analysis on organizational legitimacy as theorized in sociology. “For example, government, foundation, or federated funders might find social-enterprise activities pragmatically legitimate because such activities could reduce social-purpose organizations’ need for these groups’ funding, or because such activities offer innovative solutions to social problems” (Dart, 2004). Michael Bull (2008), from Manchester Metropolitan University Business School (UK), studied the social enterprise literature and concluded that the emergence of the social enterprise business model has been due to:
The previous discussion reveals different reasons for the rise of the social enterprise movement. Some of these reasons are financial in nature while others focus on the legitimacy given to social enterprises through governments due to the decline of social services provided by these governments. What is certain though is the great attention this movement has received by policy makers, practitioners, and academics. The next section will attempt to provide an overview of how the academic community sees social enterprise, expanding the discussion to include social entrepreneurship and social innovation.

4.0 Social Enterprise in Academia

In 1993, John C. Whitehead, a banker and Harvard Business School (HBS) graduate donated $10 million to his alma mater to develop the first academic social enterprise program in the world. Professor J. Gregory Dees led the academic team that developed the curriculum for the first academic course in the discipline. Dees’ writings have shaped the way social enterprise is being understood now, especially his views on social entrepreneurship and enterprising non-profits. Since its conception in 1993, academics at the HBS’ social enterprise program have contributed and written “over 800 social enterprise books, cases and teaching notes” (Harvard Business School, n.d.). The growing interest in social enterprise has led to the expansion of academic programs in business schools around the world. John A. Byrne (2010) noted this expansion and argued that “[a]s greater numbers of young people dedicate themselves to social enterprise, more and more business schools are also getting into the act” (Byrne, 2010). Nearly twenty-two
years after Harvard University started the first social enterprise academic program, many business schools including Yale University’s School of Management, Stanford’s Graduate School of Business, and Oxford’s Said Business School now offer programs in social enterprise and social entrepreneurship. The Skoll Center for Social Entrepreneurship at Oxford’s Said Business School was founded in 2003 when Jeff Skoll, the founder of eBay granted the school a large fund to start an international MBA program in social enterprise. In a short period of time the program established itself as one of the best international MBA programs in the field. Additionally, the Fuqua School of Business at Duke University, also, offers MBA with concentration on social entrepreneurship.

The Concentration in Social Entrepreneurship is designed for students interested in using their MBA skills in the entrepreneurial pursuit of social impact [...] However, MBAs looking to use their skills and talents for social impact must approach their work thoughtfully, recognizing the unique challenges, opportunities, and qualities associated with trying to create social value (The Fuqua School of Business, n.d.).

Students who go through academic training to be social entrepreneurs receive the necessary foundations to be able to tackle the needs of their society in an innovative way. For example, the Social Enterprise MBA Program at Harvard Business School offers the following courses; Entrepreneurship and Technology Innovations in Education, Managing Social Enterprise, and Public Entrepreneurship as part of their curriculum. What we see, therefore, is that the curricula of these leading (agenda-setting) programs are not only a recognition of the importance of social enterprise as a credible and legitimate business model, but an up-skilling of an emerging generation of business leaders equipped to bring these models into the market, and to think and work in socially enterprising ways. They are the manpower that will lead social entrepreneurship in the future. Within this context, it may be helpful to review what qualities social entrepreneurs need to have and how the term “social entrepreneurship” is conceptualized.

- **Social Entrepreneurship**
Essentially, social entrepreneurship entails the personal qualities and characteristics of the individuals who are starting or leading social enterprises. Dees (1998) defines social entrepreneurs as,

Social entrepreneurs play the role of change agents in the social sector by:

- Adopting a mission to create and sustain social value (not just private value),
- Recognizing and relentlessly pursuing new opportunities to serve that mission,
- Engaging in a process of continuous innovation, adaptation, and learning,
- Acting boldly without being limited by resources currently in hand, and
- Exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created.

As we see, Dees’ definition places the social mission and the creation of social value at high importance. He believes that the path to achieve the social mission is through “continues innovation, adaptation, and learning”. He also refers to some of the attributes associated with business leaders such as boldness and accountability. Phills Jr., Deiglmeier, and Miller (2008) provide a definition that corresponds with the qualities mentioned in Dees. They state that “[s]ocial entrepreneurship focuses on the personal qualities of people who start new organizations, and it celebrates traits like boldness, accountability, resourcefulness, ambition, persistence, and unreasonableness” (Phills Jr., Deiglmeier, & Miller, 2008). On the other hand, Alex Nicholas (2006) sought to shed light on the term “social entrepreneurship” in his book, Social Entrepreneurship: New models of sustainable social change. The book describes a range of projects and establishes a clear set of frameworks around social entrepreneurship drawing on a number of articles authored by leading experts. Nicholas argues that “Social Entrepreneurship is a term that has come to be applied to the activities of grass-roots activists, NGOs, policy makers, international institutions, and corporations, amongst others, which address a range of social issues in innovative and creative ways” (Nicholls, 2006). As we see here, innovation is a quality that all previous definitions have included to describe social entrepreneurs. Dees specifically
addresses the innovativeness quality arguing that “[t]his willingness to innovate is part of the modus operandi of entrepreneurs. It is not just a one-time burst of creativity. It is a continuous process of exploring, learning, and improving” (Dees, 1998). The continuity of innovativeness, breaking new grounds, and developing new models are essential parts in Dees’ definition of social entrepreneurs. Dees, however, makes it clear that innovation does not necessarily mean inventing new products or services; “it can simply involve applying an existing idea in a new way or to a new situation. Entrepreneurs need not be inventors. They simply need to be creative in applying what others have invented” (Dees, 1998).

Research by MIT attempted to identify the qualities of successful entrepreneurs. Confirming the attributes mentioned above, the research argues that an entrepreneur is someone who: has drive and energy; has self-confidence; believes they can make a difference; can cope with not knowing; is ok with failure; is ok with taking some risks; takes the long-term view; uses money as a measure, not just an end; uses feedback; likes solving real world problems; uses the resources they have; creates their own standards; sets clear goals; and tries out new ideas (Hadzima, 2005). Bill Drayton, Ashoka Founder and CEO distinguishes the work of social entrepreneurs stating that they “are not content just to give a fish, or teach how to fish. They will not rest until they have revolutionized the fishing industry” (PBS, n.d.). Drayton’s comment shows how social entrepreneurs can be committed to find a lasting solution; a solution that does not just cure the symptoms of the problem but also addresses the heart of the matter. That is why social entrepreneurs always ask tough questions, try to see opportunities for development in complicated social problems and are determined to solve societal needs on a large scale. They are perceived as agents of change for society and producers of social value or as some experts call it, social innovation. We explored the concepts of social enterprise and social entrepreneurship. Now, we will turn to another important concept: social innovation, as it is closely associated with the social enterprise business model.

- Social Innovation
Reviewing the literature, it appears that the three terms, social enterprise, social entrepreneurship, and social innovation, have been used interchangeably by some academics and practitioners to refer to the same concept. For example, at the 2012 Social Innovation Summit held at the United Nations headquarters in New York City, according to David Wilcox, “a plenary panelist stated, that social enterprises and social innovation are “really the same thing.” This conclusion was not questioned and appeared to be a point of view the conference leaders and speakers were eager to adopt” (Wilcox, 2012). Also within this context, the literature lacks conceptual studies that can highlight the unique characteristics, overlaps, and connections between the three terms. Therefore, we intend to take some time here to distinguish between the three terms. This distinction is very significant (especially in relation to social enterprise and social innovation) and considered a base for the case studies at the IWM and National World War II Museum, which we will examine in Chapter 6.

This research views social enterprise as a business model and a quality of an organization. Social entrepreneurship, on the other hand, entails the characteristics of an individual who leads a social enterprise organization or is involved in finding creative solutions to today’s social problems. Social innovation expresses both the outcome and the process by which the solution is being created. It is possible, suggested here, to express the relationship between the three terms by stating that social entrepreneurs use social enterprise business model to achieve social innovation. In essence, social innovation is about new or more effective solutions for social problems. Murray, Caulier-Grice, and Mulgan (2010) define social innovation as “new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations”. While the three terms (i.e., social enterprise, social entrepreneurship, and social innovation) share many traits, each one of them brings to the discussion its unique perspectives and qualities.

James Phills, Kriss Deiglmeier, and Dale Miller (2008) argue that out of the three terms social innovation is the best to understand and execute a permanent and effective social change. This notion has, probably, led some business schools to prefer the use of social innovation (over social enterprise and social entrepreneurship) in naming their
academic centers and MBA programs. For example, in 2000, Stanford Graduate Business School established the Center for Social Innovation and, in 2003, they both launched the *Stanford Social Innovation Review*, a scholarly journal devoted for the study of social innovation. Since then the Center has been greatly contributing to the emerging field of social innovation. The Center’s mission is:

> to bring social and environmental change in the world. Through research, education, and experiential learning we strengthen the capacity of individuals and organizations to develop innovative solutions to complex problems. We envision a networked community of leaders actively working across sectors, frontiers, and disciplines to build a more just, sustainable, and prosperous world (Center for Social Innovation, 2013).

The Center for Social Innovation defines social innovation as “a novel solution to a social problem that is more effective, efficient, sustainable, or just than present solutions and for which the value created accrues primarily to society as a whole rather than private individuals” (Center for Social Innovation, 2013). We notice here how both social enterprise and social innovation share the same values in terms of social activism and addressing the needs of society. What may distinguish social enterprise from social innovation, as it appears from the term itself and the different definitions we reviewed here, is the strong belief that social enterprise should utilize business strategies and concepts to achieve its social mission. Similar to social enterprise, academics have been very interested in the concept of social innovation. The Stern School of Business at New York University, for example, offers MBA in Social Innovation and Impact to train future social entrepreneurs. The program provides “innovative conceptual frameworks, strategies and implementation skills necessary to create substantial social as well as economic value in for-profit, nonprofit and public sectors” (Stern Business School, NYU, n.d.). The objectives of Stern’s program, as we observe, very much overlap with and seem similar to the objectives set by other academic programs in social enterprise.

Social innovation has received attention and support from governments on both sides of the Atlantic. The European’s Commission DG Enterprise launched the Social Innovation Europe initiative (SIE) to empower the field of social innovation within the 27
member states in the Union. In an Open Innovation model, the SIE initiative aimed “to connect policy makers, entrepreneurs, academics and third sector workers with other innovators from across Europe” (O’Sullivan, et al., 2012). The project is run by Euclid Network\textsuperscript{17} and the Danish Technological Institute\textsuperscript{18}, and led by the Social Innovation eXchange (SIX), at the Young Foundation\textsuperscript{19}. The project offers in-depth information on European social innovation, conducts interviews with prominent innovators, presents case studies of successful ventures, and publishes articles by the leading thinkers in the field.

In the US, the White House accommodates the Office of Social Innovation and Civic Participation (SICP).

President Obama created the Office of Social Innovation and Civic Participation in early 2009 based on a simple idea: we cannot drive lasting change by creating new top-down programs from Washington. Instead we need to cultivate bottom up practices in cities and towns across the country where ordinary people already are coming together to solve tough problems. SICP serves as a hub for these activities (SICP, n.d.).

The acknowledgment by the White House and President Obama of the potential of social innovation as a means to transform communities and solve tough problems is very significant and probably worth the attention. More specifically, President Obama tasked the SICP with "engaging individuals, non-profits, the private sector, and government to foster innovation and work together to make greater and more lasting progress on our Nation’s challenges" (SICP, n.d.). While the interest in social innovation increases by governments, the international community is trying to create forums to discuss and engage with social innovation related issues. Taking place at the United Nations and Silicon Valley, Social Innovation Summit convenes every year since 2011 aiming to connect and

\textsuperscript{17}Euclid Network was founded in 2007 and has a strong track record of networking, peer learning and policy impact in the civil society and social enterprise arenas. EN has delivered a range of European programmes in the fields of civil society capacity-building, social entrepreneurship, social innovation and responsible research & innovation” (Euclid Network, n.d.).

\textsuperscript{18}The Danish Technological Institute is a self-owned and not-for-profit institution which develops, applies and disseminates research- and technologically-based knowledge for the Danish and International business sectors.

\textsuperscript{19}Young Foundation is a non-profit organization that utilizes “the power of social innovation to tackle the root causes of inequality” (Young Foundation, n.d.).
inspire “a global network of leaders to discuss the key strategies and business innovations creating social transformation across the corporate, investment, government, and non-profit sectors” (Social Innovation Summit, 2013). The 2012 Social Innovation Summit was hosted by Landmark Ventures and the United Nations Office for Partnerships. The summit brought together participants including corporate executives, venture capitalists, government leaders, foundation heads, and social entrepreneurs eager to discuss global challenges, analyze innovative approaches to problem-solving, and build lasting partnerships that enable them and their organizations to maximize social impact.

Figure 24: Social Innovation Summit, 2014 presented by Landmark Ventures held at the United Nations in New York. (Photo: JeffreyHolmes.com)

The diversity and expertise of the conference guest speakers and presenters reflects the growing nature of the social innovation concept and its possible applications in different settings and disciplines. Some of the distinguished speakers included Grant Harris, Special Assistant to the President & Senior Director for African Affairs at the National Security Council in the White House; Hilary Brandt, Director of Policy, Bureau of International Information Programs at the U.S. Department of State; Douglas Sabo, Vice President, Head of Corporate Philanthropy & Responsibility at Visa; Faizal Karmali,
- Process of Social Innovation

The UK National Endowment for Science, Technology and the Arts (Nesta) has presented a six-stage model for social innovation. The model describes how social innovation starts in its infancy as an idea and goes through a dynamic process. The final stage is the ultimate goal for the innovation where systematic change takes place (Murray, Caulier-Grice, & Mulgan, 2010). Chesbrough and Minin (2014) used Nesta’s model for social innovation to introduce their Open Social Innovation (OSI) paradigm using three case studies at three different organizations in three different countries including Emergency (Italy), Ashoka (USA), and the City of Birmingham (UK). We previously saw how Ashoka’s case represented a meeting point between open innovation and social enterprise through Chesbrough and Minin’s study. Now we are witnessing another significant link, through the use of Nesta’s social innovation model, again by Chesbrough and Minin to explain their OSI model. This shows how open innovation, social enterprise, and social innovation seem to be interconnected and complimentary in the social space.

As we can see in the figure above, Nesta’s social innovation model consists of six stages. The stages can be explained as follows:

Figure 25: Nesta’s Model of Social Innovation
- Stage 1: Prompts, inspirations and diagnoses: this stage describes how social innovators identify the needs, problems, or gaps in societies. The better we identify the root of the problem and ask the right questions, the greater the chance to come up with an effective solution.

- Stage 2: Proposals and ideas: this stage involves idea generation and possible solutions for the identified problem.

- Stage 3: Prototyping and pilots: this is the stage where abstract ideas transform into practical solutions. Prototypes are created, tested, and evaluated through pilot studies or any other appropriate method.

- Stage 4: Sustaining: this stage insures that the social innovation has enough elements to make it viable. That includes budget, logistics, staffing, supplies, etc.

- Stage 5: Scaling and diffusion: this is when the innovation is being implemented. Social enterprises can use different strategies to maximize the impact of the innovation. That may include franchising, licensing, partnership, etc.

- Stage 6: Systemic change: this is the ultimate goal for the social innovation where new social value has been created.

Chesbrough and Minin (2014) argue that,

> Open Social Innovation framework is particularly useful to accessing prototypes (stage 3), sustaining innovative efforts (step 4) and scale-up activities (step 5) within either the current business model or a potentially novel business model to meet the needs of under-served target populations that pure-market mechanisms are not able to address.

Once again, we see here how open innovation, according to Chesbrough and Minin, can be conducive to those organizations that are interested in adopting the social innovation model. On the other hand, Nesta’s report explains that “these stages are not always sequential (some innovations jump straight into ‘practice’ or even ‘scaling’), and there are feedback loops between them. They can also be thought of as overlapping spaces, with distinct cultures and skills” (Murray, Caulier-Grice, & Mulgan, 2010). Based on that, social innovation can be perceived as a dynamic and lively process, which can follow different
patterns and forms. This may require an innovation strategy that is flexible, agile, and can draw upon internal and external resources; qualities that can be found in open innovation.

Having considered the conceptual framework of the social enterprise business model and its connection to social entrepreneurship and social innovation, our discussion will now turn to the museum sector with the aim to deeply investigate the different conceptualizations as well as fieldwork examples of social enterprise in museums. The discussion will focus on the United States and United Kingdom contexts and benefit from the business studies theorization of social enterprise.

5.0 Social Enterprise in Museums

The first national survey of non-profit social enterprises in the United States was conducted by James C. Crimmins and Mary Keil in 1982. The survey resulted in crafting profiles of 11 non-profit social enterprises. Excitingly, the list included Denver Children’s Museum besides other organizations working in the education, healthcare and art sectors such as Housing Opportunities, Skidmore College, Southwest Craft Center, the Des Moines Ballet Company, Wells College, Pikes Peak mental health Center, the Shoreline Association for Retarded and Handicapped, the Guthrie Theatre, St. John’s College and Disc Village (Crimmins & Keil, 1983). Naming a museum in the first list that aimed to identify social enterprises in the US is quite significant and shows the historical connection between social enterprise and museums. Richard Steckel, Director of Denver Children’s Museum and Lisa Farber Miller, Director of Enterprise at the Museum transformed the Denver Children’s Museum into a successful social enterprise, where they modeled the earned income approach. Steckel’s activism in the social enterprise movement goes beyond sector divisions. In 1980, he invited individuals with different expertise from around the world “to gather for peer support and to share lessons learned” about social enterprise (The Institute for Social Entrepreneurs, 2008).

In 1984, Robin Simons, Peter Lengsfelder, and Lisa Farber Miller wrote a book entitled Nonprofit piggy goes to market: How the Denver Children’s Museum earns $600,000 annually, describing how Denver Children’s Museum was able to adopt a social
enterprise business model. This approach of linking social enterprise to earned income as it appears in the book title also corresponds with the US conceptualization of social enterprise, which focuses on the use of business strategies and marketplace principles by social organizations.

Since the case at Denver Children’s Museum, it seems like museums have slowed down in their experimentation with the social enterprise model. However, Stephen Weil, former deputy director of the Smithsonian’s Hirshhorn Museum and Sculpture Garden and senior scholar emeritus at the Smithsonian Center for Education and Museum Studies, showed in some of his later work an interest in the term and how it could possibly apply to museums. In his book, *Making Museums Matter*, Weil reintroduced the social enterprise business model explaining its business background and its possible implementations in museums. He states:

Within my own working lifetime, I have followed with fascination the emergence—particularly in this country [United States], perhaps less so abroad—of a new and potential dominant model for museums. Because it puts so extreme an emphasis on an organization’s outward rather than inward focus, it is a model that seems strikingly different from most of the earlier ones that museums have followed. Applicable across the entire spectrum of nonprofit organizations, it is called the “social enterprise” model, so named by J. Gregory Dees (Weil, 2002).

Weil’s observation raises two main points related to our current discussion. First, his vision that social enterprise represents the organization’s (and in our case here is the museum’s) “outward” or output. Secondly, Weil refers to Dees, as the person who coined the social enterprise concept. We have discussed Dees’ views on and contribution to social enterprise earlier in this chapter. Therefore, what we will attempt to do in the remainder of this chapter is to investigate the conceptualization of social enterprise in museums and to what extent this conceptualization has been different from, or influenced by, Dees.

In a six-page chapter entitled “New Words, Familiar Music: The Museum as Social Enterprise”, Weil offers a theoretical overview of the different business models museums
have gone through since their appearance as distinguished institutions and compares them
to the new social enterprise model. As we notice from the title of the chapter, Weil implies
that social enterprise is a familiar concept, which is expressed in a new way. In his
introduction of the social enterprise business model, Weil identified five preceding
sequential museum business models: the Museum as Establishment, the Museum as
Treasure House, the Museum as Philanthropy, the Museum as a Process, and the
Museum as a Presenter. He argued:

In contradistinction to the Museum as Establishment, the Museum as Social
Enterprise would draw its legitimacy from what it does rather than what it is, would
seek public support not as a matter of right but by offering to provide the public
with value in exchange, might be open to challenge as a matter of course, and-
equally as a matter of course- would expect to be held accountable for every aspect
of its operations. In contradistinction to the Museum as Treasure House, it would
regard its collections and other resources as means toward the accomplishment of
its entrepreneurial goals, not as ends in themselves. In contradistinction to the
Museum as Philanthropy, it would measure itself by the results that it achieved, not
merely by its good intentions. In contradistinction to the Museum as Process, it
would - in Drucker’s phrase - “seek not just to do things right, but also to do the
right things.” Less dramatic might be its distinction from the Museum as Presenter.
The Museum as Presenter might once have concentrated on the quality of its
public offerings but the museum as Social Enterprise would look first and
principally at their impact (Weil, 2002).

Weil here recognizes the different aspects, which characterize the museum as
social enterprise including the social mission as the ultimate goal and the entrepreneurial
aspiration as a means. Weil’s reference to the museum as social enterprise equals
providing “the public with value”, a value that has a social impact. We notice here that this
understanding is influenced by Dees’ views on social enterprise. However, Weil, while
developing his views on the museum as social enterprise, it seemed that he became more
interested in the social aspect of the term and somewhat overlooked its business
dimension.
More recently, Robert Janes (2013) in his book, *Museums and the paradox of change* points out to the new social entrepreneurship movement in museums. Janes is a former museum director, the former Editor-in-Chief of the *Journal of Museum Management and Curatorship* and a distinguished international museum thinker. He states, “[t]he intersection of the two – a desire for social change coupled with new and better solutions and initiatives – is now called social entrepreneurship, a concept that is slowly taking shape in the museum world” (Janes R. R., 2013). Janes recognizes the concept but also considers it exceptional to what museums are accustomed to; “but social entrepreneurship is the exception and not mainstream museum practice” (Janes R. R., 2013). Janes criticized the mainstream museum business model for being irrelevant to social and environmental challenges we face today. He argues,

> The convergence of global issues—ranging from climate change to the erosion of cultural diversity—has created a watershed of opportunity or an unprecedented crisis for museums. The contemporary museum business model based on consumption, entertainment and ancillary education is increasingly unsustainable and irrelevant in this context (Janes R. R., 2010).

In contrast to Steckel’s approach to social enterprise and the work he carried out at the Children’s Museum of Denver, Weil and Janes’ visions focus on the social aspect of the social enterprise business model, and probably seemed to overlook or even reject the implication of the enterprise part of the model. Janes, for example, argues that “[t]he mindful museum rejects marketplace ideology and demonstrates that solutions will arise from place and culture” (Janes R. R., 2010). On the other hand, the social enterprise business model, as explained previously by Dees and others, takes advantage of the marketplace and business principles to strengthen the organization’s ability to achieve its social mission.

David Fleming, Director of National Museums Liverpool confirms that Stephen Weil was a believer in the museum as social enterprise stressing on the social value of museums. Fleming states, “In fact, Stephen was relentless in pursuing the notion of the Museum as Social Enterprise, and in stressing that without social value the museum is nothing” (Fleming, 2006). Fleming continues to explain Weil’s vision,
In one essay he came up with at least seven phrases to describe what he wanted: he wanted “social activism”; he wanted “social enhancement”; he wanted “social advancement”; he wanted “social service”; he wanted “social development”; he wanted “social change”; he wanted a “social outcome” (Fleming, 2006).

Janes and Weil’s understanding of social enterprise as a driver for social outcome and advocacy is highly important, and probably revolutionary for many museums. Janes, in his article, “The Mindful Museum,” offers examples of what he believed mindful museums are. His examples included museums and cultural organizations seeking to positively impact issues related to poverty, starvation, and preservation of water among other things. Moreover, Richard Sandell, Professor of Museum Studies at The University of Leicester theorizes about the social role of museums in society in issues related to human rights, equality, social justice, and social inclusion. He argues that “museums can contribute to the combating of the causes and the amelioration of the symptoms of social inequality and disadvantage at three levels: with individuals, specific communities and wider society” (Sandell, 2003). This clearly corresponds with the social enterprise and social innovation concepts as they are theorized in the business studies literature. (Sandell, 2013).

Heather Doherty (2011) from Museums Galleries Scotland reports that “[s]ome [cultural] organizations have been looking at social enterprises currently operating and thinking about how this could be applied elsewhere.” The value of incorporating enterprise in the museum business model is that it facilitates innovation. Lyons, Townsend, Sullivan, and Drago (2010) assert that “[p]art of being entrepreneurial and operating an entrepreneurial nonprofit is to innovate”. Contrary to Weil and Janes’ views which focus on the social side of the social enterprise business model, some politicians such as Ed Vaizey emphasize the enterprise part of the model. Vaizey stated:

But driving forward will take courage and ingenuity. The state cannot afford to subsidise those who are unable to help themselves. All museums need to develop a

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20 Janes also used other terms to refer to his idea of the “mindful museum” such as “progressive museum” and “museum innovation”.
stronger instinct for partnership, mergers, commercial ventures and new approaches. Those who fund museums and those who govern and lead them need to consider fresh strategies to ensure stability in the years to come (Vaizey, 2010).

As we noted in Chapter 2, Vaizey in his short speech at the 2010 Museum Association conference attempted to bridge enterprise and innovation. He asserted that Renaissance funding, for example, “will only be applied to efficient, imaginative and innovative museums” (Vaizey, 2010). Between Vaizey’s vision and those ideas of Weil and Janes, we see how the social enterprise business model in museums can be perceived differently. This is not because the term is ambiguous, as suggested here, but because each party preferred to focus on one side of the model, the side that better serves their idols and understanding of what the museum should be.

In a related event, a one-day seminar at The Museum of Brands in London titled “Cultural Community: The Museum as Social Enterprise” explored the idea of social enterprise within a museum context. It was argued in the seminar “that museum directors ought to see themselves as social entrepreneurs. By doing so, they can transform their organizations into true community assets which deliver social benefits while generating income” (Museum ID, 2012). We see here a discussion by a group of museum professionals who clearly recognize the two sides of the social enterprise business model. This is significant and encouraging as the museum sector tries to analyze the model and understand how it can apply to museums. However, the first possible reaction to the idea suggested in the seminar is the question, do museum directors carry the necessary skills to behave as social entrepreneurs, as described by Dees (1998) and others? That can be a challenge, especially in the absence of academic training on social entrepreneurship among museum professionals.

One of the museum directors who appears to have the skills and the vision of a social entrepreneur is Tony Butler, Director of Derby Museums. Butler started his position at Derby in January 2014 and before that he was the Director of the Museum Anglian Life (MEAL) for almost 10 years. Butler has been a strong advocate for the museum as social enterprise. When Butler accepted the responsibility of directing MEAL, the Museum was near bankruptcy. Within his 10-year tenure at MEAL he was able to
transform the Museum into a thriving institution with £4 million capital development. According to the website of the British Council, Butler “has transformed a failing organisation into one which is leading developments in social and cultural enterprise in the UK’s independent museum sector. MEAL was one of the first museums in the UK to reposition itself as a social enterprise.” Butler carried his skills and vision with him when he moved to lead Derby Museums. One of the major decisions he made in the first month at his new job is “to make the organisation "more entrepreneurial" – including opening a café at the city's museum” (Mallet, 2014). He also had plans “to hire out rooms in the trust's buildings for corporate events and improve the museum's shop” (Mallet, 2014). By doing so Butler was able to transform the business model of the museum from a traditional non-profit organization which depends on philanthropic contributions, donations, and government subsidies to a thriving social enterprise which uses business strategies and marketplace principles to support its social mission. The work of Tony Butler at MEAL will be discussed in further detail uncovering both the social and entrepreneurial dimensions in Chapter 7. It is worth noting at this point that social enterprise represents the MIM’s business model, and as we see, has proven valuable in several museums contexts.

Katharine Ford, specialist in sustainable business models and practices, was asked by Cinema Museum in London to review their business model. After finishing her study, Ford concluded that museums are functioning social enterprises; “I get annoyed when museums are invited to think about this [adopting social enterprise model] because most of them are already operating a social enterprise business model – and really well” (Ford, 2012). She defines social enterprise as “organizations that engage in some commercial activity in the way in which they deliver social, environmental, educational or cultural benefit. The profits of which are used to increase the level of benefit the organization delivers rather than retained for personal gain” (Ford, 2012). In an interesting opposition to the views of Vaizey (2010), Ford continues to strongly defend museums’ business models as social enterprise; “the museum's business model is based on sustainability and is a classic example of the successful early adoption of the social enterprise model” (Ford, 2012). She explains,
Museums deliver on government contracts and generate income from shops, cafes, educational programmes, image loans, membership, hire of facilities, and film shoots as well as being expert fundraisers. Museums are also expert in running on a shoe-string, working with volunteers, and collaborative working – they understand the environmental impacts of their activities and have done pioneering work on energy saving (Ford, 2012).

As is evident, there is a disagreement between Ford’s perceptions of museums as social enterprises on one side, which argue that museums actually perform a lot of enterprising work, and on the other side, those of Vaizey, who is interested in seeing museums develop their commercial capabilities. Contrary to Ford’s views, Stuart Davies expressed his concerns about the management and entrepreneurial skills museums hold. He stated, “Business skills are not consistently present [in museums] – and these include both management and entrepreneurial skills. We need to particularly think about how skills that are available can be accommodated within the resources available in order to produce a result” (Davies, 2009). Davies was the President of the Museums Association in the United Kingdom from 2008 to 2010, and currently is a visiting professor in Museum Studies at the Institute of Archaeology, University College London and the School of Conservation Studies at Bournemouth University.

Aside from this controversy, the large majority of museums do not see themselves as, or at least have not claimed to be, social enterprises. Museums have the tendency to present themselves as non-profit organizations, which is quite different from social enterprise. We explained the difference between the two models earlier in this chapter. Dart (2004), however, reminds us that “[s]ocial enterprise differs from the traditional understanding of the nonprofit organization in terms of strategy, structure, norms, and values and represents a radical innovation in the nonprofit sector.” Adopting the social enterprise business model by non-profits requires fundamental changes in their organizational structure, vision, policy, culture, and partnership strategy. These changes touch all aspects of the organization which makes it a very intense process.

The cultural sector responded to the social enterprise movement and formed the Association for Cultural Enterprises (ACE). ACE’s mission is to promote “commercial
best practice in the cultural, heritage and visitor attraction sector by providing training and networking opportunities and facilitating the sharing of information and experience between its members” (ACE, n.d.). Such organizations can help cultural institutions including museums gradually transform their business model, if interested, into social enterprises. Doherty (2011) argues that “while social enterprise can have great benefits for a museum, it is only one approach to social engagement and increasing funding. As such, it should be considered alongside other activities, taking into account available resources and expertise.” In her report, she names three museums that have included social enterprise elements in their work: Grampian Transport Museum, Highland Folk Museum, and the Museum of East Anglian Life.

The new economic reality has probably provided museums with good enough reasons to take the social enterprise business model more seriously. Simon Neville from The Guardian reports that “thanks to a combination of the financial crisis, government cuts and the changing landscape of Britain’s high street, museum and gallery shops are turning into thriving commercial hubs, generating sales of £100m last year” (Neville, 2013). The article shows how museums were able to capitalize on their exhibitions and famous objects in their collections by supplying their stores with innovative products which drove the sales up. John Stachiewicz, chairman of the Association for Cultural Enterprises states

Cuts in the cultural sector have been deep since the recession hit and institutions have quite simply had to rise to the challenge. One of the ways we have witnessed the sector doing this is by creating unique and relevant products to sell to visitors (Neville, 2013).

The article gives examples of the new products museums and cultural organizations have innovated to increase their sales. Neville (2013) states that “St Paul's Cathedral harvested some of the rubble from recent refurbishments and set it into cufflinks. For £210 owners can now decorate their shirt cuffs with marble from the starburst under its famous dome”. Another example of museums that experimented with enterprising projects in the UK is London Transport Museum, which Doherty has mentioned in her 2011 report, “Social Enterprise and Museums.” As part of the activities to celebrate London Underground's 150th anniversary sesquicentennial the Museum “salvaged luggage
racks from old Metropolitan line trains - selling them for £250”. Mike Walton, Head of Trading at the museum stated to Neville, “The best-selling items include wallets and bags made from off-cuts of the fabric used on the seats of tube trains and buses.” Walton explains,

The fabrics are ingrained into the subconscious of Londoners, but the patterns are distinctive and immediately recognisable. They have been so popular that we’ve even started selling cushions and rugs in the same patterns as the Victoria line seats or old Routemaster bus seats (Neville, 2013).

This type of entrepreneurial and innovative thinking to introduce new products to the market can help museums thrive financially and subsequently be in a better position to achieve their core missions. The implication of social enterprise business model is not limited to the organization’s boarders. Neville explains the wider impact of the museums’ commercial activities, stating,

It is not just the museums and galleries that are benefiting from the growth in sales, as many of the gifts are now sourced from British manufacturers and suppliers. At the transport museum, Walton explained that the moquette fabric is produced in Yorkshire, with the offcuts added to bags and purses at factories in Shropshire. New furniture made from the fabric is produced in Nottinghamshire. Production has doubled in the last three years as a result, while porcelain memorabilia adorned with transport motifs are once again being made in Stoke (Neville, 2013).

Walton, Head of Trading at London Transport Museum points to an important shift in museum thinking. He argues,

We [business departments] were near the bottom of the pile in terms of importance. But now it has become vital for virtually all cultural institutions, whether they are in the public domain or independent, to raise more and more money as government and local authority grants dry up. So, in order
to thrive and prosper, our operations are now absolutely essential (Neville, 2013).

Looking at the current debate about social enterprise within the museum context and what museums have been inspired to do as a result of financial constraints, there is some evidence which suggests the occurrence of a fundamental shift in the museum business model. Evidentially, many museums have already started to move away from a traditional non-profit model and instead, are slowly embarking on building their own version of the social enterprise model. The innovative thinking in creating opportunities for the museum to increase its earned income, as we saw at London Transport Museum and St Paul’s Cathedral, reflects that transformation. This transformation ultimately differs from one museum to another and from one country to another. Within this paradigm, the Italian government led by prime minister Matteo Renzi has recently proposed a project to encourage the adoption of enterprise in Italy’s cultural institutions and more specifically in museums. In an ironic comparison to show the state of enterprise among Italian museums, the Guardian newspaper and Italian press have reported that the income of the Metropolitan Museum of Art’s restaurant alone is higher than all Italian museums combined. Therefore, the initiative aims to allow private restaurants and gift shops to open locations in museums which will potentially serve as a major source of income for the Ministry of Culture. This step can be huge for Italian museums but this may not be the case in other countries and contexts. What is sure, however, is that we are witnessing a transformation of the museum business model.

In the United States context, the American Alliance of Museums’ Center for the Future of Museums (CFM) observes an interesting shift in the museum thinking about the social enterprise business model; “While ‘entrepreneurial’ as applied to museums has usually focused on the ‘willing to take risk’ part, in recent years, with traditional nonprofit business models tanking, attention has shifted to encompass the ‘making money’ part as well” (CFM, 2013). The previous comment was made by the CFM on their blog to introduce a project by the Lemelson Center for the Study of Invention and Innovation at the Smithsonian’s National Museum of American History. Inspired by the franchise business model in the private sector, the center developed a program to expand the impact
of its innovative hands-on experience, Spark!Lab. Hence, they called the program Spark!Lab National Network. Tricia Edwards, Education Specialist and Michelle DelCarlo, Spark!Lab National Network Coordinator at The Smithsonian’s Lemelson Center for the Study of Invention and Innovation, explain the business model of the Network,

The business model we developed for the Network involves charging a licensing fee to collaborators. In exchange, they receive licensed use of the Smithsonian, Spark!Lab, and Lemelson Center names and logos; a set of Spark!Lab activities to start-up; all physical materials needed to operate these activities for the first two years; in-person assistance to open; and consultation services for the life of the agreement. In essence, we are franchising Spark!Lab. But unlike a traditional franchise, our goal is to work extensively with Network collaborators to create activities, programming, and initiatives that are unique to their institutions and communities (Edwards & DelCarlo, 2013).

The first Spark!Lab National Network location was opened in September 2011 at the Terry Lee Wells Nevada Discovery Museum in Reno, North Virginia. Now, the Network expands to include six locations in the USA, and locations overseas, most recently in Kyiv, Ukraine.

Looking at the development of Spark!Lab, some elements of Nesta’s social innovation model can be identified, especially the fifth stage, scaling up the innovation. Murray, Caulier-Grice, and Mulgan (2010) considers this stage crucial, where “there are a range of strategies for growing and spreading an innovation – from organisational growth, through licensing and franchising to federations and looser diffusion.” Franchising in the case of Spark!Lab was the model used to spread the innovation and carry out the diffusion. The project can also be seen through the lens of open innovation, where inbound and outbound paths can be identified to speed up and enlarge the impact of the innovation.

21 Spark!Lab is a space for hands-on learning experience for children and families to engage the Museum’s visitors in “the invention process, come up with solutions to problems through fun challenges, prototype their ideas, and have creative learning experiences” (Edwards, 2013).
Edwards and DelCarlo believe that “[m]useum professionals are starting to think
about new, entrepreneurial ways of approaching their work, driven by pressure to generate
revenue, to compete with for-profit social entrepreneurship, and to create sustainable
models of operation” (Edwards & DelCarlo, 2013). The desire to create a better
community, however, remains the core mission of Spark!Lab. Edwards and DelCarlo
(2013) state, “For us, the main goal of the Network is to create a meaningful impact
focused on fostering inventive creativity in youth”. It is a balance any social enterprise has
to maintain every day and with every decision it has to make.

We continually grapple with the most balanced way to fulfill our mission, to
serve our collaborator’s needs, and to be savvy entrepreneurs. We continue
to ask ourselves tough questions about sustainability and search out ways to
educate ourselves about entrepreneurial practices. We’re excited about the
future of the Spark!Lab National Network, and about the future of
entrepreneurship in the museum field (Edwards & DelCarlo, 2013).

Perhaps it is hard to imagine museums in the real estate business, but the
Children’s Museum of Pittsburg, Pennsylvania, has done the unimaginable. In the 1990s,
the Museum acquired a neighboring property in an ambitious plan to expand its 20,000
square feet exhibition space to 80,000 square feet. However, this plan did not proceed,
leaving the museum with a huge unoccupied space. The Children’s Museum of Pittsburg
decided to rent out the space to non-profit organizations under the market value to help
these organizations while making income for the museum. The museum successfully
rented out the space to non-profit organizations that work on behalf of the children to align
with the museum’s mission. These organizations include Allies for Children (child
advocacy group), Reading is FUNdamental Pittsburgh, The Saturday Light Brigade (family
radio program), Head Start/Pre-K classrooms for the Pittsburgh Public Schools, and
University of Pittsburgh’s Center for Learning in Out-of-School Environments
(UPCLOSE) (Children’s Museum of Pittsburgh, n.d.).
This experiment has given the museum the necessary tools and courage to expand its real estate venture. Not too long after, “the museum took over management of a park in front of the museum. Then it partnered with other arts groups, including the nearby Andy Warhol Museum, to renovate a local theater and advise on programming for the space” (Gelles, 2015). The Museum is now considering a new project, to take over a 45,000 square feet abandoned library and transform it into an arts and research center. David Gelles (2015) reports to the New York Times: “Overall, the Children’s Museum’s real estate ventures have bolstered its finances while allowing it to shape its neighborhood. The museum now charges to provide advice to other museums looking to develop nearby real estate.” The Museum has 42 full-time employees, 108 part-time employees, operating budget of $5.4M, and spends $5M in the local economy of Pittsburgh, making it an important economic power in the city.

The previous examples from the museum sector in the United States and Europe correspond with what Dees (1998) had envisioned nearly seventeen years ago. He argued that the following factors would motivate non-profits to use for-profit models in order to complement or even replace their traditional sources of revenue: increasingly rising costs,
the doubling of non-profit organizations operating in the social sector, and the scarcity of donations and grants. Dees states that “leaders of nonprofits look at commercial funding in the belief that market-based revenues can be easier to grow and more resilient than philanthropic funding” (Dees, 1998). We have witnessed through the previous discussion the growing trend of social enterprise in the museum sector both conceptually and practically from the field.

6.0 Conclusion:

From Weil’s notion of the museum as social enterprise, to Janes’s call for “the mindful museum”, and from Sandell and Fleming’s plea for the museum as a social activist, to Vaizey’s challenge for museums to “develop a stronger instinct for partnership, mergers, commercial ventures and new approaches”, the social enterprise business model seems to be an appealing paradigm for museums. However, the conceptualization of social enterprise and its practical implications within the museum discourse varies between academics, practitioners, and politicians. On one side, there is a school of thought that seems to pay greater attention to the social aspect of the social enterprise business model and run the risk of overlooking the enterprise side of the model. Champions of this notion are Stephen Weil and Robert Janes. For them it is an opportunity for museums to engage in the efforts to find creative solutions to today’s challenges in society. Janes went so far as to criticize the current business model for museums and called it “unsustainable and irrelevant” (Janes R. R., 2010). On the other side, some writers think that the social enterprise business model provides an opportunity for museums to utilize business techniques in order to generate income, innovate, and become more resilient. This paradigm is encouraged by governments in Europe and the United States especially after the new reality of the economy and the rise of the cost of fuel, food, clothes, healthcare, and housing. Between the two sides, perhaps, sits a third group which sees museums as already functioning social enterprises with no need to change their business model. Ford, for example, suggests that “the museum's business model is based on sustainability and is a classic example of the successful early adoption of the social enterprise model” (Ford, 2012).
Irrespective of these theoretical debates on the museum as a social enterprise, most museums today, in reality, are facing tremendous financial pressure and have started taking small but serious steps to overcome this pressure. What we see (and what this chapter has attempted to frame) are museums in Europe and the United States exploring business opportunities, reconstructing teams, and innovating their business models in response to this pressure. At a time of austerity, financial downturn and economic pressure, social enterprise (though cultural contingent in its application and value) has to some evidently emerged as an appealing model for museums.
Chapter 5

Open Innovation in Museums

1.0 Introduction

The last two chapters (Chapter 3 and Chapter 4) provided the theoretical framework, which this research considers central to the study. More specifically, Chapter 3 discussed the business studies’ conceptualization of innovation focusing on open innovation as a possible framework for museums. In this chapter, equipped with the knowledge we acquired in Chapter 3, we intend to turn to the field and investigate the existence of open innovation in museums. This chapter, therefore, deals with two major issues based on the fieldwork research conducted between 2013 and 2014: 1) the conceptualization of museum innovation; and 2) the implementation of open innovation strategies in museums, using the Department of Digital & Emerging Media at Cooper Hewitt, Smithsonian Design Museum as a case study.

Our attempt to contribute towards the concept of museum innovation can help museums advance their innovation capabilities. Hence, this chapter offers the perspectives of three leaders in museum innovation at three different museums and organizations: Seb Chan, Director of Digital & Emerging Media at Cooper Hewitt, Smithsonian Design Museum; Robert Stein, Deputy Director of Dallas Museum of Art; and finally Richard Evans, President of EmcArts. Based on that discussion, this study proposes a definition of museum innovation, something substantially overlooked in the museum studies literature. It defines museum innovation as the new or enhanced processes, products, or business models by which museums can effectively achieve their social and cultural missions.

Next, the chapter offers an overview of the dynamics and the organizational culture at Cooper Hewitt Labs. This is followed by an investigation of what the chapter suggests is the presence of open innovation (OI) inbound and outbound paths at Cooper Hewitt’s Digital and Emerging Media department. Both OI inbound and outbound paths are crucial in understanding Chesbrough’s open innovation theory, as we discussed in Chapter
3. The chapter shows, through empirical data gathered at the museum, the existence of three paths including: 1) open sourcing (making source codes available for developers); 2) open reflection (between self-reflection and receiving feedback); and 3) collaboration (realizing internal resources, identifying needs, and targeting purposeful partnerships with external organizations). Finally, the chapter concludes by identifying three possible levels of innovations. The first level can be described as original and universal (high level), where the innovation has the highest impact. The second level is local or sector level innovation (medium level). Third level is related to the organizational level (basic level).

2.0 Conceptualization of Museum Innovation

Based on the conceptual frameworks discussed in Chapter 3 and the fieldwork conducted during the course of this research, we will now attempt to investigate the concept of museum innovation through an analytical discussion with three museum leaders.

The first leader is Seb Chan. At the time of conducting the fieldwork for this research, Chan was the director of Digital and Emerging Media Department at Cooper Hewitt, Smithsonian Design Museum. In summer 2015, Chan took a new position as the Chief eXperience Officer at the Australian Centre for the Moving Image (ACMI). Before joining Cooper Hewitt, Chan was the director of Digital, Social and Emerging Technologies department at the Powerhouse Museum in Sydney, where he oversaw the implementation of Open Access and Creative Commons licensing policies. Throughout his career, Chan led several projects and initiatives that explored innovative approaches to audience engagement in museums. He was a member of the Australian Government’s Government 2.0 Taskforce, a special committee formed in 2009 to help the Australian government responds to the potential uses of public sector information and online engagement. Chan helped may cultural organizations in Australia, Europe, and North America to develop innovative strategies and implement cutting-edge technologies.

The second museum leader is Robert Stein. Stein is the Deputy Director of Dallas Museum of Art. Prior to his role in Dallas, Stein was the Deputy Director for Research, Technology, and Engagement at the Indianapolis Museum of Art (IMA). Stein founded
renowned technology programs that piloted many of the most innovative technology initiatives in museums including ArtBabble.org, the TAP and TourML mobile tour system, the OSCItoolkit for online scholarly publishing, the IMA Dashboard, and the technical underpinning of the Steve.Museum social tagging project. Stein also founded the IMA Lab as a consulting arm of the museum. He also founded a museum innovation lab at the DMA. Both labs have provided the museum sector with innovative open-source software solutions.

Finally, the discussion will reach out to our third contributor, Richard Evans. Evans is the President of EmcArts. He directs EmcArts’ programs and strategic partnerships. Evans’ recent research, program design, and facilitation places particular emphasis on innovation, adaptive organizational change, and effective ways that the arts and culture field can respond to the demands of a new era for the sector. His studies on innovation and capacity building led to his design for the Innovation Lab for the Performing Arts. In 2011, EmcArts partnered with the American Alliance of Museums (AAM) to establish the Innovation Lab for Museums, a national initiative to encourage innovation in museums. Richard also leads the design and implementation of the New Pathways for the Arts Initiative, a series of community-based innovation programs that is active in cities across the country.

The previous brief overview of Chan, Stein, and Evans’ backgrounds and their distinguished work around museum innovation make their contribution to this study very significant. The following discussion will analyze how the three leaders perceive innovation, and how their perspectives can guide us to define museum innovation.

- Discussion

Ultimately, innovation in museums requires a clear vision on what innovation is and what the objectives are. Chan suggests that innovation in museums “is really about the ability to react and respond to change effectively” (Chan, 2014). Stein confirms Chan’s understanding and adds, “While I think change is part of innovation, I do not think change itself is innovation” (Stein R., 2013). Stein believes that “innovation is a change that results in a novel or unique approach to solve a problem that had not been tried before” (Stein R., 2013). Chan argues that museum innovation “opens up new opportunities for
customers, users, and new opportunities for business models” (Chan S., 2014). The ideas expressed by Chan and Stein on museum innovation in the previous quotes are very much consistent with the business conceptualization of innovation, in general.

Also, it was observed in the discussion with Chan, Stein and Evans that innovation can have different levels or contexts. What may be considered innovative in one organization, region, or sector may not be innovative to others. Stein recognizes the relativity of innovation and indicates:

Many of the efforts I have been a part of have been called or named innovative by my peers; but really they are repackaging of approaches in a new way from other sectors. Are they innovative in the cross sector sense? No. Are they innovative in a local sense? Certainly (Stein R., 2013).

While Stein understands innovation as those efforts that can be seen as new to the museum sector (not very much in a global sense), we encounter another approach suggested by Richard Evans. Evans (2014) argues that “innovation does not actually have to be totally new to the world; it has to be new to that organization.” It seems that Evans’ understanding of innovation lowers the expectations and intends to contextualize innovation within each individual museum. The approach that places innovation as something totally new and original to the world raises the bar too high for museums and probably is not what most experts mean when they speak about museum innovation. On the other hand, endorsing the localization of innovation to the organizational level may lead to the degradation of the term and potentially its use out of context. A museum that just started using social media, for example, to disseminate information to the public about its exhibitions and programs cannot claim it is being digitally innovative, even if it was a huge step in the organizational sense. Evans agrees on that analysis and adds,

We have actually moved away quite substantially from using the term innovation. Perhaps for this reason. And talk a lot more now about adaptive change. Because in a way I think that the term enables us to encompass all those different levels (Evans, 2014).
As we try to understand and define museum innovation, it is probably crucial to discuss the museum’s objective to innovation. Stein’s logic is probably sound when he argues that “it is hard to go after innovation for innovation’s sake and actually achieve it”. Without a clear vision of why a museum is investing time, money, and efforts to innovate, the idea of innovation in itself becomes odd and seems outlandish. Within this context, Chan suggests that innovation needs to be driven by the museum’s mission. He argues,

It [innovation] becomes the ability to find new ways of fulfilling that mission, and increasing its reach, scope, and scale. Or doing it more effectively to reach out to our targeted communities. I think the precursor to that is having a clarity around what you are there for. Having an app, [for example] is not the innovation; the innovation, perhaps, is that the app has enabled the mission to be delivered better, more effectively, and reach other audiences. The app itself is not innovation (Chan, 2014).

Chan’s comment here is crucial and explains in clear terms the importance of binding innovation to the museum’s mission. In the private sector, the ultimate mission of any business is to maximize its profit. Therefore, the discussion around innovation in business studies is always linked to that specific mission. Stein expresses the same idea in a different way. He states; “I think if you are more driven by an outcome that has intrinsic value, then you are more likely to innovate upon your way towards achieving that outcome” (Stein R., 2013). Again, in business the outcome of innovation is thought of in financial terms and the absence of profitability from innovation may lead to unfavorable conclusions about the success of the innovation. However, museums, unlike business, have a different mission and purpose in society. Evans, here, provides a valuable contribution explaining other types of outcomes when attempting to evaluate museum innovation. He states,

We need to be looking at how we are building social capital, human capital, knowledge capital, and financial capital. Those are the four that matter. I would argue that we need to be looking at how we are strengthening each of those through innovating (Evans, 2014).
Evans (2014) explains that social capital is “about building bonds and networks with people in the community. It is very definitely and strongly impacted by innovation”. The concept of social capital is also connected to the community wellbeing, and the sense of collective responsibility between community members, which are valuable characteristics of a healthy society. Evans’s reference to human capital relates to the set of skills and expertise that exist within or outside the museum. He argues that human capital can be built “by having people engaged in innovation work.”

The third criterion in Evans’ four outcomes of museum innovation is knowledge capital. Museums are known as knowledge based institutions where research, teaching, and learning take place. Thus, considering the contributions of museums to knowledge when innovation is being evaluated seems a reasonable approach. Finally, as the museums try to achieve the previous outcome, it may be applicable, Evans argues, for museums to “also achieve growth in financial capital” (Evans, 2014). Evans adds; “[m]y experience is that the financial return on innovations – at least in the art sector – is probably the slowest to emerge, of those four.... But I do think we need to evaluate success in each of those four areas, and not confine it just to the financial” (Evans, 2014). Reviewing the first three outcomes (social capital, human capital, and knowledge capital), it appears possible, as suggested here, to place them under one umbrella, which is social innovation. Hence, it is argued that social innovation can be the ultimate goal for museums while financial capital is sought as a means, not an end.

Based on the previous discussion, we established two major points. First, we observed that innovation can have different levels, universal, local or geographical, and institutional. Secondly, it seems logical, as suggested by Chan, Stein, and Evans, to perceive innovation in museums (in the terms of the objectives and outcomes) in relation to the mission of the museum. These two points are crucial as we attempt to define museum innovation.

- **Innovation Modes:**

The discussion now will move to the modes by which innovation in museums may occur. Chan (2014) argues that, within the last few years, museums have been able to foster process innovation, especially in the way exhibitions are being created. Not only that, but
museums have also shared these processes with the public. On the other hand, museum exhibitions have not witnessed change in the product innovation sense, Chan argued,

I think also, that the product end of things, honestly, has not changed much. The exhibitions are still pretty much the same as they ever were. We have done those for hundreds of years. The purpose and reach of those exhibitions has not really changed. Maybe the form has changed (Chan, 2014).

Chan here makes reference to museum innovation through processes and products. Both process innovation and product innovation are established modes of innovation in business. Chan adds, “museums that are doing possibly the most innovative product work are probably those who are not actually doing exhibits, but are doing some other form of programming.” Contrary to Chan’s views which see museum exhibitions and programs as products, Stein rejects the concept of relating the categorization of innovation in the business sector to how museums may approach innovation:

It is difficult [to correlate] because we do not have a product or service that is equitable to the business and commercial sector in the same way. The things we have that are closest to product and service are our venues or our visitor experience as a service (Stein R., 2013).

Evans takes a different position and favors process innovation over product innovation in museums. He agrees with Stein’s perspective in differentiating innovation in museums. He explains,

It is actually a set of procedures and processes and tools that organizations can learn. It is different from, say, the idea of entrepreneurship. Or the idea of the individual entrepreneur taking an idea and bringing it to market, and taking the risks associated with it. Innovation, I think, is more of a process than a product (Evans, 2014).

Evans adds,

Unlike in the corporate sector where the focus is on the product because it is the product that sells for the profit – whereas of course every product we sell
in the arts is pretty much bringing us a loss. The more we do, the more we lose, generally (Evans, 2014).

As we see here, three dominant experts in the field of museum innovation seem to have different views on the modes by which museum innovation may occur. However, in the previous chapter we offered some field examples of museums that were able to innovate new products and services, and successfully present them to the market for a profit. Chan repositions his argument and offers the moveME project as an example of product innovation in museums. Chan was involved in the project during his tenure at Powerhouse museum in Australia. He explains; “The government funded a whole bunch of technology startups that had to partner with people like museums to get the funding. The museum was actually used as a test bed, I guess, for their product” (Chan, 2014).

Chan here is referring to the Collaborative Solutions program funded by New South Wales (NSW) Government, which aims to help build the digital economy in NSW. The project brought together four different organizations: Smarttrack RFID, a company that offers RFID solution designed specifically for art museum collections; RAMP RFID, a company specializing in RFID asset tracking, vehicle tracking, and people tracking; MOB, an R&D lab that focuses on developing multi-device platforms, applications, as well as creating augmented reality experiences; and finally the Powerhouse Museum. The team was responsible for “developing an indoor tracking solution that enables cultural institutions to easily create rich, location aware, mobile apps” (MOB, n.d.).

A press release issued by MOB explained that the final product “will ease the development of smartphone and tablet applications delivering additional information on objects in exhibitions and collections. It will actively deliver content based on the user’s location, and the direction they are facing.” This type of collaboration (which can be seen as a model for open innovation) works from the assumption that associations between

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22 Radio frequency identification, or RFID, is a generic term for technologies that use radio waves to automatically identify people or objects. There are several methods of identification, but the most common is to store a serial number that identifies a person or object, and perhaps other information, on a microchip that is attached to an antenna (the chip and the antenna together are called an RFID transponder or an RFID tag). The antenna enables the chip to transmit the identification information to a reader. The reader converts the radio waves reflected back from the RFID tag into digital information that can then be passed on to computers that can make use of it (RFID Journal, n.d.).
museums and technology companies can help museums introduce new or improved products that can potentially improve visitor experience. Through the previous examples we can envision the possibility of seeing museum innovation in both product and service modes.

On the other hand, Evans’ views on museum innovation relate to the concept of “organizational innovation” as he argues that “it [innovation] is a set of capacities, I think, in an organization, which allow it to go on adapting and coming up with new approaches. Not just once, but consistently every time” (Evans, 2014). Evan’s EmcArts non-profit organization has been investigating the concept of innovation in arts organizations for many years. Their proposed definition “places innovation in the context of organizational change” suggesting that the “definition has achieved real traction in the field, being adopted by funders and becoming a reference point for arts and culture leaders” (EmcArts, n.d.). Evans explains that organizational innovation has three elements:

[First,] a shift in organizational assumptions. Some shift in the fundamental assumptions that an organization has about its business. Secondly, that it is a departure from past practice. It is a divergent; it is not just an extension of the way the organization used to do things. It is our view that you can do those two things; you could change in that way, but still it would be change for change’s sake. The third part of the definition is that an innovation is a new pathway to achieving public value and impact. In our work, we use those three parts of that definition – the shift in assumptions, the divergence from past practice, and the new pathway to value – as our definition of innovation (Evans, 2014).

Looking at what Evans is describing here we can realize that the intended innovation focuses on the organization’s business model. It is about how museums can improve their internal operation and seek best practices. Evans describes organizational change to an organization like the muscles to the body:

[...] which would be the muscles, if you like, that an organization has. It can flex whenever it needs to move forward with innovative work. If they have got weak muscles, they may still be able to occasionally innovate, but they are not
going to be able to bring those to bear with the consistency that they might if they had really flexed them and worked on them regularly. A lot of our work helps organizations build that kind of capacity (Evans, 2014).

Described as central to understanding and carrying out innovation, organizational change is an interdisciplinary concept, which has been born from the fields of psychology, sociology, political science, economics, and management. Barnett and Carroll (1995) argue that “[t]heories and analysis of organizational change seek to explain why organizations change as well as what the consequences are of change.” Marshall Scott Poole and Andrew H. Van de Ven (2004), on the other hand, maintain that “[t]o understand organizational change is to understand organizations as we experience them, and to explain organizational change is to articulate what makes organizations what they are and to suggest how we may shape and reshape them” (Poole & Van de Ven, 2004). The capability of organizations to detect and change ineffective organizational techniques, behaviors, and culture is essential to be able to innovate. It is ultimately an innovation in the business model of the organization. In their book, *Organizational Change and Innovation*, Gilley and Gilley (2011) explain:

Innovation can be manifested in new organizational structures, such as modular offices, virtual teams, matrices, and flattened hierarchies.
Organizational innovation requires a cultural orientation attuned to anticipating trends, generating and evaluating ideas, communicating solutions, and leadership dedicated to promoting, executing, and sustaining initiatives.

Furthermore, the *Cambridge Business Dictionary* defines organizational change as “a process in which a large company or organization changes its working methods or aims, for example in order to develop and deal with new situations or markets.” Organizational change researchers try to understand how change occurs in organizations regarding contents, levels, means and processes, episodes and stages, and sequences and patterns. Therefore, the study of organizational change or business model innovation, from the business studies perspective is important in understanding and managing innovation.

In conclusion, the previous discussion reveals that innovation in museums can take different modes or forms; product innovation, process innovation, or business model
innovation (or organizational change). This thesis proposes a possible definition of museum innovation which can be expressed as *the new or enhanced processes, products, or business models by which museums can effectively achieve their social and cultural mission.* This definition of museum innovation (a contribution this study is attempting to make to the field) ultimately intends to contribute towards building a museum perspective to innovation. Now, we will turn our attention to investigate the first case study in this research which primarily attempts to study the concept of open innovation at Cooper Hewitt Lab.

3.0 Open Innovation in Museums: Case Study at Cooper Hewitt, Smithsonian Design Museum

With this circumspect definition of museum innovation in mind (particularly in the context of digital teams) our discussion can focus on the existence of open innovation, in particular, in museums using the Department of Digital and Emerging Media at Cooper Hewitt, Smithsonian Design Museum as a case study. Specifically, the study will review the work of Cooper Hewitt Lab and identify the existence of purposeful inbound and outbound activities, which are both essential concepts in the open innovation theory.

3.1 History of Cooper Hewitt, Smithsonian Design Museum

Cooper Hewitt, Smithsonian Design Museum in New York City is recognized to be “the only museum in the nation devoted exclusively to historic and contemporary design” (Cooper Hewitt, n.d.). The Museum has recently gone through a major $91 million renovation and reopened to the public in December 2014. Cooper Hewitt’s mission is “to advance the public understanding of design across the thirty centuries of human creativity represented by the Museum’s collection” (Cooper Hewitt, n.d.). The Museum is one of only three Smithsonian museums located outside Washington, D.C., and charges admission fees.

Smithsonian is one of, if not the largest museum in the world with a network of 19 museums and galleries as well as nine research centers. The other two museums located outside Washington, D.C. are...
The history of Cooper Hewitt goes back to 1897 when Peter Cooper’s granddaughters, Amy, Eleanor and Sarah decided to celebrate the legacy of their grandfather. A historical article in the *New York Times* goes back to the 1897 documents the opening of Cooper Hewitt for the first time. The articles states,

The granddaughters of Peter Cooper have founded, after years of patient effort, a Museum for the Arts of Decoration. The museum is established "in memory of the great and constant interest he always evinced in the education and welfare of artisans"; and their collections for it are appropriately placed in Cooper Union. (New York Times, 1897).

**Figure 27:** Andrew Carnegie Mansion, Home of Cooper Hewitt, National Design Museum

- Photo Credit: Friends of the Upper East Side Historic Districts

Inspired by Musée des Arts Décoratifs in Paris, the Museum was opened as Cooper Union Museum for the Arts of Decoration and, according to the *New York Times* article, included “8,000 articles, valued at $360,000, and a library of 7,000 volumes, 

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National Museum of the American Indian's George Gustav Heye Center in New York City and National Air and Space Museum's Steven F. Udvar-Hazy Center in Chantilly, Virginia.
100,000 original designs, and 280,000 samples” (New York Times, 1897). The museum is currently housed in New York’s famous landmark, the Andrew Carnegie Mansion, which in itself has a very interesting history. The mansion was designed by the architectural firm, Babb, Cook & Willard, and is located at 2 East 91st Street at Fifth Avenue in Manhattan, only two blocks from the Guggenheim Museum. “The sixty-four-room mansion, built from 1899 to 1902, is an impressive testament to the desire of Carnegie and his wife, Louise Whitfield Carnegie, to build a spacious, comfortable, and light-filled home in which to raise their young daughter, Margaret” (Cooper Hewitt, n.d.).

Due to financial constraints, the museum closed in 1963, which led to a move from The Smithsonian to save the museum and its collection. In May 1968, The Smithsonian gained ownership of the museum and renamed it the Cooper-Hewitt Museum of Design. After some major renovations, the name was changed again in 1976 to Cooper-Hewitt, National Design Museum, Smithsonian Institution. In 2014, the museum received its current name, Cooper Hewitt, Smithsonian Design Museum (Cooper Hewitt, n.d.).

In its 118 years, Cooper Hewitt was able to establish itself as a prominent institution for formal and informal education in the field of design:

Its exhibitions, in-depth educational programs, and on-site, degree-granting master’s program explore the process of design, both historic and contemporary. As part of its mission, Cooper Hewitt annually sponsors the National Design Awards, a prestigious program which honors innovation and excellence in American design. Together, these resources and programs reinforce Cooper Hewitt’s position as the preeminent museum and educational authority for the study of design in the United States (Cooper Hewitt, n.d.).

During the last renovation, this role probably increased the responsibility of the museum to come back with a new vision to enhance its ability to achieve its goals, a vision that takes into consideration the visitors’ experience and meets their expectations in the new digital age. Caroline Baumann, Director of Cooper Hewitt spoke to New York Times reporter a few days before the December 2014 opening, “[w]e’re really taking the dust off the place and making it an exciting destination for people […] We want to open our arms
and say welcome to Cooper-Hewitt, and to build audience” (Pogrebin, 2014). With this optimistic outlook, Cooper Hewitt had been getting ready for a new beginning, a beginning that includes a complete reform even with a new logo and a new name. Ambitiously, Cooper Hewitt planned to increase the number of its annual visits, exhibition space, and budget. Robin Pogrebin from the New York Times reports:

Through such efforts, the museum hopes to raise its annual number of visitors to as many as 500,000, compared with 225,000 in the 12 months before it closed in 2011 (which in itself was unusually high because of the Van Cleef & Arpels show that spring). By comparison, the Frick Collection, also in a Beaux-Arts mansion, had 420,000 visitors last year, and the Guggenheim, just down the block from the Cooper-Hewitt, had 1.2 million (Pogrebin, 2014).

Additionally, the renovation allowed Cooper Hewitt to increase the gallery space by 60% and provide its visitors “an entirely new and invigorated visitor experience, with interactive, immersive creative technologies” (Cooper Hewitt, n.d.). Also, the museum’s annual budget increased from $16 million to $18 million; however, only 30% of the budget comes from the Smithsonian. Cooper Hewitt has to raise 70% of its budget ($12.6 million) annually which is a challenge many museums have to face in an increasingly troubling economy. Moreover, the museum strives to double its endowment to $20 million.

The launch of the new Cooper Hewitt in December 2014 was successful in many respects and digital was at the heart of that success. For example, the museum houses an interactive immersion room where visitors can use a special pen “to select wallpapers from the museum’s permanent collection and see them projected on the walls from floor to ceiling—for a vibrant, impactful, immersive experience” (Cooper Hewitt, n.d.). Audio recordings accompany some of the wallpapers when they appear on the wall revealing information about the design. These unique experiences inspired the New Yorker’s journalist, Alexandrea Lange to make an interesting comment. Lange states: “If a Luddite and a technologist were to fall in love, the Cooper Hewitt would be an excellent place to do it—and the museum shop could provide the engagement gift” (Lange, 2014). In the next section, we will explore the digital work at the Cooper Hewitt Lab and the existence of open innovation paradigm in their workflow.
3.2 The Work of the Digital & Emerging Media Department at Cooper Hewitt

The Digital & Emerging Media department at Cooper Hewitt stands behind the exceptional success of digital at the museum from interactive displays to the museum website and the collection management system. The department describes itself as “a space for exploring what it means to be a museum in the Internet age”. They pose critical questions about the role they play in the museum.

“How can we design and build online collections that are more than a basic catalog? How can we deliver the museum’s mission beyond our physical building? How can we enhance the in-gallery experience, and then weave it back in to the web? How can we research and understand our visitors’ real motivations and needs? How can we make our services more informative, more explorable, and more interconnected with other museums? (Cooper Hewitt, Smithsonian Design Museum, n.d.).

Many members of the team at the department are well-known in the museum sector for their innovative work. The department is also referred to as Cooper Hewitt Lab (http://labs.cooperhewitt.org/) where they operate and conduct meetings. Robert Stein, Deputy Director of Dallas Museum of Art describes Chan’s work and his team as “seriously innovative:”

I think a lot of what Seb Chan is doing at the Cooper-Hewitt around collections. Not as much from the collection side of things, but from the process side of things. Really sincerely adopting the iteration as metaphor in the process of creating an online collection is seriously innovative; something that we’re trying to do here as well. Is it meta-innovation? It’s innovating around the process of creating a product; which in this case is a digital collection (Stein R., 2013).

Chan (2014) states that “[r]ight now, again our capacity is particularly strong and we have been able to carve out a creative environment that is reasonably protected from interference.” The questionnaire conducted during this study reveals that the digital team at Cooper Hewitt is a small-size department consisting of “4 to 10 people” out of 70 full-time employees in the museum. “We are a small team in open office environment. We do
not do formal stand ups but work directly and collaboratively in a way that reduces the need for formalised meetings” (Chan, 2014). The data gathered from the questionnaire shows that Cooper Hewitt Lab has a high level of communication among its team. The mode of the communication differs according to the nature of the information that needs to be transformed. The team identified regular email, face-to-face meetings, “Slack” and “Basecamp” as ways of communications. Chan explained in the questionnaire,

We use Slack as a team messaging platform throughout the day, Basecamp for legacy project management, and email for communication outward to other parts of the organisation. We do face-to-face meetings with other areas of the museum regularly and on an as-needs basis (Chan, 2014).

Chan elaborates in the interview why his team uses Basecamp in their work:

We use Basecamp, really, as a shared drive and project document space; project management space. I think other people would use shared network drives and Microsoft Project, or something similar. Basecamp for us is nice because it allows us to work with distributed teams – geographically distributed – and also across different networks. We often work with people in other parts of the world who are not part of our physical network infrastructure. For security reasons Basecamp is a good way of communicating securely with them (Chan, 2014).

The attitude exhibited in Chan’s previous statement, which shows the openness, willingness, and readiness for his team to work with other teams distributed across different geographical locations and belonging to different networks is very significant and worth attention. As we remember from our discussion in Chapter 3, the idea of open innovation is the utilization of outside and inside knowledge and expertise to advance the organization’s innovation capabilities. What we can sense from Chan’s comment is his inclination to the open innovation approach.

In order to be an effective and efficient collaborator externally, a high level of internal communication may be required. This is largely because the more you understand the strengths and needs inside your museum, the more precise you can be in identifying
potential external collaborations. At Cooper Hewitt Lab, the digital team uses Slack to facilitate internal communication. Chan argues:

Slack has channels, and we have private channels and public channels within the team. We can message each other. We often work with headphones on, or whatever. Or I am in a meeting and I will message someone on Slack. “Hey, can you bring this up to me?” Or, “Can you send me the figures on this?” It is just quicker than an email. It does not clog the recipients’ email box. It is a chat client with more structure, and some of those features I think work really well for teams like mine. We use Basecamp across the museum as a whole, but my team, for a lot of the agile work we do, Slack is – we could not do it without it (Chan, 2014).

That said, the data has shown that the level of communication between Cooper Hewitt Lab and other departments in the museum is less effective. When asked about the possible reasons for that, Chan (2014) argued, “[t]he level of communication is medium mainly because we are in a massive rebuilding and re-launching project that is meaning that all staff are very caught up in production work across all the departments”. However, one of the strongest points evident in Chan’s team is their effective communications with outsider organizations and individuals. Micah Walter, a member of Cooper Hewitt digital team confirms; “We try and collaborate with many other institutions as much as possible” (Walter, 2014). Chan (2014) adds; “[e]ach team member is reasonably prolific in external communications and partnerships. We also maintain a team Twitter account and blog separate from the institutional one for outward communications.”

Most of Chan’s team members appear to belong to professional organizations such as American Alliance of Museums, and College Art Association. They also regularly attend and present in professional conferences such as Museums and the Web, which is a leading international conference that started in 1997 bringing people together who are interested in the intersection between museums and technology. They consider these events a valuable platform for networking and exchanging ideas. Furthermore, the team has an interest in connecting with organizations outside the museum sector, “We invest time in sending staff to external out-of-sector events, as well as regular team excursions” (Chan, 2014). Chan’s
team worked with a Google team as part of Google Cultural Lab to explore the possibility of using Google’s newly innovated product, Chromecast in museums. Chan (2014) explains the project; “What was interesting was we were working with Google’s engineering team to work with my team here for a week to rapidly prototype – build and release – code for their Chromecast product to explore whether digital signage solutions could be made using Chromecast”. However, Chan thinks that a lot of museums struggle with how this type of collaboration works alongside with what their core business is. He is repeatedly questioned about how the experimental work he does may benefit the museum at which he works. He states; “Even when we were doing the work with Google Creative Lab, people here were like, “Seb why is your team spending a week on this? We have got to open this museum. What are you doing?” (Chan, 2014). This shows that openness and the inclination of working with external collaborators can be challenging in some cases. Not everyone in the museum may necessarily have the same mind-set in terms of working with external organizations, and that can cause doubt and uncertainty.

The digital team at Cooper Hewitt goes beyond collaborating with others and publishes its internal experimentations online for the wider community. For example, the team wrote a blog post explaining its innovative work with Google Cultural Lab:

We are trying to imagine a system where one dedicated machine running Chrome and the Chromecast extension that is configured to send messages and custom URLs for a variety of museum signage purposes to any number of displays throughout the museum. Additionally we want to allow a variety of standalone “clients” in such a way that they can receive information about what is being displayed on a given display and to send updates.

We want the front-of-house staff to be able to update the signage from anywhere in the museum using nothing more complicated than the web browser on their phone and we want the back-of-house staff to be able to create new content [sic] for those displays with nothing more complicated than a webpage (Cooper Hewitt Lab, 2013).

As we see here, the team is sharing its vision on the innovation it is pursuing. It also provides details on the challenges it has faced during the experimentation and made the
code available for programmers to contribute. The team’s members state; “We have put all of this code up on our GitHub account and we encourage to try it out and let us know where and when it doesn’t work and to contribute your fixes” (Cooper Hewitt Lab, 2013).

Derived data provides evidence that Cooper Hewitt Lab uses multiple sources of ideation. Chan (2014) argues; “We often apply things from different disciplines and domains, but also undertake user (including internal users) research”. The three members of the team; Chan, Walter, and Cope have identified both internal and external resources for innovative ideas. Walter explains:

Many of our ideas come from our own team, working on side projects. It is basically just whatever we are interested in. Other ideas come in from various funders and the rest of the museum community. We also love to have researchers and grad students work with us (Walter, 2014).

Cope confirms Walter’s position and argues; “We are not shy about stealing other people’s ideas. I mean if someone has a good idea then we are just like; yes, we will do that too. Then, it is just making sure that we give credit wherever it is due” (Cope, 2014). The notion of attracting ideas from external resources seems to pervade the lab, as Chan ratifies Walter and Cope’s approach and adds; “we come up with other ideas based on seeing how other people’s business processes work for them; we adopt them” (Chan, 2014).

According to the questionnaire, the members of the digital team at Cooper Hewitt agree that museums should innovate. Chan (2014) stresses that museum audiences are changing and museums need to redefine their role in their communities. This is where museum innovation is really important, to keep the audience engaged and achieve the mission of the institution. Innovation, however, requires taking some degree of risk, according to Chan (2014). This is a reasonable assumption and a common belief among the innovation community. Without taking calculated risk, museums can possibly fall into a set of stagnating rules and procedures which is not a healthy environment for innovation. On this issue, Stein argues;

Creating a culture in the museum that embraces risk is a prerequisite to allow significant innovation to take hold. Recognize that by attempting
innovation you expose yourself to risk. The freedom to innovate can only happen when museum leaders remove the stigma of failure from the process. Instead, celebrate failure as a badge of honor and a key component needed to break old models and embrace innovation (Stein R., 2013).

Chan confirms Stein’s view and adds,

I am a firm believer that failure is instructive. One of the reasons we invested so heavily in in-house expertise at Powerhouse (and now, increasingly at Cooper-Hewitt), is that it allowed for lots of small, inexpensive failures, and the cultivation of more of a culture of experimentation and continuous improvement (Chan, 2013).

Within this context, Walter (2014) states, “we use failure to learn and build and grow. It is a necessary part of everything we do” (Walter, 2014). Cope adds, “if something fails, then what’s important is to be able to recognize that it failed and to understand why; and to be able to speak about it” (Cope, 2014). The idea of risk taking at Cooper Hewitt is also supported by Chan, who states; “We are always looking for new ways to do it [things] better. We are building a risk tolerance in. I think part of my job has been to help the museum feel better about that risk” (Chan, 2014).

Based on the previous data, we will attempt in the following discussion to examine the existence of open innovation strategies and principles in the work of the digital team at Cooper Hewitt. The analysis of data resulted in identifying three inbound and outbound paths to innovation; open sourcing; open reflection; and collaboration.

3.3 Traits of Open Innovation Model at the Digital & Emerging Media Department at Cooper Hewitt, Smithsonian Design Museum

The work conducted by Chan’s team at Cooper Hewitt is highly regarded in the museum sector and considered by many museum professionals as innovative. The team has a high spirit of belonging and interconnectivity with the outside world in general and the museum sector in particular. This can be seen in the way by which the team members
envision their role. They ask questions like; “How can we make our services more informative, more explorable, and more interconnected with other museums?” (Cooper Hewitt, Smithsonian Design Museum, n.d.). This connectivity extends in two different directions: outbound (inside-out), and inbound (outside-in), both of which are important concepts in the open innovation theory. This section will examine the existence of open innovation strategies at Cooper Hewitt Lab and how these strategies have probably allowed them to achieve a high level of innovation.

Inbound OI activities can be defined as the process by which museums can attract, acquire, and utilize knowledge that exists outside the museum to advance their internal innovation process, while outbound OI activities are the processes by which museums make their internal knowledge available to other museums and organizations to accelerate innovation. In the business sector, open innovation research “has focused on the inbound dimension, whereas the outbound dimension has been relatively neglected” (Lichtenthaler, 2009). That imbalance probably reflects the nature of open innovation in the private sector.

One of the interesting findings in a report prepared to monitor open innovation activities among British companies and manufacturers is that “outbound OI activities were less common than inbound activities among all firms” (Cosh & Zhang, 2011), which is also a common theme in the US context. That is because companies in the private sector are probably more inclined to pursue external ideas in order to advance their internal research and development and maximize their profit. Also, the process by which companies’ inside knowledge is transferred to outside clients is quite complicated. It can take the form of traditional sale or partnership and sometimes requires lengthy negotiations and legal considerations. Additionally, acquired knowledge through R&D process is very valuable to companies. Protecting and maximizing the profit from this knowledge is central to the operation of companies, as explained in Chapter 3.

The case in the non-profit world, and more specifically in museums, is perhaps fundamentally different. Museums exist for the wellbeing of society and financial profit is not at the core of their mission. Therefore, the process of transferring inside knowledge to the rest of the world is less complicated and in some cases encouraged. The case of the
digital team at Cooper Hewitt represents this notion where OI outbound activities are strongly noted.

### 3.3.1 Open Sourcing: making source codes available for developers

The Digital & Emerging Media Department at Cooper Hewitt creates codes for the museum’s internal use, serving a wide range of technical services from the museum website and the collections management software to the interactive displays. This research reveals that Cooper Hewitt Lab makes some of its source codes available on GitHub for developers to add and improve. Cope considers the open source movement a way of giving back to the community and the sector.

The other big change, and this has been in almost all industries, has been open source. Advocating for and supporting [open source]; and suddenly it is a culture of giving back. We go out of our way, as much as possible, to give source code back to the community (Cope, 2014).

Generally, the open source movement has produced some innovative well-known programs and software such as Linux (computer operating system), FireFox (internet browser), and OpenOffice (office suite). Wallen (2013) notes that “[t]here are thousands upon thousands of open source projects that bring about innovation. Some do so on a small scale, while others are thinking massive and global”. Moreover, Ebert Christof (2007) argues that open sourcing drives innovation and “[t]he free and open source software movement has had phenomenal impact on the industry evolution”. Thus, open source has the potential to advance museum innovation in the sector and improve innovation capabilities in individual museums.

Cooper Hewitt Lab is one of the most important contributors to the open source movement in museums. An example of their contribution is the code they used for Chromecast experimentation where members of Chan’s team worked with Google engineers to find more cost-effective digital signage alternatives for museums. The lab advertises its contribution and solicit inputs from the wider community: “We have put all of this code up on our GitHub account and we encourage to try it out and let us know
where and when it does not work and to contribute your fixes” (Cooper Hewitt Lab, 2013). GitHub is a platform for sharing, building, and managing open source codes. There are tons of codes available on Cooper Hewitt Lab’s account on GitHub. The strategy of sharing source codes does not only help others to improve their operations by using the code (outbound), but also improves the code itself (inbound). Skilled developers from around the world can contribute to the source code which leads to incremental improvements. There are many individuals with very high level skill sets in the world, allowing them to contribute to the museum internal R&D which in turn helps museums increase their ability to innovate. Kris Arnold, a web developer at Dallas Museum of Art, who moved with Rob Stein from Indianapolis Museum of Art (another innovative museum in northern United States) explains:

A lot of the projects I worked on at the Indianapolis Museum of Art we open sourced. Anybody could download them for free. Open sourcing code is not just writing it, throwing it up on GitHub, and you are done. It is talking to people; helping them through setting it up, installing it; maintaining the product. Through that process other people are contributing back (Arnold, 2013).

Arnold’s comments confirm our assumption mentioned above, which argues that open source can facilitate a two-way path for innovation. The outbound path ultimately occurs when the source codes are made available for others to use. On the other hand, the inbound path is represented in the contributions made by the community of developers to the source code.

Additionally, in a radical move, Cooper Hewitt acquired the source code of the iPad app, Planetary. The software was released in 2011 and has been downloaded more than 3.5 million times. Bloom Studio, a San Francisco startup company, developed the program to visualize iTune music library using planets theme. Chan (2013) explains how the visualization is configured; “Songs are moons, albums are planets, artists are suns—and the orbits of each are determined by the length of albums and tracks. Their brightness represents their frequency of playback.” Catherine Shu, a technology writer explains the rationale behind the museum collecting Planetary and making the source code available on
GitHub; “By making it open source, the museum says it wants to encourage people to view the code as a “living art” that highlights the possibilities of programming as an interactive and collaborative art form” (Shu, 2013). This can be the first time that a source code is being collected by a museum and made available for developers to examine and add to. It raises new challenges for museums in terms of preservation, interpretation, and display of these new types of collections (i.e. source codes). How can museums engage their audiences with this type of object? Is “object” the right word to use in that context? What is certain though, is making source codes available for developers to unlock the creative process and open the gates for digital innovation to take place is a potential future role museums may be able to play. Chan (2013) explains,

The source code is currently hosted in Cooper-Hewitt's repository on GitHub as is a second repository called PlanetaryExtras that contains images, screenshots, notes, and drafts that were made during the creation of Planetary itself. Think of that second repository as the 'curatorial folder' of all the additional materials – except that it is out in public. This means that anyone can now look at, download, and play with the source code that makes this app. Not only that, you are permitted to replicate, modify, and transport it to other hardware platforms and devices.

The wealth of information accompanying the source code, as Chan explained above, makes the Planetary an interesting case not only for open sourcing, but also for open innovation in museums. In conclusion, we have seen here strong evidence that can lead us to believe that each one of Planetary and Chromecast projects represent dual, inbound and outbound paths for innovation. While the acquisition of the software itself, in the Planetary case, for example, is inbound activity, the decision of making it open source, is, indeed, an outbound path for innovation.

3.3.2 Open Reflection: sharing technical and operational information (between self-reflection and receiving feedback)
Under the title, The Third Element - Learning, Reflection and Innovation, the European Workplace Innovation Network EUWIN24 argued in a web publication that reflection on work practices among employees is an important factor in driving innovation. They debate; “Great organisations understand that a continual stream of ideas is a vital resource for improvement and innovation. They create times and spaces where people can discuss ideas with their co-workers or in their team meetings.” Within this context, Juhani Ukko and Minna Saunila (2013) conducted an empirical study to examine “The role of reflection in facilitating and assessing innovativeness.” They concluded that “reflection plays an important role in facilitating innovativeness across organization” (Ukko & Saunila, 2013). According to Ukko and Saunila, the result is consistent with the findings of other researchers such as Somech (2006) who found that “the process of team reflection serves as a vehicle through which the interaction of participative leadership style and functional heterogeneity enhances team innovation.” Moreover,

As Nakamura and Yorks (2011) state, reflection can also occur collectively and that dialogue is a critical component in reflection as a part of learning processes. Participating in the reflective procedure of enhancing innovativeness increases the employees’ understanding of the idea evaluation process, allows the presentation of how the ideas influence the employees’ tasks, and enhances cross-functional communication and the sense of fairness (Ukko & Saunila, 2013).

Therefore, reflection on work practices and open discussions can be a major factor in facilitating and developing the organization’s innovative capabilities. The data suggests that Chan and his team highly value “reflective practice” where they use different mediums to practice this crucial chore. We will focus here on one of these mediums, reflection through blogging. Some studies show that blogging has become a powerful tool to communicate information and build communities of interest. In their article, “Tech talk: An investigation of blogging in technology innovation discourse,” Davidson and Vaast (2009) argue that “Web logs [...] are fast developing in diverse social and business contexts as influential sources of discourse, knowledge, and community development” (Davidson &

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24 EUWIN is an initiative of the European Commission’s Directorate General for Enterprise & Industry.
Vaast, 2009). Blogging takes different forms. Twitter, for example, offers a platform for individuals and organizations to share short and concentrated information. Users may use hashtags to create conversations or discussions around specific topics. Traditional blogs, on the other hand, are not word restricted and can be found by anyone on the web.

Many museums have recognized the power of blogging and used it to advance their mission. In February 2009, the American Alliance of Museums’ Center for the Future of Museums (CFM), for example, has started one of the most common blogs in the museum sector on Blogspot.com.

Chan’s team uses Cooper Hewitt Lab blog to reflect upon their experimentations where they, also, receive feedback from audiences and other professionals in the field. Seb Chan (2014) explains; “We operate in public, and we make incremental change in public, and we encourage everybody here who writes code to write about their code”. By digging deeper and looking at an example of the reflection posts published by one of the team members at Cooper Hewitt Lab, Sam Brenner, we find a very interesting dynamic. Chan tells the story of the blog;

One of our new developers, Sam, just did a big post on how he changed the search interface; how he is working on the search interface on our site to make it better. He did not come from the museum world. I was like, “Sam, you need to write about what you have learnt through this.”

Chan further explains his intention behind encouraging his staff members to write about their work and share it with the public. He argues;

I think what is interesting with the team here, and to a degree the team at the Powerhouse, is we have tried to make our work public early. And I tried to get the staff to write about it publicly as a means of reflecting on their own way of working. Having a reflective practice (Chan, 2014).

Chan clearly directs us to think about the importance of reflective practice. Through Sam Brenner’s post, let us look at the benefits a digital team can gain from blogging about their work. Brenner wrote a post explaining some of the problems he encountered with Elasticsearch, which is an open source data search and analytics engine.
Brenner explains in his blogpost; “This doesn’t mean Elasticsearch is always correct in its guesses — for example, it started treating our accession numbers as dates, which made them impossible to search on...” (Brenner, 2014).

After a few months of work, Brenner was able to solve the problems he found in the software. Brenner offered his innovative solutions to the museum community and developers to benefit from and also asked for comments and feedback. Brenner writes; “We’re very interested in hearing about any issues, suggestions or general feedback that you might have — leave them in the comments or tweet us @cooperhewittlab” (Brenner, 2014). Brenner received comments ranging from words of appreciation to suggestions on other possible approaches to improve the service. For instance, Peter Grond, a developer from Amsterdam, The Netherlands, responded to Brenner’s post; “Nice post on the challenges for a good user friendly search. Maybe interesting for you is the research of the University of Amsterdam on searching in large museum databases and dealing with polluted and incorrect data.” Grond here is referring to a similar problem he and his team have encountered and wanted to share his solution with Brenner. Grond states; “We built a search engine like that, based on the results of the scientific research for the Municipality museum of The Hague. The search engine is open sourced and you can find more information on Github.” This type of communication and soliciting ideas from across the world is in the heart of the open innovation approach.

Chan believes that the interactions his team is exposed to through reflections and blogging is crucial to the creative process. According to Chan, it is a unique experience for many of them who came to the museum world from different sectors. Chan (2014) states: “Sam had never been exposed to that before. Sam had come from another sector; he had not worked in museums prior. He was like, “Wow, all these people!” Chan encourages his team members to develop the communications they receive on their blog; “Go and talk to them, send them an email, follow it up. That’s the thing” (Chan, 2014). As we can see, reflection, through blogging in the case of Cooper Hewitt Lab, represents an open innovation dual inbound and outbound activities where Brenner contributed his innovative solution to the wider community while soliciting creative ideas to improve the internal development of his team (Figure 27).
Although Chan (2014) confirms that reflection through blogging helps his team to test their ideas and learn from others. He recognizes that there are some challenges, “I would say that not everybody at this museum likes that. There are numerous occasions where people have been upset by what we have posted on our own blog because they have felt that it has been too open” (Chan, 2014). Some museums may shy away from sharing their internal operation to avoid the possibility of being judged by the public or the professional community. This is probably because museums want to preserve the public trust and respect they have historically inherited. Sharing what could be a controversial or experimental project can bring criticism to the museum. Therefore, although open innovation seems very logical in the digital age, the actual implementation of open innovation strategies in museums may be challenging and requires leadership support. Chan, for example, offers his full support for his staff to experiment and be open with their experimentations. He states; “But I am on the senior leadership team; I make the decisions around that stuff... My job is to protect my team, and to let them continue to do experimental stuff and deliver what they have to deliver... I defend that work” (Chan, 2014). Chan also asserts the importance of opening channels of communications with other departments and individuals inside the museum, explaining the objectives of some experimental projects. He offers his possible response in a fictional conversation with a
museum colleague who may oppose an experimental project: “you might not like it now, but in two weeks’ time it will not be that; it will be some other thing, and we need to be here to get to that place in two weeks’ time. Or six weeks, or whatever it is” (Chan, 2014). This type of explanation can help build support for innovative projects and gradually change the culture inside the museum.

Failing publicly may seem to be a negative conception; however, Chan sees it in a different way. Chan argues that it is important for failure to be public.

If it all happens behind closed doors, the only criticism you will get is from the people who are already doing it a particular way. If you fail publicly, you will get people who will criticize you who will say, “I am already doing it better. Why are not you doing it like this?” You will also get supporters who say, “Wow, that was a really interesting way of trying that. Did you think about this other way?” If it is only internal, you never get that feedback from people outside (Chan, 2014).

In Chan’s views, museums may be able to avoid potential public criticism by not bringing their experimental ideas to the public, but by doing so they also lose the potential of public support and creative ideas. Chan recognizes that “open innovation is very important; the open part is that it has to be open publicly. If it is not open publicly you do not get the benefit of the world criticizing your work” (Chan, 2014). Open reflection through blogging offers Chan and his team the level of openness they require in order to innovate. However, it may be helpful to note that the case in each museum is different. The level of openness can be individually decided by each museum but some sort of openness may have to be maintained in order for museums to innovate and avoid stagnation.

Chan thinks that museums may have to be a little less risk averse. He argues that it is important for museums to avoid mixing up the mission risk with the enterprise risk; “They are mixing up and thinking that if we make public failures in our mission, we will affect the enterprise. It is not – I would disagree with that” (Chan, 2014). This is because these failures are not spectacular and arguably will not lead to losing public trust, according to Chan. To the contrary, Chan thinks that transparency and getting the public involved
actually build public trust. Those who may prefer to avoid reflecting on their work openly mainly because of a fear to miss funding opportunities and donations. Chan (2014) disagrees and argues:

I would say though that the proof in my work is that has not been the case; in fact, it has resulted in millions of dollars coming to this [Cooper Hewitt] museum. And in the case of the Powerhouse, millions of dollars came through new government projects and visitor action. You have got to trust that that is going to happen. It is not going to happen for everyone, and it is not always going to work for me. But I think there is a reasonably – at least in our case here – a clear line between our experimentation and literally millions of dollars of funding.

The connection which Chan has made between the ability of museums to experiment and innovate openly on one side and their ability to attract funds on the other side, confirms the earlier discussion in Chapter 2 of this thesis around innovation and enterprise. As we can recall, Vaizey’s 2010 keynote speech at the Museum Association Conference in Manchester made the connection between innovation and enterprise. Also, we discussed different funding schemes in the US and UK which encouraged museums to capitalize on their innovation.

### 3.3.3 Collaboration: realizing internal resources, identifying needs, and targeting purposeful partnerships with external organizations

Cooper Hewitt had to close for several years for renovation which made the museum building and collections inaccessible to the public. However, the museum understands the valuable role it plays in the lives of New Yorkers and refused to let the renovation process handicap its ability to serve the community. Caroline Baumann, Cooper Hewitt Associate Director stated;

The key for us is really to keep the presence of Cooper-Hewitt alive during the renovation, I don't use the verb 'to close.' I really see these two years as an
opportunity to educate people about our mission and to expand our circle, our audience (Maloney, 2012).

Subsequently, the museum strategized untraditional ways to continue delivering high quality programs and exhibitions. Jennifer Maloney from the Wall Street Journal reports;

As part of that effort, Cooper-Hewitt presented an exhibit at the United Nations from October to January, and it will open a graphic-design exhibition on May 26 on Governors Island. The museum also is looking to lease space for a pop-up Cooper-Hewitt museum shop somewhere in Manhattan, according to associate director Caroline Baumann (Maloney, 2012).

Cooper Hewitt here provides an example of creating purposeful partnerships with external organizations to fulfil the needs of the museums in order to achieve its mission. This strategy is central in the open innovation framework. Another example of this strategy is the partnership between the museum and Target, the giant retail corporation. The New York division of Target supports arts in museums and cultural organizations through its national program, Targeting the Arts: “We believe the arts have the power to bring communities together to help us see the world from different perspectives and understand various cultures, traditions and points of view” (Target, n.d.). Both Target and Cooper Hewitt partnered to establish Cooper Hewitt Design Center in Harlem, New York which was opened in May 2012. Chan (2014) states; “We opened a new education space up in Harlem while we were closed as a way to run out the education programs whilst the main building here on the Upper East Side is being closed”. The Center in Harlem offers various programs such as “Target Design Kids, drop-in design programs, with free workshops for children ages 5 and older, and evening public programs for adults, including the Design Talks and Harlem Focus series” (The Smithsonian, 2013). Although the museum was closed during the renovation, we witness here how the museum was able to continue delivering its programs and contribute to the wellbeing of the community through partnerships and innovative thinking.

We find the same strategic thinking prevails at Cooper Hewitt Lab as well. Chan asserts that “[e]ach team member is reasonably prolific in external communications and partnerships” (Chan, 2014). The Chromecast project with Google Cultural Lab, for
example, is a great example of the importance of collaboration in the open innovation model at Cooper Hewitt Lab. The project brought together two highly skilled teams from two different organizations (Cooper Hewitt and Google), who worked closely together to find solutions for a specific problem. The experiment and its outcomes have been publicly shared on Cooper Hewitt Lab blog and developers were invited to contribute to the source code. Chan asserts that these types of projects improve the innovative capabilities of his team.

We learn from the way we can do other sorts of work better. And the exposure to the working or practices of Google was really interesting as well. A lot of the stuff that I have done and my teams have done in the recent years, probably in the last ten years, the best works have come from when I have been able to expose my people to another company, or another firm’s way of working for a period of time, and then bring back that knowledge back into the team here (Chan, 2014).

Chan’s strategy to expose his team to the outside world is consistent with the business studies’ understanding of collaboration as a potential approach to carry out innovation. Pillay (2014), for instance, argues;

Collaboration is a core component of modern business, and over the years, collaborative efforts have resulted in some of the world's most groundbreaking innovations, in the areas of technology, medicine and engineering. The opportunities are seemingly endless when people unite and work together, whether within a single organization or across many.

Therefore, purposeful collaboration, as we saw at Cooper Hewitt can increase a museum’s ability to introduce new innovations. Most museums house valuable resources such as: collections, physical spaces, libraries, and expertise. Understanding the wealth of resources in a museum is, probably, the first logical step towards building fruitful relationships with other organizations. The second step is probably identifying the museum’s needs to carry out its mission and find external collaborators that can help the museum to fulfil those needs.
This research has identified three inbound and outbound paths for innovation at Cooper Hewitt Lab. These paths are open sourcing, open reflection, and collaboration. The data collected strongly recommends that the level of openness and inclination of the digital team at Cooper Hewitt to work with external organizations in innovative projects is advantageous and is a major strategy for the team. Additionally, it was noted that the team has a strong sense of belonging to the museum sector and eagerness to share knowledge. This is specifically shown in the keenness of the team members to attend conferences in order to communicate with other skilled professionals and academics in the field.

Research related to the theories of learning organization, communities of practice, and knowledge construction suggests that conference attendees improve their “mega-, macro- and micro-level learning” (Wiessner, Hatcher, Chapman, & Storberg-Walker, 2008). New knowledge acquired by museum professionals during conferences help the advancement of internal projects in their respective museums (i.e. inbound).

It is evident that all members of Chan’s team at Cooper Hewitt belong to professional organizations and regularly attend and present at conferences. Walter, a member of the digital team at Cooper Hewitt Lab confirms that professional conferences “are a great way to connect and catch up with the rest of the museum world. I try to present each year, though it is not always possible” (Walter, 2014). Ted Forbes, Manager of Digital Media at Dallas Museum of Art has an interesting observation which is consistent with research findings.

It seems like the museums that are all considered being on that cutting edge, and considered to be innovative are all part of that core. We all go to the conferences. You meet the person who does what you do in their team at another museum. We look forward to seeing them once or twice a year when we go to these things. The museums that do not show up at those I never really even think of as doing much (Forbes, 2013).

Between presenting (i.e., outbound) and attending presentations (i.e., inbound), conferences like museums, are places for informal teaching and learning. Conferences are fertile environments for ideas to be conceived and evolve. Therefore, Chan encourages his team members to attend and present at local, national, and international conferences. He
states; “We invest time in sending staff to external out-of-sector events, as well as regular team excursions” (Chan, 2014). Chan explains that he has learned the significance of presenting at conferences in his early career in Australia: “My early bosses and my early directors were very clear about the importance of traveling to other parts of the world for museum events, and presenting research papers [...]” (Chan, 2014). Data reveals that in 2014, Chan alone attended and presented at more than ten national and international museum related conferences. Some of these conferences include the following (Chan, 2014):

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<tr>
<th>Name of the Conference</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Remix</td>
<td>New York City, NY, USA</td>
<td>September 2014</td>
</tr>
<tr>
<td>Beautiful Data at MetaLab Harvard</td>
<td>Cambridge, MA, USA</td>
<td>June 19, 2014</td>
</tr>
<tr>
<td>We Are Museums 2014</td>
<td>Warsaw, Poland</td>
<td>June 5 – 6, 2014</td>
</tr>
<tr>
<td>American Alliance of Museums (AAM) Annual conference</td>
<td>Seattle, WA, USA</td>
<td>May 19, 2014</td>
</tr>
<tr>
<td>SUNY/Fashion Institute of Technology's 2014 Exhibition Design MA Capstone keynote address</td>
<td>New York, NY, USA</td>
<td>May 16, 2014</td>
</tr>
<tr>
<td>Leadership Nouveau 2014</td>
<td>New York, NY, USA</td>
<td>April 28 - 29, 2014</td>
</tr>
<tr>
<td>Museums and the Web</td>
<td>Baltimore, MD, USA</td>
<td>April 2 - 5, 2014</td>
</tr>
<tr>
<td>Future Everything Festival</td>
<td>Manchester, UK</td>
<td>March 27 - April 1, 2014</td>
</tr>
</tbody>
</table>

As shown in the table, in 2014, Chan attended conferences in three different countries: USA, UK and Poland. His activities in the USA included four states: New York (his state of residence), Massachusetts, Washington, and Maryland.

In 2013, Chan attended and delivered presentations at 21 conferences and events in five different countries including USA, Australia, Portugal, Brazil, and the Netherlands. Some of the conferences include the following (Chan, 2014):
<table>
<thead>
<tr>
<th>Conference</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring the future: speculative curatorship for the new millennium</td>
<td>New York City, NY, USA</td>
<td>November 21, 2013</td>
</tr>
<tr>
<td>(w/Aaron Cope)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freer-Sackler Exhibiting Asia Lecture Series: The Digital Museum and the</td>
<td>Washington, DC, USA</td>
<td>November 3, 2013</td>
</tr>
<tr>
<td>Evolving Promise of Digitization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Institute for the Conservation of Cultural Material</td>
<td>Adelaide, Australia (via video link)</td>
<td>October 23, 2013</td>
</tr>
<tr>
<td>National Conference 2013 (w/ Aaron Cope)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directors workshop at Biennial International Congress of Maritime Museum</td>
<td>Cascais, Portugal</td>
<td>September 10 – 13, 2013</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keynote at International Council of Museums Annual Conference</td>
<td>Rio de Janeiro, Brazil</td>
<td>August 10 – 17, 2013</td>
</tr>
<tr>
<td>Keynote at Digital Acrobatics: Performing the Circus Oz Archive Symposium</td>
<td>Melbourne, Australia</td>
<td>July 5, 2013</td>
</tr>
<tr>
<td>Opening keynote at MuseumNext</td>
<td>Amsterdam, Netherlands</td>
<td>May 13 – 14, 2013</td>
</tr>
<tr>
<td>Museums and the Web</td>
<td>Portland, OR, USA</td>
<td>April 16 – 20, 2013</td>
</tr>
<tr>
<td>Digital Humanities Winter Institute, University of Maryland</td>
<td>College Park, MD, USA</td>
<td>January 7 – 11, 2013</td>
</tr>
</tbody>
</table>

The decrease of Chan’s activities in 2014 compared to 2013 was probably due to the grand reopening of Cooper Hewitt in December 2014. It is noted, however, that a good number of Chan’s presentations were delivered in collaboration with professionals from other museums and organizations. The presentation, Tough Times, New Ideas: Experiments in Organizational Change at the 2014 AAM annual conference, for example, was a collaboration between Seb Chan, Cooper Hewitt, Smithsonian Design Museum; Marsha Bol, Museum of International Folk Art; Janet Carding, Royal Ontario Museum; Kathleen McLean, Independent Exhibitions; and Suzanne Seriff, University of Texas at Austin. The presentation addressed new museum staff structures and possible ways of
increasing organizational efficiency. More specifically, the discussion concentrated on “innovative change efforts focused on visitor experiences, resilience and responsiveness” (AAM, n.d.). The diversity among presenters and their institutional affiliation provides a perspective on the possible rich environment conference goers may encounter.

4.0 Conclusion

Our discussion in this chapter has revealed that innovation can have different levels or contexts, ranging from original and universal innovation (high level) to local or sector level innovation (medium level) to organizational changes/innovation (basic level). This study has adopted the understanding of museum innovation as those radical or incremental changes that may have an impact on the museum sector nationally or internationally. Innovation in museums can take different forms: product innovation, process innovation or business model innovation (or organizational change). This chapter attempted to propose a definition of museum innovation which can be expressed as the new or enhanced processes, products, or business models by which museums can effectively achieve their social and cultural mission. More broadly and outside of this discussion, this definition is intended to contribute towards building a museum perspective to innovation.

The data collected from Cooper Hewitt Lab provided empirical evidence that suggests that the open innovation model has been strongly present in their work. OI inbound and outbound activities at Cooper Hewitt Lab can be summarized as followed:

<table>
<thead>
<tr>
<th>Path</th>
<th>Inbound (outside-in)</th>
<th>Outbound (inside-out)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open Sourcing</strong></td>
<td>Other skilled developers contribute to the source code which improves its quality and reduces bugs and other technical problems. As a result, the internal museum operation improves and becomes more effective.</td>
<td>Opening the source code is a contribution to the wider community and allows other museums around the world to improve their internal operation and accordingly the whole sector to evolve.</td>
</tr>
<tr>
<td><strong>Open Reflection</strong></td>
<td>Through blogging, receiving comments, insights, and sharing self-reflections and inside technical and operational</td>
<td></td>
</tr>
</tbody>
</table>
feedback from experts worldwide about reflective practices helps improve the internal research in the museum and its ability to innovate. Information, through blog posts, as well as success and failure on the web help other professionals in their internal research and improves their innovative capabilities.

| Collaboration | Identifying internal needs and fulfilling these needs through partnerships with outsider museums and organizations helps the museum to innovate and achieve its mission. | Utilizing internal resources to work with external organizations in collaborative projects helps the museum to broaden its audiences and expand its outreach |

Figure 29: Inbound and Outbound Paths to Open Innovation at Cooper Hewitt Lab

Museums differ in terms of the nature of their collection, size, mission, governing and management framework and the community they serve. Therefore, OI inbound and outbound activities can (and perhaps should) differ from one museum to another. If open innovation is a framework that can possibly interest any museum, that museum may want to invest the time and efforts necessary to plan its tailored open innovation strategies, which allow the museum to innovate and effectively achieve its mission.

This chapter allowed us to examine some specific open innovation strategies in museums, and more specifically, within the context of digital. In the next chapter, through two case studies at National WWII Museum (USA) and Imperial War Museums (UK), we will try, first, to zoom out and look at the business model for each museum and identify the elements of social enterprise in both museums. Second, we will focus and look more closely at the place of digital in each museum in an attempt to understand how it is possibly contributing to each institution’s overall social enterprise business model.
Chapter 6

Social Enterprise at the National WWII Museum and Imperial War Museums

1.0 Introduction

This chapter of the thesis is intended to reach back to the second of the two main structures of innovation and enterprise, and investigate how specifically social enterprise business models are manifestly structured in some museums. As with our last chapter (and the consideration of open innovation), here the example taken will once again be digital media and the role it plays within the museum’s social enterprise model. The fieldwork underpinning the discussion is informed by the conceptual frameworks of social enterprise as discussed in Chapter 4 including, specifically, Dees’ (1998) double bottom lines (social mission and profit making) paradigm for social enterprise. The fieldwork also draws upon our earlier discussion and remains mindful of the ways in which social enterprise is defined in the literature. In particular, the discussion here will work from the Social Enterprise Alliance’s (2012) definition of social enterprise and focus on the ability of the museums in the case studies to use business principles and market strategies to achieve their social mission.

The study examines two major museums: the National World War II (WWII) Museum in New Orleans, Louisiana, United States, and Imperial War Museums in the United Kingdom. The data shows that both museums are functioning social enterprises. It was found also that digital lies in the heart of the social enterprise business model and significantly contributes to its sustainability. More specifically, at the National WWII Museum, the chapter analyzes the new Dog Tag digital experience (i.e., My Journey project) while the new approach to digital history content is explored at the Imperial War Museums. Both cases, however, share a common theme, which is the aim of both museums to create a tailored content that is driven by audience interest.

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The chapter ends by suggesting that digital contributes to the suitability of the museum’s social enterprise business model through direct and indirect approaches. The direct approach is represented in the museum’s strategy to license digital images and videos which directly generate earned income for the museum. The indirect approach is ultimately the role digital plays to enhance the visitor’s experience (both in the physical gallery and online), which facilitates the sale of other products. The conclusion also highlights the distinction between the conceptualization of social enterprise and social innovation from a museum perspective.

2.0 Case Study 1: The National WWII Museum, New Orleans, Louisiana, United States

Located in downtown New Orleans, the National WWII Museum was opened to the public for the first time as the D-Day Museum on June 6, 2000, the 56th anniversary of the D-Day. D-Day is the name of a significant military operation during WWII when the Allied forces invaded Normandy in northern France on June 6, 1944. The operation enabled the Allied forces to liberate Western Europe from the Nazis. In 2003, the D-Day Museum was designated by the United Stated Congress as the official WWII museum of the United States and carries its current name, The National WWII Museum.

The Museum was founded by Stephen E. Ambrose (1936 – 2002), who was an American writer, historian, and the biographer of two U.S. Presidents; Dwight D. Eisenhower and Richard M. Nixon. Ambrose is well-known for his bestsellers; Band of Brothers, and D-Day and Citizen Soldiers in which Ambrose tells the story of the American experience in World War II. Ambrose chose New Orleans to house the museum for its connection through Higgins Industries. In the 1930s, the U.S. military looked into developing small boats that could transport troops from big ships to land. During that time, Andrew Higgins and his firm in New Orleans manufactured “shallow-water work boats to support oil and gas exploration in the Louisiana bayous” (Schensul, 2015). The U.S. military commissioned Higgins to design the special boats they needed, of course, with the specifications of the military. The boats were so successful that Higgins and his 30,000 workers manufactured “every landing craft used in the war”, according to Schensul (2015).
The National WWII Museum offers a powerful narrative of World War II, which consists of emotional personal stories of individuals and families who participated or were impacted by the War. The Museum’s permanent exhibitions include: the Home Front, Planning for D-Day, the D-Day Beaches, and Pacific D-Days galleries. The museum collection ranges from small and personal objects such as uniforms, diaries, and military dog tags, to digital stories from veterans who participated in the war, and huge military equipment including aircrafts, tanks, boats, and machine guns.

According to the 2014 Museum Annual Report, the museum complex today is 212,500 square feet including exhibit spaces, theater, and restaurant. The Museum is currently expanding and expects to add an additional 81,000 square feet in new construction by 2017. The museum galleries offer an experience like no other to its visitors. On the third floor, for example, museum visitors can enjoy a panoramic view of huge hanging World War II aircraft. Additionally, the museum’s Solomon Victory Theater features a unique 4-D cinematic experience, showcasing “Beyond All
Boundaries.” Narrated by Tom Hanks, Beyond All Boundaries is exclusively produced for the National WWII Museum in New Orleans. The film “features dazzling effects, CGI animation, multi-layered environments and first-person accounts from the trenches to the Home Front read by Brad Pitt, Tobey Maguire, Gary Sinise, Patricia Clarkson, Wendell Pierce and more” (The National WWII Museum, n.d.).

![Figure 31: Hanging World War II aircraft at the National WWII Museum in New Orleans](image)

The Museum has gone through several expansions since its inception. More recently, in December 2014, The National WWII Museum opened the Road to Berlin pavilion, a 32,000 square-foot state of the art building sponsored by Boeing, the giant aircraft company. Through the new exhibition, the Museum hopes to offer a “whole new way to understand America's story of the war in Europe, Africa, and the Mediterranean” (The National WWII Museum, n.d.). The Museum plans to open the Road to Tokyo exhibit in December 2015. What is worth noting is that in a short period of time the museum has achieved a high level of eminence. TripAdvisor, the world's largest travel site named the National WWII Museum the number one attraction in New Orleans and ranked number four among U.S. museums. Museum records show that the museum has
133, 475 paid members representing all U.S. States in addition to countries outside the United States. According to the WWII Museum Registrar and Assistant Director of Collections & Exhibits, Toni Kiser (2014), the museum has the highest paid members in the United States exceeding well-established museums such as The Smithsonian and Metropolitan Museum of Art.

2.1 The Social Enterprise Business Model at the National WWII Museum

Unlike most national museums in the United States, the National WWII Museum receives no funds from the U.S. Federal Government and has to raise 100% of its budget. The following table shows the museum’s enterprising revenues in 2014 based on the Museum Annual Report:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memberships</td>
<td>$6,726,019</td>
</tr>
<tr>
<td>Admissions</td>
<td>$10,280,373</td>
</tr>
<tr>
<td>Facilities and property rentals</td>
<td>$1,707,590</td>
</tr>
<tr>
<td>Sponsored events and conferences</td>
<td>$4,322,719</td>
</tr>
<tr>
<td>Food and beverage</td>
<td>$5,756,481</td>
</tr>
<tr>
<td>Museum store</td>
<td>2,396,333</td>
</tr>
<tr>
<td>Total</td>
<td>$28,793,182</td>
</tr>
</tbody>
</table>

Figure 32: Earned Revenues at the National WWII Museum in 2014

It is noted here that the museum’s earned income from enterprising activities account for more than 50% of the $57,039,607 museum revenues in 2014. What is crucial for our discussion here of social enterprise is that the projected numbers show the importance of commercial activities to the sustainability of the museum’s business model. Carmen and Jose (2008) note that “[t]he conventional role of a museum, which was to focus on its task and exhibit a collection of art, has changed. Museums are adopting more of a business approach in order to make the museum and its collections more accessible to the public”, an approach that can be seen in an action at the National WWII Museum.
However, while the museum utilizes market principals and business tools to strengthen its financial resilience, the museum has remained conscious to its true mission and the essence of its existence. The museum, for example, confirms that its success is not measured by the expansion of its collection or physical space “but by minds touched and connections forged” (The National WWII Museum, 2015). This sense of understanding that the core mission of the museum is crucial, especially when the outcomes of the museum’s work are being considered. In a broader context, social enterprises are aware and very conscious of the fact that commercial adventures and physical expansions are a means not an end. One of the programs that illustrate that notion is the travelling program at the WWII Museum:

This year [2014], our travel program’s historians and curators led trips around the world, helping hundreds of people connect with history where it happened: on the beaches of Normandy, in the Ardennes of Belgium, on the waves of the English Channel. Our world-class guides do much more than narrate stops on an itinerary—they help families locate gravesites, lead guests in the footsteps of their ancestors, create unique and memorable connections with history. Tours by The National WWII Museum offer access and expertise that no other program has, making every stop momentous—and many truly life-changing (The National WWII Museum, 2015).

The social value and wellbeing created through finding a family member gravesite or fulfilling a personal urge to reconnect with close friends through the legacy they left behind cannot be expressed in financial statements. Within this context, the museum’s exhibits, programs, and educational activities aspire to achieve the museum’s mission to tell the story of the American Experience in the war that changed the world—why it was fought, how it was won, and what it means today—so that all generations will understand the price of freedom and be inspired by what they learn (The National WWII Museum, n.d.).

Another example which illustrates the social dimension of the Museum’s mission is a project called Knit Your Bit. In 2006, the Museum started releasing a pattern design from the museum collection every year and then asked the public, in an open innovation
model, to use the pattern to create knit and crochet scarves for U.S. veterans. The museum collects the scarves and works with different veterans’ centers and organizations across the United States to distribute them to individual veterans. Through this project, the museum has collected and distributed more than 15,000 scarves. This specific example shows how museums can be forces for good in society, impacting people’s lives, and bringing communities together.

As Dees (1998) has conceptualized, and was later constructed by many experts such as Defourny (2001) and (2007), and Kerlin (2006) and (2009), the National WWII Museum business model can be viewed as social enterprise. The double bottom line objective (which combines social mission and enterprising activities and is an essential characteristic of social enterprise business model) can be identified in many of the museum programs. Additionally, by definition, social enterprise is “businesses whose primary purpose is the common good. They use the methods and disciplines of business and the power of the marketplace to advance their social, environmental, and human justice agendas” (The Case for Social Enterprise Alliance, 2012). By using business strategies and utilizing market tools, such as running a retail business as a means to generate revenues for the museum while centralizing the museum’s social mission as the end goal, the National WWII Museum positions itself as a functioning social enterprise.

2.2 Positioning Digital within the Museum’s Social Enterprise Business Model

Close analysis of the nature of the museum’s earned income shows that the museum receives 18% of its revenues from ticket sales and over 30% of its revenues from food, drinks, and membership. These revenues, to a large extent, depend on the ability of the museum to attract visitors, extend the time of the visit and keep the visitors engaged after the visit. This may not be easy, especially when the museum charges one of the highest museum admission fees in the U.S. and 250% more than the average museum admission fees in the metropolitan New Orleans area. Within this context, providing a unique and interactive visitor experience is crucial to the sustainability of the museum business model. It is the experience that probably motivates the visitor to plan a visit to the museum, pay admission, stay long enough in the museum to purchase a meal, be inspired
enough to buy memorabilia from the museum store, and perhaps decide to support the museum by being a member. In that sense, the National WWII Museum relies on digital interactive experiences to keep the audience engaged and entertained while learning about World War II. This approach was observed by Camareroa, Garridoa, and Vicenteb (2015) and argued that “[v]isitor orientation may lead museums to invest in technological innovation, which would enhance visitor appeal and satisfaction in addition to entailing increased costs”. Within this context, the museum, in 2013, for example, launched a new and unique digital exhibit called The Train Car Experience inspired by the 1940 iconic Pullman sleeper cars. The exhibit allows “guests to experience the sights, sounds and emotions of going off to war” (The National WWII Museum, 2013). Located to the left of the main Museum entrance, the train model can accommodate up to 26 visitors per trip which typically lasts for 5 minutes. In the beginning of the trip, the visitors hear the sound of the train leaving the station and feel the seats shaking while the train windows show moving vintage pictures from the Museum collections to simulate the train movement. The train speeds and makes several stops in different American cities. During the trip, different stories of soldiers who joined the actual train on their way to the War are digitally exhibited.
Also, the museum collects oral histories from WWII veterans and makes them available online along with a large collection of photographs. Gordon H. Mueller, President and CEO of the museum, says that the initiative “will ultimately ensure easy public access, via the Internet, to a significant percentage of the treasures in our collection. This “virtual museum” feature depends simply on a good online connection, regardless of location”. However, if the user is interested in downloading an image or a video from the museum website, the user must pay license fees. The fees range from $7.00 for students to download an image (watermarked) to $120.00 for commercial use. Videos cost a little more; from $60.00 for students (watermarked) to $340.00 for commercial use. The museum explains that the fees they charge for licensing are used to help the museum to pay off the cost involved in collecting and maintaining the digital collection:

Collecting and preserving oral histories is a costly process. Museum staff travel the country to collect high-definition interviews that must be processed and cataloged. Once this labor-intensive process is complete, the large digital
files then need to be backed up, allowing the Museum to indefinitely preserve the stories of our veterans and share them with the public online. The sale of these oral histories enables the Museum to continue this process and provide the best care for these collections (NWWIIM, n.d.).

This approach may be quite unfamiliar or probably controversial for some museums, especially on the European continent. Mindful of our discussion here, it might be helpful to remember that the National WWII Museum does not receive any direct financial support from tax payer money. Therefore, the museum has to seek innovative ways to support its operation. Digital initiatives, in this case, are some of the ways in which the museum seeks to generate revenues. In conclusion, the discussion above shows how digital occupies an important position in sustaining the social enterprise business model at the National WWII Museum by generating income for the museum. This has been achieved through the direct sale of digital assets (such as images and videos) and also by providing a unique digital experience inside the museum galleries (such as The Train Car) to attract visitors which leads to an increase in ticket sales and encourage visitors to stay long enough in the museum to spend money at the restaurant and museum store.

Similar to the Train Car Experience, the museum has been developing a major digital initiative, called My Journey. The project has been in the planning stage for many years and seeks to provide museum visitors personalized contents inside the museum galleries, and also expand the experience after the visitor leaves the museum. We intend to look more closely into the development of the My Journey project in an effort to understand the innovation process at the museum while configuring the connections between digital innovation and the museum’s social enterprise business model.

2.3 The Museum’s “My Journey” Project

The National WWII Museum’s My Journey project tells the story of 50 real people who fought in the War. The Museum has collected the testimony of living veterans and gathered information about those who survived the war. However, the museum made a strategic decision to include people who were killed in action as well. Toni Kiser,
Museum Registrar and Assistant Director of Collections & Exhibits, who is also the Head of the project states, “it is part of the experience; about a 1/8th or so of World War II soldiers were killed in action. We wanted to make sure that we represented them well”. The idea of the project is to station interactive kiosks in the museum galleries where people can check in and receive information pertaining to one of the 50 featured characters. When the visitor pays for his or her ticket they receive a RFID enabled chip in the form of a dog tag. Then visitors use their dog tag and email address to login to the stationed kiosks.

Figure 34: Dog Tag Proposed Designs, National WWII Museum Records

In the beginning, the visitor will have the chance to select one of the 50 featured characters to follow him/her in the War. Visitors are given the choice to select their character by military branch, name, or theater of war. The character’s photograph and hometown will be displayed for the visitor to choose from. Once the visitor selects the
character and goes through the galleries, they will be able to follow what their chosen character did during the War. The kiosks will display some of the character’s actual words and narrated video to give the visitor the context of what they are going through. Nick Mueller, Museum President and CEO describes the experience,

The digital dog tags bring home the courage and sacrifice of the war's participants in a powerful way by connecting visitors to the journey of real servicemen and women. And, after leaving us, guests can go online to continue their exploration and discover even more. It's history that will follow you home (Barnes, 2014).

Figure 35: Visitors checking in at one of My Journey Kiosks, National WWII Museum

When the visitors go home they receive an email from the museum with links to related objects from the digital collection such as photographs, letters, diaries and three dimensional artifacts associated with the character they chose during their visit to the museum. Kiser explains,

If, for instance, you picked an army nurse and you follow this army nurse all through the war, Battle of the Bulge, coming home and working at Walter Reed after the war. When you get home and receive our email, you may be
able to watch her entire two and a half hour oral history, see pictures of other nurses serving in the theater, see pictures of nurse uniforms or medical equipment; things like that to help give you a broader perspective on her service, or the experience of nurses in general (Kiser, 2014).

By doing so, Kiser’s team tries to keep the museum visitors engaged with the collection even after they leave the museum. Inspired by the state of immediacy\textsuperscript{25} into which some social media website users immerse themselves, Kiser’s team hopes to create a similar experience using museum contents.

What we hope to do is that kind of how you get sucked into YouTube, you watch a YouTube video and then you click on another one, then you click on another one. Then two hours later you have just watched YouTube for two hours. That is kind of what we hope will happen. What you will see [in the email] is this person that you picked. But there will also be these elements that will pull you deeper into the collection. If you like this photograph of nurses, for example, well, we have 100 photographs of nurses that you might be interested in, that is kind of the idea (Kiser, 2014).

At the time of data collection for this PhD research, the museum was in the process of digitizing a vast collection of photographs and three dimensional objects to support the Dog Tag project. Kiser (2014) expected that within a few months the museum would be able to publish about 15,000 photographs and 150 3D artifacts online; however, she expressed how digitizing 3D objects may be complicated.

2D things were easier to figure out. The standard on how to scan it and save it in the tif files and all that technical metadata and cataloging is accessible, mostly because so many other institutions have been cataloging photographs and digitizing photographs for a long time, so there were a lot of really good standards already out there. It was a little bit more problematic with 3D objects. So many museums are doing three dimensional items so differently when it comes to digitization. We

\textsuperscript{25} “Immediacy” is a term developed in the media studies discipline which refers to the true immersion of audience into a medium to the point in which they may forget that they are, in fact, consuming media.
have been trying to figure out exactly what our standard for three dimensional objects is going to be (Kiser, 2014).

Kiser (2014) explains that each one of the 50 characters the museum picked for the project will have linked contents. When the visitor goes online and receives the post-visit email communication from the museum, they will be able to discover related 2D photographs, 3D artifacts, and oral histories contents. Exploring innovative ways of delivering customized and related content based on the visitor’s experience and interest can be a major area of experimentation for museums in the next few years. In this context, My Journey project can be worthy of examination and reflection.

The project has been designed to have two phases. The first phase is the Road to Berlin, and the second phase is the Road to Tokyo. Both phases are scheduled to open as part of two massive exhibitions both carrying the same names. The Road to Berlin exhibition along with the first phase of My Journey project opened in December 2014 and the Road to Tokyo opens in December 2015. The total featured characters in both phases is 50 people, 29 of which are part of phase one.

2.3.1 The development of the idea

My Journey project is a top-bottom initiative of Steven Watson, Executive Vice President of the National WWII Museum, who started thinking about the project 10 years ago. The museum has always collected oral history from veterans and been thinking of innovative ways to deliver this content to visitors and wider audiences. However, some of the challenges the museum faces with the stories they collected is their fragmentation.

What often happens in oral history is that people do not usually sit down and tell you a chronological story. They might start out saying, “I was born and I was raised and then I went into the Army.” They get you through basic training, but then after that a lot of times for these veterans, it is just stories; it is just one story after another. Some of which one connects to another, but they are not necessarily in chronological order (Kiser, 2014).
By examining some of the oral history contents, we can discover that in many cases, people have a very good story, but they do not tell it very succinctly. It may take them more than five or six minutes to tell the story. That can be problematic because not everybody is willing to spend that much time listening to someone’s story. According to Kiser (2014), research shows that people will spend an average of two to three minutes to listen to a content of this nature. Hence, the difficult task was to figure out a way to consolidate what they say without losing any important details.

Once we realized some of the complications that would arise from this, we started to think about things like, how would we keep track of who you are following in galleries? Would you have to listen to everybody’s story? How would we deliver the stories and would it be a random one every time? (Kiser, 2014).

The idea progressed to make each visitor somehow tied to a particular person. However, finding the right technology was a challenge. The museum, for example, thought of QR codes and the magnetic keycards as possible solutions but they were not effective, according to Kiser: “None of the technology was quite up there and cheap enough until recently” (Kiser, 2014). One of the things the museum had to consider was the cost of the item (later, the dog tag), which each visitor would have to receive to guide them through the experience. Considering that 500,000 visitors visit the museum every year, the project can potentially be very expensive for the museum. Only recently has the RFID technology become affordable enough to make the My Journey project a reality.

Some museum records show that the idea was, initially, to feature only 30 people but when the museum tried to represent different races, military branches, genders as well as those who were still alive and those who died in the war the number increased to 50.

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26 Radio frequency identification, or RFID, is a generic term for technologies that use radio waves to automatically identify people or objects. There are several methods of identification, but the most common is to store a serial number that identifies a person or object, and perhaps other information, on a microchip that is attached to an antenna (the chip and the antenna together are called an RFID transponder or an RFID tag). The antenna enables the chip to transmit the identification information to a reader. The reader converts the radio waves reflected back from the RFID tag into digital information that can then be passed on to computers that can make use of it (RFID Journal, n.d.).
Also, data shows that after the project went through the early phases of development, the museum came to the conclusion that the project goals are:

1. To allow visitors to select a service member, from either the European or Pacific Campaigns, and follow their story through interactive stations at the museum (feature known as My Character).
2. To allow visitors to collect digital artifacts from interactive experiences at the museum, which can be accessed online with expanded content (feature know as My Collection).
3. To create a complementary online experience allowing visitors to further explore their service member and collected digital artifacts.
4. To allow NWWIIM to collect analytics/metrics data of user interactions at Dog Tag enabled stations and online.
5. To allow NMWIIM to collect visitor information (name, email, etc.) to facilitate targeted post-visit communication and rapid donor activation.

These goals, as stated in the records of the project, reflect the museum’s social enterprise model. Essentially, the museum is creating a digital experience which extends the experience beyond the museum’s walls, to inform its visitors about the men and women who fought the war. Meanwhile, as it provides this extended experience, the museum is also consciously trying to capitalize on the experience by collecting visitor’s information for marketing and specifically, fundraising purposes. This double bottom line mission (with concurrently a social and financial outcome) is, as we have established earlier, a defining characteristic of social enterprise.

2.3.2 Prototyping

After the idea had been developed and the technology had been identified, the museum leadership started to put a team together to carry out the project. Toni Kiser, Museum Registrar and Assistant Director of Collections & Exhibits, was selected to be the project manager. Kiser’s team started thinking about how the experience can be incorporated into the overall scheme of each gallery. They tried to investigate issues related to check in methods, possible locations for the kiosks, and how the kiosks may look and
visually fit in each gallery space. The team contracted with Unified Field, a design company based in New York City, to help them develop their ideas further and possibly build a prototype. After a few months of communication, negotiation, and intense work the team produced the first prototype.

We basically built an interface like what we thought would be in the gallery, and loaded it with as much information as we could. We selected the 50 people. We wrote their different story points, we gathered their photographs. We basically did everything that we thought we needed. They built it and we tested it (Kiser, 2014).

However, when Kiser’s team saw the prototype in action, they were not very satisfied with the result. They thought that using only texts was quite boring and asked themselves, “Why do not we add videos? Why do not we do it from the first person perspective instead of the third person? Instead of writing about them, make it like they are talking to you” (Kiser, 2014). This behavior of self-reflection practice, which Chan (2014) referred to in the previous chapter, is very important in the innovation process. Kiser’s team started to rethink how they can possibly make the experience more attractive and desirable. They edited the narrative and added more engaging stories. But the prototyping process is quite complicated and full of uncertainty. It takes a high level of communication between team members and sincere efforts to resolve conflicts and reconcile multiple interests. Kiser (2014) describes the complexity of the project, “you start adding in all the technology side of it, you kind of simplify it, and then it gets more complicated again, and then you scale it back, and then it gets more complicated”. After several rounds of discussions and gathering of material, the team was able to build the second prototype.

We built the prototype and tested it, and it tested really well. But what it really showed us was that we only have about two and a half minutes; that is as long as anyone is going to stand there, and that people really preferred not to read. They really preferred to watch or listen (Kiser, 2014).

The team decided to produce compelling 90 to 120 second videos, specifically for the project. The team had to make difficult decisions on what to include in each video.
Summarizing what had possibly happened in a few years into less than two minutes video can be a tough task. The team produced the third prototype and tested it. They found that it was working really well, although some people struggled with how they could use the RFID component. As a result, Kiser’s team had to go back and produce “a short little video that you watch first that tells you how to use the dog tag” (Kiser, 2014). The meeting minutes and communications between team members show that this specific topic had been discussed among the team before the execution of the prototype. However, no action was taken to address it. Kiser (2014) explains,

It was one of those things that we have talked about it internally for so long that we did not realize that the visitor would not necessarily understand that they had to tap the card. Somehow, we thought just having it would be enough. So we were like, “Oh, okay! You have to tell them to tap it”. That is one of the things that I think has been hard with a project like this, especially around technology, is that you get so deep in it yourself that you sometimes forget that you have to take a step back and think about what the visitor, . . . what they are going to see, and what their experience is going to be like as a novice; as somebody who has no clue what is going to happen.

Finally, the last prototype met the standards Kiser and her team had established, and they seemed satisfied with the digital experience they were able to create for their visitors.

2.3.3 Sampling

The team used samples which consisted of regular museum visitors to test the prototypes. The team tried to be inclusive and included a variety of age range, races, and genders. Also, the team decided to set up the prototype kiosks close to the ticket desk area to make it accessible to all visitors. The museum’s Sampling Evaluation Report, dated September 10, 2013 shows that 494 visitors participated in the testing experience across 390 sessions. 52% of the participants were males and 46% were females. The following chart illustrates the percentages of the participants’ racial backgrounds.
Additionally, data shows that the socioeconomic status of participants were more diverse:

Figure 36: Percentage of participants based on their racial background

Figure 37: Percentage of participants based on income
Age wise, 8% of participants were under 18 years old, 16% between the age of 18 and 24, 10% between 25 and 34, 20% between 35 and 49, 38% between 50 and 64, 8% between 65 and 74, 2% between 75 and 84, 2% 85 and above, and 5% did not answer the question.

In the beginning, visitors who were willing to test the prototype were offered incentives, such as a gift from the museum store. But this did not continue for too long. According to Kiser (2014) the team changed the incentive strategy for two reasons. First, it realized that most people were willing to do it anyway. Secondly, after a short period of time the team changed its sampling strategies and decided to utilize smaller more focused groups. At the beginning of the testing process, the team wanted to gather as much information as possible from a large pool of participants. For example, the team sought information related to the visitor’s experience selecting the character, how long it took the visitor to put their email address in, how long it took the visitor to read the text on the screen, how the visitor navigated from one screen to the next, etc. Kiser (2014) states; “Then we found that we can do smaller groups, but focus them because now we have answered a lot of questions with the big groups, so now we can really focus on one or two things.” More specific and detailed information was sought at this stage, such as the color of the icons and backgrounds, font sizes, etc. According to the reports, the average testing time took between five or six minutes including time spent interacting with the prototype and providing the feedback. Data shows that users’ feedback has significantly helped the team to improve the experience.

As we can see, during the innovation process, digital teams may have to deal with multiple issues at the same time. That can make innovation a complicated task and require a great attention to details. Therefore, having the right individuals on the team and adopting a clear workflow can decrease the intensity and complexity of the creation process. The discussion will move now to investigate the process by which the My Journey team was constructed and the nature of workflow they had. This discussion will help us make conclusions about the role of digital and digital teams in relation to innovation within the postdigital museum paradigm, as theorized by Parry (2013).

2.3.4 Team Building and Workflow
The process of building teams tasked to perform specific projects differs from one organization to another. At the National WWII Museum, building a digital team starts at the top management level where the museum’s leadership identifies a staff member to lead the project. Kimberly Guise, Curator and Content Specialist at the museum explains that the team leader takes the responsibility of picking the team members and identifies what departments need to be involved. For example, the team leader can include museum educator, exhibition designer, curator, and someone from marketing (Guise, 2014).

When the leadership at the National WWII Museum decided to pursue My Journey Project, they contacted a consulting firm to advise the museum. The consulting firm prepared a list of questions for the museum related to the featured characters including, their names, pictures, age, rank, and hometown. Consequently, the museum leadership appointed Toni Kiser, Museum Registrar and Assistant Director of Collections & Exhibits, to create a digital team to carry out the project. Kiser (2014) put together a team which combined five experts in three areas; content, technology, and research, where Kiser served as the group “consolidator.” The first task the team had to tackle was to identify the characters they intended to feature. Kiser (2014) explains; “We basically just sat down and started brainstorming who we thought should be in it. That was probably one of the hardest parts. We actually started out with only 36. We upped it to 50, ultimately.” The team worked together and created a list of people who they thought should be included with an explanation of why each one had made it to the list; “We had to talk internally about why we wanted them to be included. We would come up with a list of about ten people; ten to 12 people, and we would write out small snippets” (Kiser, 2014).

The team had to meet and review the list and approve each name. The team, then, had to figure out what the chosen character did during a specific time of the war. “We had a timeline of where the kiosks would be, and so we knew about what timeframes we needed to cover and where” (Kiser, 2014). This is where the story starts to take shape. Kiser’s team noticed that almost all stories they have collected share the same starting point, which is Pearl Harbor. “Almost everybody’s first story point was them talking about

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27 The research department at the Museum is charged with collecting the oral histories from living veterans.
where they were, or how they experienced Pearl Harbor” (Kiser, 2014). They also identified other common themes which helped them produce a group of consistent and connected stories.

After developing the story, it has to go through “executive review.” “I would take these 10 or 12 people at a time [and] forward [their stories] to our president, our executive vice president, our VP of operations, and VP of education and access” (Kiser, 2014). These senior individuals can accept the team’s proposal, amend it, or reject it all together. They can also make recommendations on which characters should be considered for the project.

Once the character passed the executive review, Kiser’s team had to start digging deeper into their stories to be able to essentially write the script that would become their video. However, writing a script for a video was not an easy task. Kiser (2014) explains that as curators and museum professionals “we often write for the eye, we write for someone to read it, as opposed to someone listening to it”. That was a challenge for Kiser’s team as these two concepts are distinct. To solve the problem, the company responsible for producing the videos provided training to Kiser’s team and helped its members to gain skills necessary to be professional script writers.

Once the team finished the script and consulted with the production company to make sure that it met their standards, the script had to go through another executive review, a process that often took several rounds of comments and editing between the team and the executive review in order for the script to be approved. After the script passed the executive review it typically went into the production phase. At this phase, Kiser’s team had to identify related footages and archival photographs to include in each video.

In some cases, the team had to obtain copyright permissions from movies or other production companies to include specific images or movie scenes. For example, Kiser’s team was interested in using some of the materials in *Twelve O’Clock High*, a 1940s TV show which featured stories from World War II. They sought materials that were related to two pilots; Paul Tibbets, who dropped the atomic bomb on Hiroshima and Nagasaki,
and Jack Bradley of the 354th Fighter Group. The team had to communicate with Warner Brothers and negotiate copyright issues (Kiser, 2014).

Once the videos were produced the content team watched them and provided their comments. According to Kiser not all videos came out perfect. In some cases, for example, wrong images were used; for instance including images of B-29 instead of B-24 fighter jets. Essentially, after Kiser’s team received the remarks from the content team, they worked on fixing any errors. Next, the video went through an executive review, which mainly focused on things like the pace of the video, music used and the compelling nature of the story.

The previous process can be summarized as follows:
Figure 38: Workflow - The Dog Tag Project,
The National World WWII Museum
One of the challenges Kiser’s team had to deal with was the scope of the story. While narrating the personal story of a specific character, for example, sometimes the viewer cannot understand why the character is going through these specific experiences unless the bigger picture of the War is explained. The question has always been, how much of the broader context, opposed to personal stories, should the team include in each video?

I think part of what was really hard was to give the user, the visitor, the broader story of the war in addition to what is happening to that person. So we had to struggle with where [and] how much of that to give them, and how much of the personal story to let just happen (Kiser, 2014).

The team had to deal with each case individually and make decisions about what to emphasize and what to ignore. The ultimate goal was to create a coherent, compelling, and immersive digital experience that would transport visitors in time and space to the time of the war.

The previous discussion about team building and workflow shows us how creating a digital experience can involve departmental collaboration inside the museum. As we noticed, the museum leadership, content teams, educational experts, the museum registrar, and the IT team members had to contribute to make the My Journey project a reality. In other words, we find that digital thinking at the National WWII Museum removes traditional barriers and goes beyond the IT department to cover the whole museum. This phenomenon is identified by museologist Parry (2013), as postdigitalism where digital becomes normalized in museums. By digital normativity, drawing ideas from both political philosophy and business studies, Parry means that digital is being embedded in the core values, functions and structures of some museums to the extent that makes its presence normalized and expected – an “institutional ought.” It is argued here that the My Journey project can be a good example of this trait of the postdigital museum.

2.3.5 The Role of IT
Our discussion here will address the role of the IT department at the National WWII Museum and the difference between digital teams and IT teams, especially in the light of the postdigital paradigm. Essentially, the role of IT departments in every museum can be different. In many cases, digital teams consist of people who work in the IT departments and mostly lead the digital initiative. In the previous chapter, for example, the IT team at Cooper Hewitt appears to be the unit which experiments with digital projects, pushes contents online, and creates in-galleries and online digital experiences. In other words, the composition of the IT team is the same as the digital team. What is different and somewhat exciting about the digital innovation model at the National WWII Museum is that each digital project has its own team, often led by curators or the museum registrar who are of course not part of the IT department. The role of IT personnel at the museum is more technical to make sure things work as they should. The My Journey project is an example of that model.

In the “My Journey” project, the IT department at the museum has been instrumental in providing services to the interface and the kiosks around the museum. They also make sure that the new technology will integrate with the system currently in place. For example, one of the things that the IT team helped Kiser’s team with is controlling the number of characters that can be offered at each kiosk. The team made a conscious decision to build the system in a way that allows the back office to control the number of choices and categories the visitor can choose from. Kiser (2014) explains,

Sometimes we will give you lots of choices and sometimes we will not give you very much choice at all. That is because if we are having a really high visitor day and we need to move a lot of people through, we might only let you pick one part. You get to pick Army, and then you get a person and we move you on. Whereas if it is a slower day you will get to pick; do you want a Road to Berlin person? Or do you want a Road to Tokyo person? Do you want ETO or PTO? Once you make that selection, then you can select a branch; Army, Navy, Army Air Corps, Coast Guard, Merchant Marine, Marine Corps, or civilians.
The role of IT here is to turn off or on some of those choices to help move the traffic through the kiosks. Additionally, the IT team has provided insight on some technical issues such as the kiosk’s keyboards; what they may look like so that people will understand what to do. IT also helped to identify the appropriate monitor size and what RFID readers to use, figure out how all the email addresses collected from visitors are going to work, where they get stored, and when the post-visit email is sent out to visitors.

The museum, however, is trying to bridge the gap between IT on the one hand, and the content and educational teams on the other. To achieve that goal, the museum created a new position called “museum technologist,” who is responsible for facilitating projects between IT and different museum departments while bearing the visitor’s perspective in mind. The position was created only five months before this case study started in July 2014.

In conclusion, although the National WWII Museum does not use the term “social enterprise” to describe its business model, the museum activities show that the concept of social enterprise is strongly present. On the institutional level, the museum utilizes business strategies and marketplace principles to advance its social mission. The museum’s 2014 Annual Report shows that more than 50% of the museum revenues are from enterprising ventures. Within this context, digital plays a crucial role in the sustainability of the museum’s social enterprise business model. This research has identified two approaches of utilizing digital at the World WWII Museum to serve the social enterprise business model. The first approach is direct, where the digital assets are used to generate revenues for the museum. The direct approach is represented in collecting license fees from those who are interested in downloading images or videos from the museum website. The second approach is indirect, where digital is used to enhance the visitor experience, thereby attracting more people to pay admission, making them stay long enough to purchase products from the restaurant and the museum store, and getting enthusiastic enough to possibly become members. These two approaches are essential in understanding how digital has contributed to the overall social enterprise business model for the museum.
3.0 Case Study 2: Imperial War Museum (IWM), United Kingdom

The Imperial War Museum in London is the second case study in this chapter, which investigates the social enterprise business model in museums and the role of digital in the model. As a start, it may be helpful to understand the structural organization of IWM. Essentially, IWM is a cluster of museums and historical sites consisting of five museums and a historical ship; IWM London; IWM North in Trafford, Greater Manchester; IWM Duxford near Cambridge; the Churchill War Rooms in Whitehall, London; and the historic ship *HMS Belfast*, moored in the Pool of London on the River Thames. IWM is governed by a Board of Trustees. The Board consists of 43 members, 22 of whom, along with the President, are appointed by the Sovereign. The remaining 21 trustees are appointed by: the Prime Minister, the Foreign Secretary, the Secretary of State for Defense, the Secretary of State for Culture, Media and Sport, and the seven Commonwealth Governments of Australia, Canada, India, New Zealand, Pakistan, South Africa and Sri Lanka, which are represented by their High Commissioners in an *ex officio* capacity.

Historically, IWM was founded in 1917 with the objective of honoring the service of those who fought and sacrificed during the First World War. On March 5, 1917, Sir Alfred Mond, a member of the British Parliament, industrialist, financier, and active Zionist (Carradice, 2012) proposed to the British War Cabinet led by David Lloyd George to establish a museum to document the war which was still taking place. The War Cabinet approved Sir Alfred Mond’s proposal and the National War Museum was created. Not too long after, the museum was renamed to carry its current name, the Imperial War Museum, which was formally established by the 1920 Act of Parliament and the first governing Board of Trustees was appointed. According to the IWM website, the museum was established with the intention “to collect and display material as a record of everyone’s experiences during that war – civilian and military – and to commemorate the sacrifices of all sections of society”.

In 1920, the museum was first opened in the Crystal Palace, where the 1851 Great Exhibition took place. Four years later and in 1924, the museum moved to a two-gallery building next to the former Imperial Institute in South Kensington. “On 7 July 1936, the
Duke of York, shortly to become King George VI, reopened the museum in its present home on Lambeth Road, South London, formerly the central portion of Bethlehem Royal Hospital, or ‘Bedlam’” (IWM, n.d.).

The wars that followed the First World War, such as World War II and the Korean War, inspired the museum to rethink its mission to include “all conflicts in which British or Commonwealth forces had been involved since 1914.” Accordingly, the museum started to increase and diversify its collection, and also to expand its physical space;


Additionally, the museum documents modern wars and provides a narrative to inform the public and future generations about the causes of war and its impact on people’s life.

IWM is unique in its coverage of conflicts, especially those involving Britain and the Commonwealth, from the First World War to the present day. We seek to provide for, and to encourage, the study and understanding of the history of modern war and ‘wartime experience’ (IWM, n.d.).

IWM regards itself as a “global authority” on conflicts and wars and their possible impact. Based on this authority, the museum tries to create a powerful and emotional experience for its visitors. From the First and Second World War to the Iraq War, the museum constantly seeks to offer a narrative that engages and educates the public. Telling the story of modern wars can be engaging as we still can smell the fire of their guns and witness the impact of their destruction. But that might not be the case for the World Wars I and II, from which modern audiences might be detached. Roger Mann, Co-Founder and Creative Director of Casson Mann, the designing firm for the new galleries at IWM, London, thinks that the challenge for the Imperial War Museum is “how to create a "felt" experience that would engage the attention of younger, increasingly distanced and in some
cases desensitized generations: how could we evoke authentic emotions that would firmly connect the contemporary visitor to a 100-year-old story?" (Mann, 2014). Like the National WWII Museum in New Orleans, IWM utilizes digital to bring the distant wars to today's audiences. Mann (2014) argues that if digital is done well “it can be a powerful tool to evoke visceral experiences that connect younger generations with difficult stories and concepts but, to ensure a seamless experience, they have to be used with great care and sensitivity to both the object and the history.” Mindful of Mann’s comment, we will attempt here to investigate the social enterprise business model at IWM and how digital is contributing to the sustainability of the model.

3.1 The Social Enterprise Business Model at the Imperial War Museums:

Imperial War Museums are one of the pioneering and perhaps the earliest museums in the United Kingdom to use a social enterprise business model to build its financial resilience. As early as 1999, IWM established its commercial division, IWM Trading Company Ltd., which is ultimately responsible for running and managing the commercial activities of IWM. The museum states on its website,

The majority of the funding for our core activities is raised by means of charitable giving, philanthropic support, sponsorship and donations, admission charges and IWM’s commercial activities. These commercial activities are conducted through the IWM Trading Company Ltd., and include retail, corporate hospitality, public catering, air shows, private tours, pleasure flying, publishing, licensing of the collections (IWM, n.d.).

According to the 2011 Museum Annual Report, IWM generated £4,000,000 revenues from retail activities and the overall profit was 18% higher than the previous year. Although IWM London was closed for more than seven months during 2014, the museum was able to make £2.8 million in net profit, according to its 2013-14 annual report. This is partially because the museum was able to capitalize on its digital assets; “Growing interest in the First World War is reflected by a high volume of image and film sales and significant licensing deals” (IWM, 2014). Additionally, the museum plans to
increase its profit from commercial activities to £4 million by the next financial year. IWM hopes to achieve that goal “through the development of commercial functions, to ensure that we operate a flexible and responsive commercial operation and build our digital sales capability” (IWM, 2014).

Operated by Peyton Events, IWM London, for example, offers different spaces for hire, ranging from the museum’s Conference Room to the Orpen Boardroom, and the Directors’ Boardroom. Additionally the museum seeks to satisfy various customers’ needs. The museum promotes its products and services through its website. Interested parties can obtain information by downloading a special flyer from the museum website where the museum markets its rental business. The promotional flyer for the museum's rental business states,

IWM London has been transformed. Designed by Foster + Partners, a spectacular new Atrium forms the heart of the museum and a breath-taking hanging gallery in the rooftop provides dramatic views of the floors beneath. Along with our remodelled daytime rooms, IWM London provides the perfect showcase for events big and small, traditional and low-key or high profile and inspirational (IWM).
Operating as a business, IWM seeks to build loyalty among its “customers” by developing a “greater understanding of what motivates our customers and by improving our customer experience” (IWM, 2014). Like the National WWII Museum in New Orleans, by definition, the IWM represents a functioning social enterprise. The museum uses business strategies and market principles to generate revenues, and use the profit to support its core social mission (double bottom). Through this business model, IWM (2014) seeks to build “financial resilience” and “create a sustainable business model”.

3.2 Positioning Digital in The IWM’s Social Enterprise Business Model

The Department of Digital Media is responsible for the development, delivery and provision of digital media within the IWM and its branches, including IWM London, Churchill Museum and Cabinet War Rooms, HMS Belfast, IWM Duxford and IWM
North. The Department plays a crucial role in the sustainability of the IWM’s social enterprise business model. For example, IWM refers its success to achieve a net profit of £2.8 million in 2013 for the sales of images licensing. According to the museum annual report; “Growing interest in the First World War is reflected by a high volume of image and film sales and significant licensing deals” (IWM, 2014). Additionally, the museum plans to increase its profit from commercial activities to £4 million by the next financial year. That led IWM to start a new project devoted to build a special website for licensing images. The museum documents indicate that the ambitious £4 million goal “will be achieved through the development of commercial functions, to ensure that we operate a flexible and responsive commercial operation and build our digital sales capability” (IWM, 2014). More specifically, the museum plans to enter new markets and increase its online inventory of digital assets for potential customers.

We have been developing a new Image Sales Licensing website which will launch in the summer. This will see our commercial operation shift from a manual service to a digital service where our images will be readily available to download. Commercial partnerships with organisations such as Getty Images have already seen our iconic images made widely available in new markets which until now we have had little presence in (IWM, 2014).

Digital is also essential in helping IWM to achieve its core mission to showcase the stories of those individuals who participated in different wars. For example, IWM started a project to bring all documents, stories, and information dispersed in different museums, libraries, organizations, and to the public about those who participated in the First World War in one place. Reflecting an open innovation strategy, the Lives of the First World War project, is a website where each “individual whose contribution to the First World War is recorded in official documents will have a personal Life Story page […]” (IWM, n.d.). Members of the public can register on the website and add personal stories on the Life Story page. Also, registered members can:

- Link together evidence relating to the same person, using records from museums, libraries and archives across the world. Many of these have been
brought together in one place for the first time by Lives of the First World War.

- Add references to sources you have discovered elsewhere.
- Upload digital images of your own precious family mementoes.
- Include family stories and personal knowledge (IWM, n.d.).
- Group together individuals you are interested in by creating your own Community page.

By 2015 the website had amassed 7,662,316 life stories, 119,427 individuals were remembered, 602,777 facts were added by the public, and 2,033 communities were created.

Another example for the role of digital in the IWM’s social enterprise business model is the new approach for the museum’s digital content. The project aims to build digital content which can satisfy the different needs and interests of web users. By doing so, IWM will be able to attract new audiences to the museum website, which may lead to online sales of images and different products while educating the public about the war. This chapter will investigate the new digital content framework, and attempt to understand how this framework can help IWM strengthen its social enterprise business model.

### 3.3 New Digital Contents

Essentially, the new digital content project hopes to improve IWM’s web presence, engage larger and more diverse audiences with its web content, confirm the museum’s authority, and attract more people to the website, possibly increasing the sales of image licenses. Jesse Alter, the project leader and web producer says that through the project, the museum anticipates that the audience will, “ultimately, recognize the IWM brand, trust us as an authority, and think we can produce interesting things.” The language Alter used to express some of the goals of the projects, perhaps, reflects the social enterprise culture at the museum. Alter has expressed the business aspect of the project by recognizing “the IWM brand.” Branding is an important concept in the business sector. It obviously relates to the customers’ trust in the product or the service, and their loyalty to the brand, which translates into profit-making. On the other hand, Alter, in the previous quotation, spoke
about the museum’s “authority” which has been an important museum concept since museums were recognized as institutions. The recent trends in digital and co-curation approaches have probably presented some challenges to the “authority” of the museum. Through this project, IWM seeks to confirm its authority as the ultimate destination for knowledge about wars, especially those that Britain was involved in. Additionally, Alter mentioned that the project aims to produce “interesting things” for the museum web users. Interesting things may imply informative, interactive, and user friendly, which are all concepts many museums strive to achieve. These different aspects of the projects; business, social, and digital will be elaborated below.

3.3.1 The Idea and Its Development

Around 2014, Jesse Alter, Web Producer and Simon Delafond, Head of Digital at Imperial War Museums met to discuss innovative ways to approach history content on the museum website. At that time, the museum had some general and fragmented short articles published on the website. Alter describes the articles as “oddly designed, and the layout was a bit weird. They were not really working. What they were intended to be was not clear to users […]. People were not really accessing them, sharing them, or engaging with them” (Alter, 2014). Therefore, something needed to be done to change that. Alter and Delafond developed a new strategy which aims to develop various articles on various topics. Each article needed to have a content that suits a specific audience, whereas, previously, the museum would only produce one article about each topic of interest. Alter (2014) gives an example of the Battle of the Somme;

We instead could have ten or twenty articles on the Battle of the Somme. It could be things like ten amazing photos of the Battle of the Somme, or British tactics in the Battle of the Somme. Here is some archive film footage from the Battle of the Somme. Rather than coming up with the one definitive article, we have as many as we want.

By doing so, it would be up for the users to decide what their interests are and find the content that suits their interest. To produce the intended content, Alter and Delafond
created a small editorial team consisting of Alter as a web producer; Gemma-Marie Lawrence, Assistant Web Producer, and two historians from the curatorial team who meet with Alter and Lawrence once a month.

The process by which the topics of the articles are chosen follows what seems to be a traditional hierarchical workflow. Elements of the hierarchical model are found in the Dog Tag project at WWII Museum as well. Alter (2014) explains that a web commissioning group, which consists of about ten senior managers in the museum meets every six weeks, and collectively determines the subject theme the editorial team need to produce. The web commissioning group, however, will give the editorial team the opportunity to choose the topics within the theme determined by the group. Alter (2014) explains; “They will not say we need you to write about photos in the Battle of the Somme. They will not say that.” But they may, for example, say “[w]e know that over the next six month period there is going to be a lot of interest in the First World War. We want you to produce some First World War content” (Alter, 2014). The editorial team then decides the specific topics and number of articles they will produce within the theme. At the time of this study, the editorial team just received directions from the web commissioning group that from January to June 2015, the plan is to focus on articles related to the First and Second World Wars and, more specifically, materials related to Winston Churchill.

2015 is a big anniversary for Winston Churchill, so they want some Churchill specific stuff. They also asked for some behind the scenes stuff. People who work in the conservation lab in the museum. Stuff like that. Shed more of a light on how the museum runs. We know we have got our general topics for the next six months (Alter, 2014).

However, Ludvig Lohse, Digital Media Manager at IWM, generally criticizes the hierarchical system some museums are still using.

You have to also trust people. That I can only see working in a more sort of flat management structure rather than a much more hierarchical system; so that you perceive your colleagues more on an equal level rather than these are the people you manage and therefore you dictate what they do. And this is your manager who dictates what you do. It is more about, and it is also
something I try to do, is to assign responsibility. Rather than tell the staff, “You have to do this and then you have to do that.” I assign responsibility (Lhose, 2014).

The hierarchical work system is seen by many as a common practice in many museums. Robert Janes has publicly criticized it and argued that it was not suitable for organizations that have responsibilities to face today’s challenges. Lhose (2014) believes that flat management, contrary to the hierarchical system, empowers the individual staff and gives them the room to innovate. It is also, according to Lhose (2014) a much more efficient structure.

Carrying out the plan, the editorial team identifies the topics within the theme determined by the commissioning group, sets up the timetable, and assigns tasks for each member. In response to the WWII and Churchill themes, the editorial team has published several articles including “How Churchill Led Britain to Victory in the Second World War” and “The Story of D-Day by The People Who Were There”. Both articles can be accessed on the museum website. The articles reflect the new approach to produce more engaging and audience specific content. The editorial team relied on using historical photographs, authentic videos, and less text to convey the message.

Contrary to old history articles which were written with one person in mind, someone who has a deep interest in history and knows what they looking for, the new contents were written to serve a diverse audience. Alter (2014) says that the audience research, which the museum previously conducted, showed that not everyone who visits the museum website comes from the same background. Accordingly, Alter and Delafond identified five types of audiences.

They range from what we call history-phobe, which we define as people who think they do not have any interest in history. They see the word history and they get completely turned off. It works its way up the chain right through to expert level; the people who really know their stuff. They might be academics, or they might be really, really into military history. Then in between there are people who have varying degrees of knowledge and interest in history. We aim to write different articles for different audiences (Alter, 2014).
Writing about the Battle of the Somme, for example, the editorial team might produce an article such as “20 amazing photos from the Battle of the Somme,” Alter (2014) says. These types of articles would appeal more towards the “history-phobe” audience, who are more interested in photography and visual contents. Another article may be about “bridge tactics in the Battle of the Somme” (Alter, 2014). That would be meant for the expert audience, people who may have special interest in military history such as historians, writers or researchers. This type of audience does not mind reading 3,000 words on military maneuvers, and they want to navigate into more in-depth information such as maps and related diaries. Lawrence (2014) mentions that the editorial team at this time tends to produce more content for the history-phobes or the people who have a low interest in history. This is probably because this type of audience represents the majority of the public and ultimately is “the bulk” of the museum visitors. However, Alter (2014) asserts that the editorial team is still producing some expert level pieces as well. But he recognizes that they are fewer in number as they take a longer time to produce.

It is not enough for Alter and his team to produce the articles and move on to carry out another round of content writings. To understand how users respond to the published articles, the editorial team ran a content test at the IWM North in Manchester for the first time. “We recently started doing a lot more user testing to see how people are using the site, and what they click on. But this is the first time we have ever done testing on content” (Alter, 2014). The team invited a random sample of the museum web users and provided them with different articles and titles to test how they reacted to the content. Then, the team ran sessions with the users to get their feedback. The feedback helped the team to identify strengths and weaknesses. Alter (2014) confirms that the research “was really useful”. He adds, “We are doing some things right, which is really nice to see. Then we were doing some things wrong, and we are going to try to make the experience better for people” (Alter, 2014). According to Alter (2014), one of the most important results of the research is that,

We learned that people are interested in this material, and that the audiences we have identified do exist. Some of the people who we tested in our sessions were what we had in mind when we created those audience types and did the research into it; they are out there. They are consuming the articles we are
publishing for them in a way that we hoped they would be. That was really, really nice to see. It really enforces all the time and effort we have put into developing this stuff, to show that it is working.

The new strategy started to bring positive results. According to Alter (2014), more visitors are accessing the web contents and sharing them on social media. By December 2014, the editorial team has published around 100 articles on different topics. Alter thinks that this rich content drives users to the website. The team is always thinking about strategies to increase the accessibility of the web content. One of the things the editorial team is thinking about is how they “can develop more content that has relevancy, and sticks with people” (Alter, 2014). Through Google Analytics, for example, the team discovered that there is a growing interest in learning about animals and World War I.

People are searching – they are going to Google, they are typing in animals WWI. Sort of various combinations of those terms. One of the articles that we have written about animals is coming up as number one or number two in the search results. We are getting a lot of traffic through that. We have seen that on a couple of other articles as well (Alter, 2014).

That observation inspired the team to monitor what people are looking for and what search words they use and in an agile model, produce content that corresponds to the people’s interest. Alter (2014) argues; “Just keeping a really close eye on what people are looking for, and maybe using that to influence some of the stuff we write”. This is a significant step in the way museums can probably produce web content; a user derived approach.

In conclusion, IWM runs an interesting model of social enterprise, where a commercial division of the organization, IWM Trading Company Ltd., manages the business activities of the museum. Through this model, IWM hopes to build financial resilience or, as some social enterprise advocates say, do well while doing good. Similar to the case of the National WWII Museum in New Orleans, this research has identified two approaches (i.e., direct and indirect) of utilizing digital at IWM in connection with the IWM’s social enterprise business model. Digital relies on the center of the model and has been one of the reasons IWM was able to increase its profit in 2013. Also, digital has been
used to expand the impact of IWM’s mission beyond the museum’s wall and reach a far larger audience. Within this context, the new history digital content project hopes to reinforce the role digital plays in the model by attracting more audiences to the website and reinforcing the IWM brand while educating the public about the war and its cost in human life.

By definition, both the National WWII Museum in New Orleans, USA, and IWM in the UK can be considered clear examples of how social enterprise is conceptualized in the business sector. Although Janes (2015), for example, recognizes the profit making side of the model (“I think this notion of social enterprise is you can have a good profit making foundation”) he believes that the concept of social enterprise is still not very commonly accepted in the museum sector. He argues, “right now, I think that the private sector, the for-profit sector, sort of owns that concept because museum people have not really started exploring it” (Janes R., 2015). But Janes does not stop there. He strongly believes that social enterprise in museums should be driven by a very well defined social goal. He argues:

It is how you use your money in the interest of the collective wellbeing. And because museums combine qualities of both business and doing good in society, I think that they are right to start to think about the notion of social enterprise; to expand what they consider to be a definition of the museum (Janes R., 2015).

Redefining the role of the museum in society is a life mission for Janes. He thinks that museums should have a bigger role in addressing serious issues facing humanity. According to Janes, from global warming, sustainable green energy, to human rights, museums should be leading the way to better societies. His classic example is the work Liberty Science Center in Manhattan has done in relation to smoking. The Center

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28 Liberty Science Center (LSC.org) is a 300,000-square-foot learning center located in Liberty State Park on the Jersey City bank of the Hudson near the Statue of Liberty. Dedicated to bringing the excitement of science to people of all ages, Liberty Science Center houses 12 museum exhibition halls, a live animal collection with 110 species, giant aquariums, a 3D theater, the nation's largest IMAX Dome Theater, live simulcast surgeries, tornado and hurricane-force wind simulators, K-12 classrooms and labs, and teacher-development programs. More than half a million students, teachers, and parents visit the Science Center each year, and tens of thousands more participate in the Center's offsite and online programs.
discovered that some large tobacco companies in the U.S. had a major recruitment plan to recruit smokers among at-risk youth in New Jersey. Shockingly, the campaign was able to attract 3,000 kids a week to smoke cigarettes. The center realized that they have a duty to fulfill. They started an anti-smoking campaign and the centerpiece of their campaign, Janes explains, was an arrangement they developed with a group of heart surgeons in New York City who were dealing with the ill effects of smoking. The idea was to give young people from the community the opportunity to watch live video feed from some open heart surgery rooms and connect with doctors in real time. Those who participated in the program were able to see the consequences of smoking and how it may affect their own bodies. Janes argues that the program had a major impact on stopping the pro-smoking campaign. This example illustrates Janes’ views on social enterprise; “so to me there is not so much profit involved there, but I would consider that as social enterprise in the sense that they stepped outside the boundaries of museums in order to benefit their community” (Janes R., 2015).

It seems like the social activism that Janes is really concerned about. Within this context, Janes also speaks about the “mindful museum.” He defines mindfulness as “paying attention and responding to what is going on around you. And in that sense becoming more responsible for yourself and your communities and your fellow beings” (Janes R., 2015). Thus, the “mindful museum,” according to Janes, is a museum that is “reality based,” a museum that realizes what is happening around it in society and the environment and appropriately responds to it. In this regard, Janes (2015) criticizes many museums for being unmindful:

Well, most museums, in my experience, are completely unmindful with respect to climate change. They are not doing anything to contribute to the dialogue we need as citizens to determine how we are going to deal with this issue that very well could contribute to the end of our civilization. Museums somehow think that they need to remain above the fray; that they do not have any responsibility to get involved in real issues in society. And that is being unmindful (Janes R., 2015).
Janes, also, thinks that because museums are being unmindful, they have become “increasingly irrelevant to a lot of governments and a lot of communities” (Janes R., 2015). Looking closely at what Janes has been describing, starting from his views on social enterprise in museums and his ideas about how the mindful museum should and should not be, it seems like he is, in fact, elaborating in comprehensive terms what “social innovation” is, and how it can be practically embedded in the museum work. Social innovation as a term expresses both the outcome and the process by which possible solutions for social problems are being created. More precisely, social innovations can be defined as “new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations” (Murray, Caulier-Grice, & Mulgan, 2010). The conceptualization of social innovation has been discussed in Chapter 4. Based on that discussion, when Janes speaks about the Liberty Science Center and its creative solution to addressing smoking among teenagers, for example, as well as the possible role museums can play in dealing with environmental challenges, it is, perhaps, social innovation that Janes is referring to.

Social enterprise is distinctly different, argued here, which refers to the business model of the organization: how it generates revenues, serves its customers, and creates opportunities to build its financial resilience. Social innovation, on the other hand, is the contribution of the organization to resolve a social problem. Therefore, social innovation can be equally achieved by non-profit, for-profit, or social enterprise organizations, or even individual activists in the community. Moreover, the organization can be a functioning social enterprise, like the case in the National WWII Museum and the IWM, but its work cannot be described as social innovation. That is probably because the social value is created by the organization and, in our case, the museum, does not reach the point of being socially innovative, which Janes has been continually criticizing. This distinction, however, between social enterprise and social innovation is not necessarily clear in the literature and more often both terms have been used interchangeably. One possible significant outcome of the fieldwork of this research, which will be explored in further details in Chapter 7, is to identify the unique characteristics as well as the relationship between social enterprise and social innovation within the museum context.
4.0 Conclusion

The data collected from the National WWII Museum in New Orleans, Louisiana, United States, and the Imperial War Museums in the United Kingdom shows that both museums are functioning social enterprises. They both use business ventures to generate revenues, make profit, and use this profit to support their social mission. We have seen that more than 50% of the National WWII Museum budget comes from commercial activities. In the case of the IWM, as early as 1999, IWM established a commercial division, IWM Trading Company Ltd., to manage the entrepreneurial activities for IWM. This is hugely significant for museums, especially within the European context. Both museums have remained conscious of their social and cultural missions as leaders in preserving and telling the story of those who fought and were impacted by the war.

Furthermore, we have also seen evidence to suggest that digital is very crucial and significantly contributes to the sustainability of the social enterprise business models in both museums. The contribution of digital can be identified in two approaches. The first approach is direct, where both museums were able to generate earned income from image and video licensing. The second approach is indirect, where digital is used as a mediator; in the case of the National WWII Museum, this occurs inside the galleries to attract visitors to the museums (which leads to the increase of ticket sales), and also to enhance visitor experience and encourage them to stay in the museum long enough to make other purchases in the museum restaurant and store. The indirect approach at the IWM was a little different: digital played a major role in driving traffic to the museum website through new history content strategy, which can lead to an increase in the museum’s online business.

Additionally, this chapter attempted to establish a distinction between social enterprise and social innovation within the museum discourse, which can be applicable in other contexts as well. Social enterprise is described here as a business model and it is a characteristic of an organization. While social innovation is both the process and product by which social solutions are being created. Therefore, social innovation can take place through different business models within the enterprise and the non-profit sectors.
The next chapter will attempt to bring together these three concepts (open innovation, social enterprise, and social innovation) that have been revealed and evidenced through our case study chapters, into one cohesive framework, which, it will be argued here, can represent a model for innovation in museums.
Chapter 7

The Museum Innovation Model

1.0 Introduction

This chapter intends to synthesize the evidence presented in the last two analytical case study chapters (on the Cooper-Hewitt, Smithsonian Design Museum in New York, the National World War II Museum in New Orleans, and Imperial War Museums in London), as well as the preceding three context chapters (on open innovation, social enterprise, and social innovation). At the center of this synthesis is the proposition of a model for innovation in museums, called the “Museum Innovation Model” (or MIM). After laying out the conceptual framework for the model and its connections to museum work, we will consider the suitability of the model to some museums other than those mentioned in the case studies. It will be suggested that the portability and flexibility of the concepts on which the model is based as well as practical examples from the field may all provide a proposition, which indicates that the model can be conducive to different types of museums. Finally, the chapter will examine some practical implementations of the model and how it can be used as a planning tool or a method to scrutinize innovation in museums.

2.0 The Museum Innovation Model (MIM)

Informed by the conceptual framework mentioned in Chapter 3 and Chapter 4 as well as the case studies in Chapter 5 and Chapter 6, this PhD research attempts to present a museum innovation model (i.e. MIM Figure xx), which utilizes the museum’s understanding of three major concepts: open innovation, social enterprise, and social innovation. The model seeks to make innovation in museums scalable, replicable, and feasible to start and operate.
Museums that adopt social enterprise business model and utilize open innovation strategies are capable of achieving social innovation.

Within this context the case studies in Chapters 5 and 6 have provided important data to vindicate the basis of MIM. More specifically, these chapters investigated the existence of open innovation strategies and the social enterprise business model, focusing on digital, in three internationally recognized museums: Cooper Hewitt, Smithsonian Design Museum in New York, National WWII Museum in New Orleans, and finally Imperial War Museums in London. The following section will attempt to explain the elements of the MIM using these case studies and analytical discussions from the literature.

2.1 Open Innovation (Innovation Strategy):

In the MIM, open innovation can provide helpful strategies for the museum to dynamize its social enterprise business model and effectively achieve sustainable social innovation. This type of outcome is very complex and cannot be achieved by the work of a single institution. Open innovation inbound and outbound paths, in this circumstance, can be very valuable. It can significantly improve the innovation capabilities of digital teams to achieve measurable social impact. For instance, Chapter 5 discussed how the research
identified three inbound and outbound paths to innovation at Cooper Hewitt Lab. These paths are open sourcing, open reflection, and collaboration. **Inbound OI** (outside – in) activities can be defined as the process by which museums can attract, acquire, and utilize knowledge that exists outside the museum to advance their internal innovation capabilities. While **outbound OI** (inside – out) activities are the processes by which museums make their internal knowledge available to other museums and organizations to accelerate innovation. Museums that operate with an open innovation mind-set are different in many aspects than those museums that use the traditional model. The table below shows some of the possible differences.²⁹

<table>
<thead>
<tr>
<th><strong>Traditional Museum Model</strong></th>
<th><strong>Museum Open Innovation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Museums do not need to innovate</td>
<td>Museums are creative institutions and positioned to innovate</td>
</tr>
<tr>
<td>Most of the smart people in the museum field work for us</td>
<td>Not all the smart people work for us, so we must find and tap into the knowledge and expertise of bright individuals outside our museum</td>
</tr>
<tr>
<td>To achieve our mission and create successful exhibitions and programs, we must do all the work ourselves</td>
<td>Partnerships with other museums and organizations can create significant value (social or financial); internal R&amp;D is needed to claim some portion of that value</td>
</tr>
<tr>
<td>If we have expansive blockbuster exhibitions we will have more visitors</td>
<td>Building a sustainable better business model and creating a lasting social value can be more beneficial than expansive blockbuster exhibitions</td>
</tr>
<tr>
<td>If we create the most and the best ideas in the sector, we will be successful</td>
<td>If we make the best use of internal and external ideas, we will be successful</td>
</tr>
<tr>
<td>We should keep the results of our experimentation inside the museum especially if it was not successful</td>
<td>We should share best practices with the museum sector and be open to discuss what has worked for us and what has not</td>
</tr>
<tr>
<td>Our curators are qualified and capable of interpreting the museum collection</td>
<td>We must involve other stakeholders (experts, community members, audiences, collectors, etc.) in the interpretation of our collection and be open to various interpretations</td>
</tr>
</tbody>
</table>

*Figure 41: Traditional Museum Model vs. Museum Open Innovation*

²⁹ The table has been extracted from Chesbrough’s comparison between closed innovation and open innovation models.
Janes (2015) thinks that the idea of allowing the museum to open up and take the chances to collaborate with other organizations inside and outside the sector is very important. Moreover, he criticizes the traditional museum model, which is based on protective mechanism. He states; “I think the museum community really suffers from insularity. And working on its own [...] They are so insular about talking to others; even working with themselves” (Janes, 2015). Confirming his interest in the open innovation concept, Janes (2015) refers to the finding of Leslie Crutchfield and Heather McLeod Grant (2012), who argue that one of the most important factors that makes a successful social organization is “they focused very clearly on the outside world, on engaging all the sectors, and on influencing others to become advocates for their cause” (Crutchfield & Grant, 2012). The study is a project of the Center for the Advancement of Social Entrepreneurship at Duke University’s Fuqua School of Business and is published in a book titled Forces for Good. Notably, Crutchfield worked for Ashoka as a managing director for many years and, at Harvard Business School, studied under Dees who immensely contributed to the way we understand social enterprise today. Janes’ observation here is crucial to the fact that it is coming from a legendary museum expert who also wrote about social enterprise in museums. Add to this, our discussion earlier which uncovered the attempt of Chesbrough, who coined the open innovation theory, and Minin to mirror open innovation theory to the social sector, and more specifically link it to social enterprise business model, as shown by Ashoka. Moreover, organizations such as Nesta are experimenting with the application of open innovation in the social sector (including museums), as discussed in the case of National Trust. Additionally, in another report based on Nesta’s Corporate Connect programme which aimed at exploring the value of open innovation, Nesta concluded that “[i]n the next few years, organisations will become more open and networked. Those unwilling or unable to make the change will be left behind” (Nesta, 2010). This is pretty alarming to those organizations that still operate on a closed mind-set. Within this context, the MIM views open innovation as a crucial concept in understanding and possibly applying the model.

2.2 Social Enterprise (Business Model for Innovation):

In the case of social enterprise at the National WWII Museum and Imperial War Museums, this research has identified two approaches of utilizing digital to serve the
overall social enterprise business model in each institution. The first approach is direct, where the digital assets are used to generate revenues at both museums. The direct approach is represented in collecting license fees from customers who are interested in downloading images or videos from the museum website. IWM, for example, refers its success to achieve a net profit of £2.8 in 2013 for the sales of image licensing. According to the museum’s 2014 annual report, “Growing interest in the First World War is reflected by a high volume of image and film sales and significant licensing deals” (IWM, 2014). Realizing the potentials, IWM plans to expand its online image sales and improves the service in 2015.

The second approach is indirect, where digital is used to enhance the visitor experience, thereby attracting more people to pay admission, making them stay long enough to purchase products from the restaurant and the museum store, and getting them enthusiastic enough to possibly become museum members. At the National WWII Museum, for example, close analysis of the nature of the museum’s earned income shows that the museum receives 18% of its revenues from ticket sales, and over 30% of its revenues from food, drinks, and membership. These revenues, to a large extent, depend on the ability of the museum to attract visitors, extend the time of the visit, and keep the visitors engaged after the visit. This may not be easy, especially when the museum charges one of the highest admission fees in the U.S. and 250% more than the average museum admission fees in the metropolitan New Orleans area. Within this context, providing a unique and interactive visitor experience is crucial to the sustainability of the museum’s social enterprise business model. This approach is illustrated in the WWIIM’s Dog Tag (i.e., My Journey) project, which was discussed in the last chapter.

The direct and indirect approaches, in this case, are essential in understanding how digital has contributed to the overall social enterprise business model for both museums. Although this analysis is very specific to the case studies at IWM and WWII, the concepts are broad enough to be found and applied in many other museums in the United States, United Kingdom, or beyond. The Museum of Science and Industry (MSI) in Chicago, for example, practices the direct approach and actively markets the licensing of its images online. Their website states, “Over 4,000 images from our archive are available for
editorial and commercial licensing through major image licensing websites, and more are being added regularly” (The Museum of Science and Industry, n.d.). Not only that, MSI also capitalizes on its innovation by selling the digital media and software which it produces for its own use. They advertise their products on the museum website: “MSI is now making media and software from our award-winning exhibitions available to other institutions and their guests [...] These experiences can be yours as well, avoiding all the R&D by simply purchasing the finished product. It’s that easy” (The Museum of Science and Industry, n.d.). Hence, using digital in a direct approach to support the museum’s social enterprise business model has become increasingly popular in the museum sector. This trend positions digital to occupy an important role in what Stephen Weil (2002) called “a new and potential dominant model for museums”, referring to social enterprise.

2.2 Social Innovation (Innovation Goal/objective):

As we are in the process of analyzing the elements of the MIM and how social enterprise and social innovation are understood in the model, it is crucial here to clarify that the model adopts the definitions of social enterprise by Social Enterprise Alliance and Dees (1998), which focus on using business strategies and market tools by social organizations to generate income and, subsequently, position themselves to better achieve their missions. On the other hand, MIM recognizes social innovation as both the process and the outcome of the creative work museums perform to achieve their mission. This distinction is not clearly made in the literature and more often both terms are mixed and alternatively used to refer to the same concept, which can be confusing and mystifying in some cases. For example, we previously discussed how social enterprise is conceptualized within the museum context to find different thoughts and interpretations. Among these thoughts would be a group that intends to focus on the social aspect of the model and seems to overlook the business side. For them, it is an opportunity for museums to engage in making a tangible change in society. Stephen Weil (2002), for example, provides his understanding of the museum as social enterprise,

[...] the Museum as Social Enterprise would draw its legitimacy from what it does rather than what it is, would seek public support not as a matter of right but by offering to provide the public with value in exchange, might be open to
challenge as a matter of course, and-equally as a matter of course- would expect to be held accountable for every aspect of its operations.

As we can see, Weil focusses on the “public value” which museums can offer in exchange for subsidies they receive from governments or donors. Along the same lines, but more recently, Robert Janes (2013) points to the new social entrepreneurship movement in museums. He argues, “[t]he intersection of the two – a desire for social change coupled with new and better solutions and initiatives – is now called social entrepreneurship, a concept that is slowly taking shape in the museum world” (Janes, 2013). This focus on the social aspect of social enterprise which is, no doubt, part of the concept, and the avoidance of the enterprising dimension can create unintentionally a confused image of the concept. Actually, what Weil and Janes are probably attempting to describe is the museum as social innovator, a museum that is conscious of current social problems and actively engaged in finding solutions. For that reason, MIM purposely prefers to make the distinction between social enterprise and social innovation. In other terms, MIM projects that museums can use the social enterprise business model to achieve sustainable social innovation in their communities. Within this context, digital acts as a means to strengthen the museum’s social enterprise business model and can potentially broaden the impact of the museum’s social innovation.

In conclusion, we can see how open innovation, social enterprise, and social innovation are interconnected and together can present a formula for innovation in museums. The formula might be expressed simply as: museums that adopt social enterprise business model and utilize open innovation strategies are capable of achieving social innovation.

3.0 The MIM at the Museum of East Anglian Life

At this stage, there are no empirical data or studies that can show how the application of the model in art museums, for example, can be different than in history or science museums. Similarly, as new as it is, there are no studies that make a connection, if any, between the application of the MIM and the size of the museum. However, there are numerous examples in the museum sector which suggest that MIM can be equally valuable for different types of museums. The Museum of East Anglian Life (MEAL), for example,
is located in Suffolk County in the East Anglia region in the United Kingdom. For almost half a century the museum has been telling the story of the rural and early industrial history of the region, which has been reliant on farming as a major economic activity. Clearly, the MEAL is different in size, collection, and management style than the museums presented in the case studies of this research. However, the museum identifies itself as a social enterprise. The museum website states that “The Museum of East Anglian Life is a social enterprise sharing the compelling story of East Anglian lives through historic buildings, collections and landscape.” When Tony Butler was appointed to be the Director of the MEAL, he felt that the museum had much more potential, more than being just a traditional visitor attraction. Butler states, “We looked at how we could use all these physical assets for public good. We thought there were lots of opportunities for training and skills development. We felt there was [sic] lots of opportunities to bring people together” (Butler, 2014). To achieve Butler’s vision, the MEAL developed an agricultural project. Nonetheless, the business model of the project was unlike the typical agricultural projects we normally see in the private sector. Butler tried to achieve the highest social impact possible. To illustrate this point, Butler (2014) explains, the museum “started training people with learning difficulties and mental health service users in horticulture.” More specifically, in an open innovation strategy, the museum collaborated with West Suffolk College, and three special schools, Priory, Hillside, and Riverwalk in west Suffolk, to provide opportunities for students with a wide variety of difficulties and disabilities to experience vocational and life skills in a range of different settings. The project targeted 14-16 year old audiences, aiming to help the students develop an understanding of specific skills related to the Suffolk region, construct a critical understanding of the past and maintain effective social and cultural skills. In 10 weekend sessions led by museum staff and volunteers, students were able to participate in hands-on activities and learn specific skills such as bodging30, making traditional Suffolk rusks and butter, making butterflies from willow, and traditional hurdle making and printing using historic printing presses. Students also grew “plants and flowers using the traditional seeds and varieties, using

30 Bodging is making traditional tools carved from wood.
traditional implements of the collection, and then selling them to the public” (Butler, 2014).

Additionally, started in 2007, the MEAL worked with HM Prison Hollesley Bay, a local prison in Suffolk. Butler explains his project,

We would take people from a local prison who would work with us as part of their setting programs, spend six month with us, on day release, gaining these skills in construction, land management, [and] work with animals that they then use when they are released (Butler, 2014).

However, this approach has disturbed some members in the community. It seems that having convicted felons work in the local museum can make some people worried about their safety and the wellbeing of their families. Butler had to lead a campaign to address the concerns of the community and highlight the benefits of the project. He affirmed to the East Anglian Daily Times, the local newspaper, that “[w]e are really aware this is an important public space and do not want to compromise the safety of our visitors” (Howard, 2007). Butler set up strict criteria to fulfil his promise to the community and make sure his social enterprise/innovation project would not cause any undesirable outcomes. The museum decided not to accept any sex offenders, violent criminals, or arsonists. More specifically, the program will target those who are first time offenders,
usually for fraud and minor offences. Butler continued to explain the logic behind his social enterprise venture:

It is no secret that we are not flush with cash and by working with volunteers, people with skills we can use, we can do extra work on site and help people who are not working at the moment, for whatever reason, to return to employment and build up their skills and confidence (Howard, 2007).

Butler adds,

It will be good for everyone and help the socially disadvantaged. It will help us provide additional services for the public, nice gardens, flowers, hanging baskets, and we will be very, very strict about who we take on from the prisons (Howard, 2007).

It appears that Butler’s campaign was able to convince the community of the project’s merits. Local prisoners started contributing to improving the museum and producing products while learning new skills. When Butler accepted the responsibility of directing MEAL, the museum was near bankruptcy. Within his 10-year tenure at MEAL he was able to transform the museum into a thriving institution with £4 million capital development.

In the case of the MEAL, it is not hard to identify the elements of the proposed Museum Innovation Model (i.e., open innovation, social enterprise, and social innovation). The MEAL uses open innovation strategies by partnering with local schools, colleges, private companies and even prison to improve the wellbeing of its community and actively engage in finding solutions to social problems. This conscious objective, to achieve sustainable social innovation, is combined with the desire to build the financial resilience of the museum through commercial projects. The success of Butler at the MEAL paved the way for him to start a new position in January 2014 as director of Derby Museums. One of the major decisions he made in the first month at his new job is “to make the organisation ’more entrepreneurial’ – including opening a café at the city’s museum” (Mallet, 2014). He also planned “to hire out rooms in the trust’s buildings for corporate events and improve the museum’s shop” (Mallet, 2014). In other words, Butler
is trying to utilize the resources and assets at Derby Museums to duplicate the innovation model he carried out at MEAL.

The work of Tony Butler at MEAL and Derby Museums shows that the concepts of open innovation, social enterprise, and social innovation can prove valuable to museums of different sizes and collections. Janes (2015) goes as far as observing that the culture of openness is found more in small museums. He argues; “The boundaries have to be as open as possible. And there are some museums like that, but they are small. The big ones still have a big problem. And I do not know what is going to cause them to change” (Janes, 2015). He thinks the same concept applies to those museums that are doing sustainable social innovation. He gives the example of Fort Calgary Historic Park in Calgary, Alberta, Canada. Janes (2015) explains their social innovation approach, “Well, they have a lot of land along a very fertile river bottom that was just sitting there. What they have done now is developed that into vegetable gardens to feed the homeless and provide food to other social agencies in the city.”

The fact that small museums do not have the complex management structure, perhaps, makes them more flexible to work with different stakeholders, and more agile to respond to social needs in the community. These stakeholders may include museum audience, community, staff, board members, partners, supporters, etc. What is noteworthy from the previous examples and the comments by Butler (2014) and Janes (2015) is that we now can realize the possibility of identifying the concepts of open innovation, social enterprise, and social innovation in different types of museums, regardless of the museum’s size, stakeholders, and the nature of the collection. Additionally, the previous examples give us a clue that the MIM is not just for digital and it can have a wide range of applications.

In fact, the model reflects the “normalization of digital” in museums, as conceptualized by Ross Parry (2013), which refers to “the normative presence digital media is having within some organizational strategies and structures.” The construction of the Museum Innovation Model recognizes and allows digital innovation to be blended across the museum to achieve the ultimate mission of the institution, which is expressed in the model as social innovation. Butler (2014) states that “At times I have felt the two
Butler’s reflection on the relationship between digital and the social mission of the museum is shared by many commentators in the museum field. However, this is changing, maybe more visibly in some museums than others. One of the things Butler is doing in his capacity at the Happy Museum Project to meld digital innovation and social innovation is “developing an app so people can self-report happiness when they are looking at exhibitions” (Butler, 2014). This actually corresponds with Parry’s analysis, which suggests the normativity of digital within the museum’s structures and functions.

4.0 MIM Applications (Steps and Processes)

The previous discussion investigated the conceptual framework of the Museum Innovation Model and tried to illustrate the practical dimensions of the model through case studies from various museums in the United States and United Kingdom. This discussion has already allowed us to see the potential universality of the concepts (i.e., open innovation, social enterprise, and social innovation) MIM is based on. This leads us now, therefore, to project possible steps and processes museums can use to take full advantage of the model. These steps and processes can significantly differ from one museum to another. It is important also to notice that the three elements of the model are not necessarily equal or achievable in every case.

For example, Younan and Eid demonstrated “How Digital Artist Engagement Can Function as an Open Innovation Model to Facilitate Audience Encounters with Museum Collections” (Younan & Eid, 2016). The project designed to combine the innovative potentials of digital 3D technologies and artist museum engagement in an open innovation model. Hence, Younan and Eid’s project 3D scanned artifacts from the ceramics collections at the National Museum Cardiff. The resulting digital 3D models were exposed to various artists to serve as an inspiration for new digital artworks. The new digitally-born artworks “ranged from digital 3D models to animations and video games; these creations were displayed alongside the original artefacts inside the National Museum Cardiff ceramics galleries in the scope of a public exhibition” (Younan & Eid, 2016). In this case,
Younan and Eid chose to fully utilize the MIM’s innovation strategy (i.e. open innovation) to execute their exploratory project.

Other projects may prefer to focus on strengthening the museum’s social enterprise business model or the innovation objective represented in the social innovation framework. However, we anticipate that those projects that can take advantage of the three elements of the MIM, when possible, can reach a high level of innovation. Let us take a new museum exhibition as an example and see how the model can be used as a planning tool. We will look through the prism of the MIM and discover, more specifically, what practical steps and processes that can transfer this new exhibition from a traditional project to an innovative one.
Answering these questions can help the exhibition team produce an innovative museum exhibition. An exhibition that can connect the museum with other stakeholders in...
the community, improve the financial resilience of the museum, and create a sustainable and measurable social value. Eid confirms:

Ultimately, each museum project is unique and all these questions may not necessarily be relevant or the goals be achievable; however, being conscious of these dimensions can help museum teams generate innovative projects. Also, if the process is reversed, the model can be used as an evaluation tool to scrutinize innovation in museums through the prism of open innovation, social enterprise, and social innovation (Eid, 2016).

Additionally, the model can be applicable to different organizational levels. For example, the previous discussion illustrated that elements from the model can be found in museum projects (as we saw in the Dog Tag project at the National WWII Museum), museum departments (as we saw in the case of Cooper Hewitt Lab), or the whole museum as an institution (as we saw at the MEAL).

3.0 Conclusion

In conclusion, the proposed Museum Innovation Model consists of three major concepts: open innovation, social enterprise, and social innovation. The case studies have helped to demonstrate the ways these concepts are interconnected and complement each other conceptually and practically to form a possible innovation model for museums. In principal, the model seeks to make innovation in museums scalable, replicable, and feasible to start and operate. Beyond the case studies mentioned in this research, and looking out from the specifically digital context of the examples considered, elements of the model can be found in museums of different sizes, management styles, locations, and collections. It is proposed that the model can be used either as a planning tool to carry out innovation, or as an evaluation tool to scrutinize innovation in museums. Additionally, the model can be utilized at different organizational levels starting from projects to museum departments or the museum as a whole.
Chapter 8

Conclusion

1.0 Summary

This research sought to investigate museum innovation with the intent to ask a clear and precise primary question; how can museums cultivate innovation? As we attempted to address the primary question, a group of secondary questions proved valuable such as; what is “innovation” in the first place? How is it defined? Why are some museums succeeding in adopting innovation while others are struggling to do so? How can museums plan, implement, and evaluate innovation?

To address these questions, we started our investigation in Chapter 2, analyzing existing innovation initiatives and conceptual frameworks to cultivate and understand innovation in the museum sector, focusing on the United States and United Kingdom. The discussion in Chapter 2 uncovered that although national initiatives in both countries have been introduced to promote museum innovation, there is still a lack of clarity on what innovation actually means in the museum context. Additionally, the chapter showed us the extent and influence of the business studies’ conceptualization of innovation on the very few pieces on innovation literature in the museum discourse. The limitation of research on innovation in the museum context, both in number and in scope, suggests that more work is needed to develop a better understanding of innovation from a museum perspective.

Chapter 3 observed the many definitions of “innovation” in the business studies literature and recognized that most of these definitions share common concepts. This led to the conclusion that although innovation is a complex concept, it is well defined and understood in the business context. Also, Chapter 3 explored innovation theories presenting the most influential of these, and showing how they have greatly shaped how innovation is being understood today, such as Joseph Schumpeter theories, the Linear Model of Innovation, disruptive innovation, and open innovation theory. Finally, the
Chapter 4 attempted to understand the connection between innovation and the organization’s business model. Within this context, the business studies’ conceptualization of business model is investigated, with more attention paid to the social enterprise business model, as suggested by many experts as a possible conducive model for museums. Additionally, the chapter looked with special interest into how social innovation and social enterprise are interconnected and how the museum studies literature understand both terms, especially with respect to the writings of Stephen Weil and Robert Janes.

The discussion in Chapter 4 indicated that irrespective of the theoretical debates on the museum as a social enterprise, museums today in reality are facing tremendous financial pressure and they have started taking small but serious steps to ease this pressure. What we saw (and what Chapter 2 has attempted to frame) are museums in Europe and the United States exploring business opportunities, reconstructing teams, and innovating their business models in response to this pressure. At a time of austerity, financial downturn, and economic pressure, social enterprise (despite the cultural contingent in its application and value) has to some emerged as an appealing model for museums.

Within this context, Chapter 2, Chapter 3, and Chapter 4, aimed to present the contextual framework on which the case studies in Chapter 5 and Chapter 6 were based. More specifically, Chapter 5 presented an investigation of what the chapter suggests is the presence of open innovation inbound and outbound activities at the Digital and Emerging Media Department at Cooper Hewitt, Smithsonian Design Museum. The chapter showed through empirical data gathered at the museum, the existence of three paths: 1) “open sourcing” (making source codes available for developers); 2) “open reflection” (between self-reflection and receiving feedback); and 3) “collaboration” (realizing internal resources, identifying needs, and targeting purposeful partnerships with external organizations). These three paths, as the research showed, provided the digital team at Cooper Hewitt some effective strategies to innovate and strengthen their existing innovative capabilities.

Benefiting from the contextual framework in Chapter 4, Chapter 6 tried to reach back to the business model and investigate how specifically social enterprise business
models are empirically structured in IWM in London and the National WWII Museum in New Orleans. More specifically, the fieldwork underpinning the discussion is informed by the conceptual frameworks of social enterprise, as discussed in Chapter 4 including, specifically, Dees’ (1998) double bottom lines (social mission and profit making) paradigm for social enterprise, as well as Janes’ (2010) regarding the “mindful museum.” Within this context, we found that both museums are operating robust social enterprise business models that utilize business strategies and market principles to advance their social mission. While Chapter 6 looked at the social enterprise business model in each museum, it also investigated how digital contributed to the sustainability of the model.

Building upon the knowledge acquired from the case studies in Chapter 5 and Chapter 6 as well as the conceptual frameworks discussed in Chapter 2, Chapter 3, and Chapter 4, and widening our view out from the specific context of digital development, the research attempted in Chapter 7 to present a more portable Museum Innovation Model based on the museum’s perspective of three major concepts: open innovation, social enterprise, and social innovation. The model is structured to make innovation in museums scalable, replicable, and feasible to start and operate. Beyond the case studies mentioned in this research, and the consistent working examples around digital, elements of the model can be found in museums of different sizes, management styles, geographical locations, and collections as we saw at the MEAL, for example.

Chapter 7 suggested that the model could be used as 1) a planning tool to carry out innovation; or 2) an evaluation tool to scrutinize innovation in museums. The chapter provided practical processes and steps to apply the model through an example of a new museum exhibition. It was argued that the project teams are capable of transforming that project from a traditional proceeding to an innovative exhibition by using the Museum Innovation Model.

Additionally, the discussion in Chapter 7 stressed the fact that each museum project is unique, and recognized that not necessarily all the suggested steps and process could be relevant or achievable, although being mindful of the Museum Innovation Model framework (including open innovation, social enterprise, and social innovation) could help museum teams generate innovative projects. Also, if the process is reversed, the model can
be used as an evaluation tool to scrutinize innovation in museums through the prism of open innovation, social enterprise, and social innovation. Finally, the discussion in chapter 7 uncovered that elements from the model can be found in museum projects (as we saw in the Dog Tag project at WWII Museum), museum departments (as we saw in the case of Cooper Hewitt Lab), or the whole museum as an institution (as we saw at the MEAL).

2.0 Contribution to Knowledge

The findings of this research are consistent with and provide potential explanations to the projected primary research question. The research, precisely, asked; how can museums cultivate innovation? The findings of this research revealed four contributions that can be crucial in answering the primary question.

First, the research provided a possible definition of museum innovation, which can be expressed as *the new or enhanced processes, products, or business models by which museums can effectively achieve their social and cultural mission.* To our knowledge, this is the first time museum studies research has attempted to present a definition of “museum innovation.” The proposed definition builds on the business studies’ conceptualization of innovation and also takes into account the unique character of museums as social and cultural organizations. The definition, also, recognizes three types of innovations in museums: product innovation, process innovation, and business model innovation. The difference between this definition and the business studies definition of innovation is that the ultimate purpose of innovation in the museum context, as the definition suggests, should be closely tied to the ability of the museum to effectively achieve their role in society as social and cultural organizations. The business definition of innovation, however, focuses on the ability of the company to capitalize on innovation through profit-making. The idea of considering the social value created by non-profits when evaluating their output, in itself, is not new and has been around for many years. What our proposed definition brings to the table is expressing and verbalizing this notion in the museum context with a specific link to innovation (i.e., product innovation, process innovation, and business model innovation).
The second contribution this research attempted to achieve is supplying the museum studies literature with some terminologies and concepts related to innovation. Through the navigation of the business studies literature, we were able to solidify some conducive innovation vocabularies and frameworks such as closed and open innovation, product and process innovation, and social innovation and social enterprise, to name some. Moreover, some of these vocabularies and frameworks have been reinvestigated and reexamined within the museum context, resulting in adding new conceptual contexts and structures to innovation from a museological point of view. This is, probably, helpful for the museum studies field in order to create a common ground with other disciplines (such as business studies), which can facilitate future collaborations between academics and practitioners from both sides. Additionally, the clarity of innovation related concepts and terminology within the museum context can provide the museum sector, internally, with a clearer, more effective, and eloquent way of communicating ideas, projects, goals, objectives, and expectations.

The third contribution this research tried to achieve is contributing to the museum’s conceptualization of open innovation, social enterprise, and social innovation. Through three case studies at internationally-recognized museums, the research tried to expand the conceptual and practical museum framework of these three evolving concepts (i.e., open innovation, social enterprise, and social innovation) in the museum sector, which can potentially help museums improve their innovation strategies, capabilities, and outcomes. Additionally, the data collected during the course of this research provided some useful information potentially linking essential museum theories to the three concepts of interest. These conceptual linkages can strengthen and disseminate, or to the contrary may dismiss and replace current museum practices, or even suggest new ones. For example, by understanding that social innovation is about finding new or more effective solutions to social or environmental challenges and connect that concept to what Janes (2008 and 2010) theorized as the “mindful museum,” we find that this conceptual link between social innovation and the mindful museum can impact how museums identify their role in society and the types of innovation they can contribute to the world.

The fourth contribution this research is presenting to the field of museum studies is its proposition of the Museum Innovation Model, a consequence of these intensive and
serious conceptual and fieldwork studies conducted over three years. As previously
detailed, open innovation, social enterprise, and social innovation construct the theoretical
framework of the model, creating a potential paradigm for implementing and evaluating
innovation in museums. The data and case studies discussed here showed how the three
terms are interconnected and together can present a formula for innovation in museums.
The formula might be expressed simply as: museums that adopt social enterprise business
model and utilize open innovation strategies are capable of achieving social innovation.
The model attempts to make innovation in museums scalable, replicable, and feasible to
start and operate. Although the case studies focused on digital, it is argued here that the
model is conceptually broad enough to be applicable to different institutional levels and
contexts. By the institutional levels we mean that the model can be considered when
looking at projects of different sizes, museum departments, or the whole museum, as we
saw in the case studies and the examples given from the museum field. And by the
institutional contexts we mean that the model can be equally conducive in different
departments such as education, curatorial, or exhibition design.

Also, indirectly, this research has further evidenced examples of “postdigitality” in
museums (Parry, 2013). Postdigitality is a term suggested by Parry (2013) to express “digital
normativity” within the museum context. By digital normativity, Parry means that digital
has been embedded in the core functions and structures of some museums to the extent
that its presence becomes usual and common. Parry used three “metastructures” to
evidence normativity in museums. The first metastructure is “normativity through
structures of domination,” which refers to “the rules that regulate actions in the institution
as manifest, for instance, in the museum’s organizational shape or its mission; these are
structures that might reveal how digital is part of what the museum considers itself to be”
(Parry, 2013). Secondly, “normativity through structures of legitimization”, which
constitutes those elements

that validate behaviors, such as the allocation of resources to particular digital
projects or value given to digital skills or to working in a digital way; in other
words, these are structures that might reveal how digital is embedded in how the
museum functions (Parry, 2013).
Parry’s third metastructure is “normativity through structures of signification,” which he describes as “those visible and meaningful directions captured in the museum’s strategy; structures, in other words, that indicate how the digital is critical to how the museum wants to develop” (Parry, 2013). Overall, postdigitality observes that the traditional barriers between digital and the rest of the museum are being demolished in some cases and digital thinking and behavior are spread across the museum. Seen in the context of this proposition and theory, this research has located some evidences in the three case studies which can demonstrate ways in which these museums exhibit traits of postdigitality. Take for example the National WWII Museum in New Orleans and Imperial War Museums in London where digital has become crucial to the sustainability of the museums’ social enterprise business models. According to Parry’s classification of the three metastructures, this type of activity can be considered as “normativity through structures of signification.” Therefore, it is argued here, the structure of the Museum Innovation Model reflects “postdigitality” and “normalization of digital” in museums by recognizing and allowing digital innovation to be blended across the museum, and merging digital with the museum’s social mission.

3.0 Limitations

The research recognizes the limitation of the study which can be represented in four different kinds; geographical, institutional, context, and research methodology limitations. This research has mainly considered the museum perspective to innovation in the United States and United Kingdom. Museums located in different geographical locations in Europe, Australia, Africa, North and South America, and Asia may have different perspectives, challenges, goals, or aspirations when it comes to museum innovation. Secondly, the case studies in this research were conducted at national museums with relatively big budgets and staff. While the conceptual frameworks discussed in this research can be flexible enough and conducive to museums with different sizes and management styles, the research recognizes that many variables can possibly be identified as a result of the institutional distinctions.
The third possible limitation is based on the context of the case study (i.e., digital). In consistence with other research that has used digital as a laboratory to study innovation, this research made a strategic decision to study museum innovation within the digital context. Similar to the institutional limitations, the research recognizes that every department in the museum may have its distinctive objectives, dynamics, strategies, and workflow, which may lead to different results and findings if the research was conducted at another museum department.

Finally, limitations could have resulted from the research methodology. In this research, it was thought that triangulation could benefit the study and introduce robust data. Other researchers may prefer to use either a qualitative or quantitative approach, which may lead to different conclusions. Also, different data collection methods or case studies can significantly impact the nature of the data collected and accordingly take the research to different directions. Additionally, the use of the business perspective of innovation has largely influenced the doctrine introduced in this research. Other researchers may choose to utilize different theories within the business literature, or even look into other frameworks related to change and development as, for example, in sociology, or, perhaps, a community of practice in education.

4.0 Future Research

Though deep and careful in its own way, within the wider context this research has only scratched the surface of a very broad, complex and important topic. Ultimately, museum innovation can be discussed from a myriad of different angles and theoretical approaches. Future research may try to overcome the limitations identified above. For example, researchers who are interested in studying museum innovation in the future, they may attempt to investigate the Museum Innovation Model and its conceptual components (i.e., open innovation, social enterprise, and social innovation) in different museum contexts such as education, conservation, curatorial, or exhibition design. Also, future research may consider studying museum innovation in different countries, especially those countries where museums have a set of strict roles and hierarchical management systems. Another variable is the size of the museum. The case studies considered here were
conducted at national museums. Different findings and conclusions may result from studying innovation at small, medium, or regional museums.

Also, future research may consider studying museum innovation in relation to the way museums are governed. For instance, some museums run by governments and local authorities while other museums belong to the non-profit sector with fewer strings attached to government, and finally some museums function as for-profit enterprises (which are low in number but they exist and are effective). Investigating how museum innovation can possibly be different in each group, especially when it comes to social enterprise and social innovation, can bring more insight to the conducive environment for museum innovation.

As early as it is, this research has already started to generate some interest in both academia and the practice community. In collaboration with various museums in New Orleans such as the National WWII Museum and McKenna Museum, major grants have been submitted to the National Science Foundation and National Endowment for the Humanities in the United States based on the MIM. These projects expect to use the model as a framework to carry out innovative approaches to address social and cultural issues.

On the academic level, the fieldwork and literature research conducted during the course of this doctorate study has resulted in the author publishing several articles at major publications such as the International Journal of the Inclusive Museum, the 2016 Museums and the Web conference, and the Museum Computer Network (MCN). Also, this study paved the way for the author to be part of the Planning Committee charged of organizing the 2016 MCN conference in New Orleans. Additionally, at the time of submitting this thesis, the author accepted two offers to be the principal investigator in two major grants in order to continue his investigation of the MIM and its related concepts. One of these grants aims to establish the New Orleans Art Institute for Social Innovation, a professional development training for artists.

Innovation is what makes organizations, communities, and nations develop, improve, and thrive. However, innovation is not typically an easy process. It comes with a strong desire to change and challenge the status quo. Ginni Rometty, CEO of IBM, once said; “The only way you survive is you continuously transform into something else. It is this
idea of continuous transformation that makes you an innovation company.” Throughout history, museums, since cabinets of curiosity, have gone through major transformations to become the institutions we know today. This should not stop, as Rometty suggested, in order for museums to stay relevant and valued. What this study has attempted to do is to give the museum sector some potential tools to transform and make innovation possible.
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To: HAITHAM EID

Subject: Ethical Application Ref: he34-d8f4

(Please quote this ref on all correspondence)

16/10/2013 22:17:20

Museum Studies

Project Title: Cultivating Innovation and Enterprising Values in Museums: Investigating The Case of Digital Innovation

Thank you for submitting your application which has been considered.

This study has been given ethical approval, subject to any conditions quoted in the attached notes.

Any significant departure from the programme of research as outlined in the application for research ethics approval (such as changes in methodological approach, large delays in commencement of research, additional forms of data collection or major expansions in sample size) must be reported to your Departmental Research Ethics Officer.

Approval is given on the understanding that the University Research Ethics Code of Practice and other research ethics guidelines and protocols will be compiled with

- http://www2.le.ac.uk/institution/committees/research-ethics/code-of-practice
- http://www.le.ac.uk/safety/
### Appendix 2

**Key Individuals and Institutions**

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<th>No</th>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
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<tbody>
<tr>
<td>1</td>
<td>Aaron Straup</td>
<td>Head of Engineering (Internets &amp; Computers)</td>
<td>Cooper Hewitt, Smithsonian Design Museum, New York City, New York, USA</td>
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<td></td>
<td>Cope</td>
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<td>Barbee Barber</td>
<td>Director of Visitor Services</td>
<td>Dallas Museum of Art, Dallas, Texas, USA</td>
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<td>Brooke Molinaroli</td>
<td>Director of Marketing</td>
<td>Dallas Museum of Art, Dallas, Texas, USA</td>
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<td>Jeremy Ottevanger</td>
<td>Technical Web Manager</td>
<td>Imperial War Museums, London, UK</td>
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<td>5</td>
<td>Jesse Alter</td>
<td>Web Producer</td>
<td>Imperial War Museums, London, UK</td>
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<td>6</td>
<td>Kimberly Guise</td>
<td>Curator/Content Specialist</td>
<td>National WWII Museum, New Orleans, Louisiana, USA</td>
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<td>7</td>
<td>Kris Arnold</td>
<td>Senior Web Developer</td>
<td>Dallas Museum of Art, Dallas, Texas, USA</td>
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<td>8</td>
<td>Lindsey Barnes</td>
<td>Senior Archivist/Digital Projects Manager</td>
<td>National WWII Museum, New Orleans, Louisiana, USA</td>
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<td>9</td>
<td>Lorraine McConaghy</td>
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<td>Museum of History &amp; Industry, Seattle, Washington, USA</td>
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<td>Ludvig Lohse</td>
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<td>Dallas Museum of Art, Dallas, Texas, USA</td>
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<td>Micah Walter</td>
<td>Developer and Digital Strategist</td>
<td>Cooper Hewitt, Smithsonian Design Museum, New York City, New York, USA</td>
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<td>13</td>
<td>Meka Manchak</td>
<td>Exhibits Coordinator</td>
<td>Museum of History &amp; Industry, Seattle, WA</td>
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<td>Nicole Stutzman Forbes</td>
<td>Chair of Learning Initiatives</td>
<td>Dallas Museum of Art, Dallas, TX, USA</td>
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<td>15</td>
<td>Richard Evans</td>
<td>President</td>
<td>EmcArts, NY City, NY, USA</td>
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<td>16</td>
<td>Robert Janes</td>
<td>Editor-in-Chief Emeritus</td>
<td>The Journal of Museum Management and Curatorship</td>
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<td>Robert Stein</td>
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<td>Toni Kiser</td>
<td>Assistant Director of Collections &amp; Exhibits/Registrar</td>
<td>National WWII Museum, New Orleans, LA, USA</td>
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<tr>
<td>21</td>
<td>Tony Butler</td>
<td>Director</td>
<td>Derby Museums Trust, Derby, UK</td>
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Appendix 3

Information Sheet for Participants

**Project Title:** Cultivating Innovation and Enterprising Values in Museums: Investigating the Case of Digital Innovation

**Contact Address:** School of Museum Studies, University of Leicester, 19 University Rd., Leicester, LE2 UK

**Date:** / / (DD/MM/YYYY)

**Dear (Participant),**

I am very grateful that you are willing to take the time to participate in my research project ‘Cultivating Innovation and Enterprising Values in Museums: Investigating the Case of Digital Innovation’. I would like to take this opportunity to tell you more about the nature of the project, who I am and why I am undertaking this research, and how you were selected for the project. I would also like to inform you about how the data you supply to me will be used and the protections of your privacy and confidentiality that are in place.

**Who is doing the research?**
Haitham Eid, PhD candidate at School of Museum Studies, University of Leicester, UK

**What is the project for?**
To develop a better understanding of digital innovation models in museums

**How have you been selected?**
You were selected based on your significant contribution to digital innovation in museums.

**What is your role in the research project?**
Your participation in the project will take approximately 1.5 hours to answer a few questions in a recoded interview, and 20 to 30 minutes to respond to a questionnaire.

**What are your rights?**
Your participation in this research is entirely voluntary and you are free to withdraw from the project at any point. If you are uncertain or uncomfortable about any aspect of your participation please contact the researcher listed at the top of this letter to discuss your concerns or request clarification on any aspect of the study.

**Protecting your confidentiality**
Any information you supply will be treated confidentially. The data will be stored and secured in a (locked/password protected) file. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared.

This research will be carried out in accordance with the University of Leicester’s Code of Research Ethics which can be viewed at [http://www2.le.ac.uk/institution/committees/research-ethics/code-of-practice](http://www2.le.ac.uk/institution/committees/research-ethics/code-of-practice)

If you have any questions about the ethical conduct of the research please contact the School Research Ethics Officer, Dr Giasemi Vavoula, on gv18@le.ac.uk.

Thank you very much for participating!

With best wishes,
Signature:

Name: Haitham Eid
Consent Form

Project title: Cultivating Innovation and Enterprising Values in Museums: Investigating the Case of Digital Innovation

Material gathered as part of this study will be treated as confidential and securely stored.

I have read and I understand the information sheet Yes ☐ No ☐

I have been given the opportunity to ask questions about the project and they were answered to my satisfaction Yes ☐ No ☐

I understand that I can withdraw from the study at any time Yes ☐ No ☐

I agree to the interview being recorded and my words being used for research purposes Yes ☐ No ☐

I agree that my real name and affiliated institution will be used and attributed to any words that I have said Yes ☐ No ☐

I agree that my actual words can be used in any subsequent publications or use, including publication on the World Wide Web (Internet). Yes ☐ No ☐

Name (PRINT) __________________________________________________________

Signature __________________________________________________________

Date ________________________________________________________________

Please contact me if you have any more questions or you wish to withdraw from the research.

Haitham Eid
Tel: (228) 383-8644
Email: he34@le.ac.uk
Questionnaire

- **Research Topic:** Cultivating Innovation and Enterprising Values in Museums: Investigating The Case of Digital Innovation

**Researcher:** Haitham Eid, School of Museum Studies, University of Leicester, UK

**Email:** he34@le.ac.uk

- Participant # *
- E-mail

1. Are you part of the digital media team at your museum? *
   - Yes
   - No

2. How many people (including you) are in your digital media team? *
   - 1–3
   - 4–10
   - 11 or more
   - Not Applicable

3. How often does the digital media team meet at your museum? *
   - Daily
   - Weekly
   - Monthly
   - Never

- Comments
4. How would you describe the level of communication among the digital media team? *
   - Excellent
   - Good
   - Medium
   - Poor

   Comments

5. How would you describe the level of communication between the digital media team and the rest of the museum departments? *
   - Excellent
   - Good
   - Medium
   - Poor

   Comments

6. How would you describe the level of communication between the digital media team and other organizations outside the museum? *
   - Excellent
   - Good
   - Medium
   - Poor

   Comments

7. On a grade from 1 to 4 (1 is the lowest and 4 is the highest), how would you grade the attitude of your museum digital team to work with outsider organisations? *
8. How would you describe the digital projects your team is producing? *

- Traditional
- Thoughtful
- Innovative

9. Are you a member of any professional membership organization (e.g. AAM)? (if no, please skip #10) *

- Yes
- No

10. Do you find this membership helpful?*

- Yes
- No

11. How often do you present or participate in innovative projects?*
• 12. Does the museum have a systematic approach to attract new ideas?
  ○ Yes ○ No
  • Comments

• 13. On a grade from 1 to 4 (1 is the lowest and 4 is the highest), how would you grade the museum ability to attract new ideas? *
  ○ 1 ○ 2 ○ 3 ○ 4
  • Comments

• 14. On a grade from 1 to 4 (1 is the lowest and 4 is the highest), how would you grade the museum leadership in receiving new ideas? *
  ○ 1 ○ 2 ○ 3 ○ 4
  • Comments

• 15. What is usually the source of new and innovative ideas at your museum *
• Internal  External  Both
• Comments

• 16. On a grade from 1 to 4 (1 is the lowest and 4 is the highest), how would you grade the museum in terms of implementing new ideas? *
   1  2  3  4
• Comments

• 17. On a grade from 1 to 4 (1 is the lowest and 4 is the highest), how would you grade the museum’s policy/attitude to reward innovative employees? *
   1  2  3  4
• Comments

• 18. How is failure regarded in your team? *
   Failure is not an option  We dislike failure  Failure is part of the creative process
• Comments
• 19. Museums should innovate. *
  Agree  Disagree

• Comments

• 20. Museums are innovative institutions. *
  Agree  Disagree

• Comments

• 21. In your opinion, what is the most common reason which prevent museum from innovating? *
  Fund  Expertise  Vision  Interest  Something else (please explain in the comments section)

• Comments

• 22. Please write below any additional comments:
Appendix 4
Seb Chan Interview

[begning of audio 00:00:00]

I: Again, thank you Seb for your time. It’s 9:04 in my time, in New Orleans. Seb is in New York; we’re skyping to talk about digital innovation. Seb, you responded to my survey online. I would like to discuss with you your answers. But before we go to the answer I would really appreciate it if you could tell me what innovation means in general, and how is it different in the museum sector than the private sector?

P: To me it’s really about the ability to react and respond to change effectively, and why that maybe opens up new opportunities for customers, users, whatever it might be; new opportunities for business models. Those sorts of things. In the cultural sector, of course, business models, we’re half-half. I think business models obviously matter to us, as in these modern days we do need to make some money. But at the same time, I think one of the other things for us is we are – we should be, at least – very mission based, where we have a clear mission. It becomes the ability to find new ways of fulfilling that mission, and increasing its reach, scope, scale; all those sorts of things. Or doing it more effectively to reach out to our targeted communities. I think the precursor to that is having a clarity around what you’re there for. I think in the private sector that is very clear. But it isn’t so clear in the public sector. In museums.

In the public sector at large, I’d say the work that gov.UK is doing is amazing in the public sector space. You should definitely try to talk to Russell Davies or Mike Bracken, who are the key people behind gov.UK – the Government Digital Service. Aaron actually knows them well, and he could introduce you. So maybe ask Ross to connect you guys up. I think what gov.UK has done – irrespective of the politics – is really interesting in that they have transformed the way government services are delivered on line; and transformed service – the delivery – as a whole, as a result of the focus on user needs rather than government needs. That sort of shift, I think, is more akin to what I see the opportunity in museums is.

Yeah, that’s sort of how I see it. I think a lot of the work that we’ve tried to do in the past – both myself in my Powerhouse role, and here at Cooper-Hewitt – but also in conjunction with other museums – has been about poking at that issue of can we change our publics and audiences? Can we reach audiences better – more effectively – using other means or in parallel, or in conjunction with? Can we reach more people in that more effective way? It’s not just about doing the newest thing. I think it’s about serving some particular need; mission aligned or business aligned.

I: That’s really interesting, Seb, because you articulated the purpose for innovation in the museum sector to reach out to communities, to engage
audiences, to respond to change. Maybe the same concept — I was talking to Richard Evans a few weeks ago from EmcArts. He talked about same concept. He even mentioned adaptive change. He preferred this term now than innovation.

P: Yeah.

I: Are we using the right term when we talk about innovation in museums? Is it the proper use for the term, or maybe adaptive change would be more suitable as Richard mentioned to me in the meeting?

P: Yeah. I do think adaptive change is probably the way to go. However, that’s not going to get anyone to fund it. [inaudible 00:05:16]

I: I like that.

P: I think funders like the idea of innovation as the bright, shiny new thing. Particularly when they’re not deeply engaged in funding innovation in any case. Whether that’s innovation of a museum having a new app, or something like that. Having the app isn’t the innovation; the innovation perhaps is the app has enabled the mission to be delivered better; more effectively; reach other audiences; all that stuff. The app itself is not innovation.

I: Innovation.

P: The app enables innovation. Same with digital services. [00:06:00] I think that the terms get used as a way to secure funding more than an understanding of what those terms actually –

I: Right. Yeah, yeah.

P: Anyway. I think in the U.S. it’s a little bit, it’s more stark because the museums have to get all of their money from philanthropic sources. The need to pitch yourself, to differentiate yourself from other museums is very important. That means that often terms get thrown around as a way to –

I: Right, yeah.

P: Secure money rather than really anything else. I would say it’s probably worth having a chat to the people at EmcArts. Let me just send you this thing. I’ll just message it over to you.

I: Sure.

P: These guys — the innovation lab for museum thing. They do innovation lab for — what’s it called — the performing arts as well. Let me just see if I can –

I: Sure.
P: Get this instant message thing out. There we go.

I: Thank you.

P: Have a look at these guys. [inaudible 00:07:16] philanthropies as well as rebranded a lot of their funding around innovation too. I think that's kind of interesting in that that they [inaudible 00:07:30] technology enables the delivery of the mission better, or the audience expansion. The innovation is in that audience expansion; not in the technologies used to get there.

I: That's true. That's true. Yeah, I'm very familiar with their work and their programs. Yeah, you're absolutely true. Even when we spoke, he thought that innovation in museums are more into process innovation than product innovation. He's really interested in how to build this culture of change in the museum sector to attract audience and engage them in meaningful way with the collections.

P: Yeah.

I: Yeah, that's great. I want to go back to the concept – because it's really important, what you said, about the app; it's not the innovation that you making an app. It's you're introducing the app to the museum and adopt it in a way to help the museum to reach its mission.

P: Yeah.

I: In a way I think innovation has different levels. The very high level, like we see in Apple, Microsoft, all of these people. Then there's another level for, maybe, we can say, sector level.

P: Yeah. [00:09:00]

I: Would you agree with this analogy?

P: Yeah. I think certainly the way that change rolls out across the sector – this really happens in any sector of the commercial world as much as anywhere else – is that there will be early movers who make the first changes, and then those changes get copied and adapted by others. As they're adopted by others, they change as well; their form changes. I think that that's in the museum world possibly more than the commercial world. Maybe more than the commercial world. Those changes, as change rolls out across a sector, we collectively share those learnings, perhaps, more. We're non-competitive, to a degree.

I: Right.

P: Like when these changes are practiced based process oriented, those things, we don't – we talk about them. We don't hide them behind [inaudible 00:10:15].
I: We’re open. We want to share. Yeah.

P: Public institutions particularly. I think, again, the Government 2.0 stuff is an interesting example of that. That this culture change that rolled out across government services in many parts of the world – and it’s still going – is indicative of that in that they’re non-competitive, so as the change rolls out we talk about it more, we communicate it more. We discuss it and we adapt the change itself. I would say that museums – it is interesting you’re talking about product as opposed to processes. I think museums have a lot of internal processes that are always being adapted and changed and transformed. But only recently have museums become comfortable about talking about their internal processes to the public. You see this with behind the scenes blogs, behind the scenes news reports, behind the scenes television shows even – those reality television shows set in museums – that even 20 years ago you wouldn’t have thought would happen. Museums were very much in that model of the theatre or the cinema where the end product, you don’t see how it’s made. There’s mystique around how they make the exhibition.

I think in recent times, that’s begun to change. It has revealed a lot of the continuous process innovation that’s going on behind the scenes more publicly. We start to see those things then as innovative, or as actual changes that we’re actually doing. The flipside of that though is, I think also, that the product end of things – honestly, the product hasn’t changed much. The exhibitions are still pretty much the same as they ever were. The purpose and reach of those exhibitions hasn’t really changed. Maybe the form’s changed, but it’s a bit like the shift from – I don’t think – I could be wrong here – that 3D cinema is innovative. It hasn’t changed who goes to the cinema. Same people go to the cinema; they just watch films in 3D now instead of 2D. It’s not changed the business. It’s just – and the product itself is still a film. That –

I: You are not creating new product, you want to say. It’s the same product, but adopted new technology. You’re not really innovating with the product itself.

P: Yeah.

I: You’re just innovating with the process and the changes in the final product.

P: Yeah, yeah. The core product is the same thing. Museums still have exhibitions. The museums that are doing possibly the most innovative product work are probably those who are not actually doing exhibits, but are doing some other form of programming. There is some other thing that’s not an exhibit that doesn’t involve objects in showcases or pictures on walls. If it involves those it’s not an innovative product; it’s an exhibition. We’ve done those for hundreds of years. That’s okay; it’s a successful product. But the actual core experience hasn’t shifted all that much.
I: Yeah. I want to ask a question here. I always thought, is there a chance for museums to actually be more involved in real innovation where new products come out of museums, and new software, new – real, real innovation like on the level of maybe Microsoft, Apple, or these companies?


I: That's okay.

P: Yeah, go on. Okay, go.

I: I was wondering if museums have maybe a role to play in real innovation where new products come out of museums; or in a project that involves museums.

P: Oh, sure. Yeah, yeah. Look, I think so. For sure. Yeah. Certainly we did some work at the Powerhouse; we were involved, actually, with a partner in a state government funded startup scheme. The government funded a whole bunch of technology startups who had to partner with people like museums to get the funding. The museum was actually used as a test bed, I guess, for their product. I'll send you the link to this.

I: That would be amazing.

P: Pull it up. Hang on one second. Let me see if I can find this.

I: Sure.

P: I can't find these bloody things when I need to do it. Let's try – what was it called? Let me have a look – it's in my resume because obviously I was involved with it; briefly involved with it. I think also you see – here also we've done some internal work with the cultural lab at Google. Google Creative Lab; not cultural lab, Creative Lab. Which is an internal ad agency. We did some work with Chromecast; the Chromecast product. We developed – actually if you look up – I'll send you the link for that too. Hang on a second.

I: Sure, thank you.

P: Let's see if I can find this. [inaudible 00:16:42] I'll send you a couple links here. Here we go. What was interesting was we were working with Google's engineering team to work with my team here for a week to rapidly prototype – build and release – code for their Chromecast product to explore whether digital signage solutions could be made using Chromecast. Not just Chromecast as in is it possible, but could you code that in a week and release it? This is the thing. That was in conjunction with Google cultural lab – Google Creative Lab.
I: Creative.

P: I just found [inaudible 00:17:37]. Hang on.

I: Okay.

P: I know a lot of other people are doing similar things. So that’s not remarkable at all, but it is just one of those things that is perhaps – we do this stuff, I guess. The models for doing it perhaps are not [00:18:00] as established, maybe. I think a lot of museums struggle with how that sort of collaboration works alongside –

I: With their work, you mean?

P: I guess alongside what their core business is. Even when we were doing this, you’re like, “All right, what is it – how does that benefit our exhibitions?”

I: Right.

P: So our product, in doing exhibitions or preserving collections, or whatever that might be. Here’s the other one; the [inaudible 00:18:53] government grant thing. I think rightly so. Even when we were doing the work with Google Creative Lab, people here were like, “Seb why is your team spending a week on this? We’ve got [inaudible 00:19:09] this museum. What are you doing?” And I go, “Look, this is a good project. We have a little bit of time. We need a digital signage solution in any case, in the museum. This may be it.” The learnings we get from that also; we learn from the way we can do other sorts of work better. And the exposure to the working or practices of Google was really interesting as well. Again, that sort of – I see a lot of the things – a lot of the stuff that I’ve done and my teams have done in the recent years – probably in the last ten years – the best workers have come from when I’ve been able to expose my people to another company, or another firm’s way of working for a period of time, and then bring back that knowledge back into the team here.

Then we come up with other ideas based on seeing how other people’s business processes work for them; we adapt them. Similarly, the knowledge sharing of cross-sectoral problem solving. But out of sector stuff, to me, is incredibly important. That’s where I think museums have lots and lots of experience doing collaborative research projects with universities. I think a lot of the benefit of that comes out of attacking a problem in a different way. I think that’s one of the things that has changed in recent years – again, with the opening up of the behind the scenes stuff – is people go, “I’m also trying to deal with that, but I do it like this. Let’s talk.” Then it’s like, “Oh, right, okay. Well, we can adapt that process from you.”

I: That’s amazing [00:21:00] because one of the concepts I’m studying and I’m really interested in is open innovation. It’s a theory in business studies
where it invites companies to open up their doors to ideas to come in and get out of the company.

P: Yeah.

I: That helps to innovate, and even reach new markets. I was thinking that museums are more willing to share and open through the history. But now you brought up another concept which is, no, they were not. They kind of were closed, and they don’t want to really share behind the scenes operations. This is really interesting because it’s kind of similar to the business sector.

P: Yeah.

I: Microsoft and Apple, for example, had a very closed business model for a long time and did not want to share their internal knowledge. Then they started to open up, and get involved in creating open source apps and software. The even outsource many of their work.

P: Yeah. I think what’s different in museums – maybe it’s not different in museums. I think that the way I would find that in museums is that we are very open with content – the content of a museum – but we’re very closed with the process of a museum.

I: That’s a very good distinction, yeah. Thank you.

P: The content, we’re willing to share our data sets, we’re willing to share our knowledge; we’re very open with that. We’re not open about how exhibitions are made, how tickets are sold, how we do marketing; the business end of things. I would also say that we’re also historically been pretty closed about things like conservation practices and research practices. The research itself might be open, but the practice of doing that research is not. I think this is a broader issue in the humanities [inaudible 00:23:14] as a whole. On the sciences where a scholar will publish hundreds of papers in a small period of time, humanities papers take more time. You’re secretive about your sources; all that sort of stuff. Historical research particularly. That’s where we fit; we fit in with that. The practices are very closed; the content, though, is very open. I think a bunch of us are trying to change that. [inaudible 00:23:51] open up both things, I guess, more.

I: Right, right. And you come with your team that’s really interested in opening up [00:24:00] visiting places. Like you said, Aaron is going to [inaudible 00:24:03] interact with –

P: [inaudible 00:24:04], yeah.

I: Other people. You really want this – you want to adapt this model to [inaudible 00:24:13].
P: Yeah. We do a lot of collaboration. I think my own practice has been very much informed by being in Australia, which is very far away from the rest of the world. My early bosses and my early directors were very clear about the importance of traveling to other parts of the world for museum events, and presenting research papers, and doing all this. Because you got out of Australia. You went – I would have met Ross Perry about ten years ago at a conference. Right? That’s only because I went there. It’s all that stuff. I think the people who get to do that, historically, have been very limited. And they haven’t been the business process people. It might have been the curator who was traveling to do some research on an exhibit, but not the people who actually made the exhibition. There’s that sort of thing; I think there’s a lot more – I mean obviously in the last decade as well. We have Skype, we have chat rooms, we have social media – all these other things that make it much easier for people who are spread out all over the world to share what they’re doing. That process sharing, we see who’s doing things in similar ways and different ways, and we can talk with them, and we can learn from them without needing to get on a plane.

I: That’s pretty cool. You mentioned Australia, and Ross in the UK, and we are here in the U.S.

P: Yeah.

I: The museum sector is – we have similarities in museums, but we have differences too. How do you see the museum mission different in the U.S., Australia, and the UK? Do you see any differences in the social mission of the museum?

P: I think it’s much clearer in Australia and the UK. And that’s, honestly, just because of the revenue source. We get our money from the government, and government uses us as an instrument of policy. We’re there to implement a public policy, which is usually reasonably clear. And why the museum exists is clear. In the U.S. that’s not clear at all. The museum might have an internal mission, it might have a public mission, and then it also has a mission that it tells to the people who fund it. [00:27:00] I think that those – it’s very complicated. Honestly, I much prefer it when it’s clear. I think the clarity over mission is one of the big things that hold museums back. The lack of clarity makes it very hard to get stuff done. I think the way that museums in Australia, New Zealand, UK, Canada – all the places with centralized funding models – have to publish their annual reports publicly, have to publish their mission publically; have to publish their stuff publically. It’s very different to a lot of the American museums that don’t.

I: Do you think this has any impact on digital work in museums?

P: I think it has a lot of impact on every element of the museum. It just means that there is no agreed reason for doing stuff that you can hold senior leadership up to. Even me on the senior leadership here at [inaudible 00:28:16] – and previously at the Powerhouse. At the Powerhouse someone
else – a junior staff person – could have said, “Hey Seb, that doesn’t make our mission. Look, see? It doesn’t make it.” No one can do that here. We don’t publically – we don’t have a strategic plan that’s public. One of our visitors at [inaudible 00:28:37] can’t come into the building and say, “That doesn’t make your strategic plan; you shouldn’t be doing that.” They don’t know what it is.

I: So nobody can challenge the museum. Nobody can – you just do whatever.

P: Yeah. They can’t challenge it simply because we haven’t made that public. We should make that public, but we’re not compelled to make that public. If I go to the V&A or the British Museums website, I can download their strategic plan. Journalists can hold those museums accountable for not meeting that strategic plan. The public accountability is just not here. I think that that’s hard. It makes it hard for innovation too, because it’s hard for internal innovators to say, “I can help you achieve this strategic plan goal better.” Because they don’t know what the strategic plan goal is.

I: The light is automatic. Sorry.

P: That’s cool. If that strategic plan goals are not publically articulated, it’s very hard for anyone to come up with better solutions for them.

I: Yeah. Absolutely, yeah.

P: That’s the basic thing. I think that that is really the most basic thing. And so in the absence of a public [00:30:00] strategic plan – and that public accountability – you can only rely on leadership. And that varies a lot in the non-profit sector; there’s good leadership and there’s pretty crap leadership. There’s really good leadership that’s not very good at raising money, and there’s very, very bad leadership that is very good at raising money. That’s the problem, I think. If you don’t have public accountability, it rests in the hands of a few who may or may not have good leadership skills.

I: That’s true, that’s true. You at Cooper-Hewitt, you guys are, I guess, government funded 100%. You don’t have –

P: No, we’re not. We’re not.

I: You’re not? Oh.

P: No, no, no. We’re about 20%.

I: 20%. So where –

P: Yeah. We’re the only Smithsonian that’s 80% self-raised. For some reason, I don’t know what the reason is. There’s some reasoning when Cooper-Hewitt was set up in 1976 that it can’t draw as much government money as the other Smithsonian units. So even my position is not a federal position. I’m
what’s called a trust employee. I am employed from investment returns; investment funds.

I: So 80% of the budget comes from the museum itself.

P: Philanthropic giving.


P: And ticket revenue. We’ve been closed for three years, so we haven’t had any ticketed revenue.

I: Wow, wow. That’s hard.

P: We’re effectively a private museum; non-profit. That’s an interesting thing. That forces us to look for new ways of generating revenue all the time. It may or may not force us to be innovative in our practices. I think the need to continually seek money makes it very hard to innovate your practices. Because there’s no room for experimentation. There’s no room for failure. It’s very low tolerance for risk.

I: I’m doing some research in a museum here in New Orleans – World War II Museum. It’s a national museum. They get 0% from the government; they have to raise 100% of their budget from philanthropic and enterprising projects. They’ve been so successful in generating earned income. I was wondering if you, your digital team, is involved in these type of activities to raise money for the museum.

P: Yeah, of course. Of course. A lot of both directly and indirectly. I think in the new renovation, $92 million restoration and renovation – low double figures of millions in that – somewhere between maybe ten and 15 million of that is specifically for digital or digitization related stuff that was raised as a result of being able to prove that things could be done, and we needed money to do these things in these other ways. Also, of course, incoming – we take donations online. We’ve been moving most of our customer facing financial stuff online, for online transactions. Retail – which has been running all the time – donations, joining; all that stuff. But I think what’s been interesting is that digital stuff is exciting to funders. Funders who are sensible see digital – particularly when you can prove that you’ve got – you have visible prototypes. They’re more willing to fund something that you have a prototype for than something you don’t have a prototype for.

I: That’s really interesting.

P: [inaudible 00:34:59] I think in the digital space it’s much easier for us to spin out the prototype in a couple of days or a week than it is with pretty much anything else.
I: That’s really interesting, Seb. We talked about three major concepts here; which is open innovation, social innovation – which is that is supposed to be the mission of the museum – and being enterprising with inside the museum. Do you see any connection between innovation and enterprise? You said –

P: Yeah.

I: Yeah? How –

P: Of course. I mean I think, of course. Obviously for any change to be successful you’ve got to have a way to fund it. It can be funded directly or indirectly. If you change business processes and you don’t have new income streams, then that’s not going to last. [00:36:00]

I: That’s right.

P: I think a lot of stuff is – again, it’s about – I think it may have been some of the most content stuff we’ve done; releasing collections or whatever it might be. It’s all about building audiences. It’s about building new sources of revenue. It’s about proving value to new constituencies. With the understanding that when a constituency values you, they will support you – indirectly or directly – financially. In the U.S., I expect that means they become donors at some point. Or it could be that you increase the number of people who visit your museum and pay whatever the admission fee is. Or join the museum, or that sort of thing. Everything is, at the end of the day, going to come down to can you – are there revenue streams, somehow?

That may be through third parties; so that may be through their valuing your service. I think public libraries do this very well. Public libraries have been very good at motivating communities to protest shutdowns. And say, “Don’t shut down this public library; we use it. If you do, you’re going to be voted out. So keep funding it.” That’s one level of relevance does create community support; community support creates government support. The other part, of course, is that public support may also generate philanthropic support. Is that if you can prove that you have public support within a particular community, a philanthropist who wants to support that particular community will give you that money to help support that community.

We opened a new education space up in Harlem while we were closed as a way to run out the education programs whilst the main building here on the Upper East Side is being closed. What’s been interesting about that is Target has funded that initiative, and have funded that to be free; free admission. We deliver these programs, Target pays the rent. And the program delivery, they reach and support the community up in Harlem. The museum gets exposed to new audiences, the museum gets to test out new types of public programming with those audiences, those [00:39:00] audiences – hopefully – some of them become lifetime visitors, or lifetime users of our service, and
supporters. And even when we perhaps move out of Harlem, we will be known for having worked with those communities, etc., etc. Then another philanthropist might come in and say, “Okay, you’ve proven that you can work with the communities in Harlem. Here’s some more money to do some other focused initiatives.

I: That’s amazing.

P: That’s sort of how it works.

I: That’s really amazing. I just sent you an email, and it has a model I created for innovation in museums. Which basically summarized what we just talked about; about open innovation and willing to cooperate with other organization, and social innovation, and being enterprising with your projects and how you approach – you just mentioned now how to raise funds for projects. So you’re being enterprising with your programs as well. Do you have any comments about the relationships here? Or any suggestions? What do you think of the model in general?

P: Yeah, it’s loading up now.

I: Okay. All right.

P: Yeah, cool. Let me look at this.

I: The model basically tries to illustrate the relationship between the museum and two other concepts, which is innovation and enterprise. Because you need money, like you mentioned, to fund your programs and also because you want to be innovative. The model argues that social innovation is the objective. On the other hand, how to be enterprising? It is by being socially enterprising. And you achieve innovation and enterprise by being open. You communicate with other organizations, you share information. That reminds me of a comment you said. I am not sure it was on Twitter or somewhere else, but you said, “by acquiring the source code and releasing it, Cooper-Hewitt has made it possible for others to take and build upon this work rather than it vanish.” Maybe you think it’s done. It’s a project and you finished it, and you’re done with it. But somebody else – if you release it and make it available to others – maybe they can take it and build on it, and produce very creative projects. Being open is a really important concept.

P: Yeah, yeah. I guess my thing with this model [00:42:00] is I’m not sure I would put innovation as the purple circle. I would see that as mission.

I: Okay.

P: Innovation is the process; innovation are the lines between the things. I wouldn’t make – it’s not museum, enterprise, and innovation. It’s sort of museum – or the asset; the physical assets. The building, the collections, the existing audiences – those sort of physical assets, I guess. Then you have the
mission and the enterprise elements of that. The mission parts of that require social innovation. The enterprise parts of that need business model innovation, and social, and enterprise stuff. I really like that. But in terms of that that purple corner is mission, not innovation. Innovation are the lines between; not the purple corner. Because its enterprise and mission are the two things that are different. Not enterprise and innovation.

I: Right. So you suggest instead of innovation it would be mission. Where –

P: Yeah, sure. The public mission.

I: Public mission.

P: The public mission is there.

I: So the –

P: Then the museum corner would be the museum’s assets.

I: The museum’s assets, okay.

P: Its knowledge, its collections, its buildings.

I: I like that.

P: Then innovation is how you utilize each of those corners; how you change each of those corners. The mission – social innovation is in the right spot. Social innovation allows the museum to adapt its mission better using those assets. The enterprise corner, business model innovation, social, and enterprise, etc., allows the museums’ assets to generate more social revenue; revenue basically.

I: I like that. I like that very much, Seb. How about enterprise? Did you suggest that it stays where it is?

P: No, that’s fine. I think its mission and enterprise are pretty clear to people nowadays. For me, enterprise – the way [inaudible 00:44:10] with social enterprise, the business model part is key. I think without that, it doesn’t work.

I: Right, right.

P: But I think the museum part is the assets that it has. The buildings and collections and knowledge. [inaudible 00:44:24] that needs to be explicit, is that museums have buildings which have a lot of their own capital. They are landmarks, tourist attractions. They’re physical, and they have meaning and purpose in the city.
I: Absolutely.

P: I think a lot of the work around successful cities and the like is about how to use that infrastructure of the city. Museums as cultural centers, museums as tourist attractors; all that stuff. The museums physical building is an asset for the museum itself. The museum's collections and its knowledge – the knowledge amongst its workers – are the other two bits that are the core assets, I think.

I: Right. Wow, I like that. That was very, very much helpful.

P: Great.

I: Thank you so much. Quickly – I know we've been talking a lot, but it's really fun talking to you.

P: Yeah, it's great.

I: I'm enjoying a lot of your comments. You said you guys used – I'm going to move into more detailed questions. You guys use Slack and Basecamp. Can you talk to me a little bit about why you're using these ways of communication, and what does it do to your team?

P: Sure. Sure. I mean I think everybody everywhere pretty much nowadays is trying to figure out better communication tools for inside the business. We know email works; we don't necessarily like it for everything. We know that probably Twitter's a bit too public for some of the stuff we want to do and talk about. We need some basic project management tools. Basecamp we use, really, as a shared drive and project document space; project management space. I think other people would use shared network drives and Microsoft Project, or something similar. Basecamp for us is nice because it allows us to work with distributed teams – geographically distributed – and also across different networks. We often work with people in other parts of the world who aren't part of our physical network infrastructure. For security reasons Basecamp – it's a good way of communicating securely with them.

Then Slack is something that we use – Slack is a bit like an internal chat client Twitter sort of thing. My team uses it a lot mainly because it means that we cut down the number of emails we send to each other, which allows us to focus on stuff. Slack has channels, and we have private channels and public channels within the team. We can message each other. We often work with headphones on, or whatever. Or I'm in a meeting and I'll message someone on Slack. "Hey, can you bring this up to me?" Or, “Can you send me the figures on this?" It's just quicker than an email. It doesn't clog the recipients' email box. It's a chat client, basically. It's a chat client with more structure, and some of those features I think work really well for teams like mine. We don't use it across the museum as a whole. We use
Basecamp across the museum as a whole, but my team, for a lot of the agile work we do, Slack is – we couldn’t do it without it.

I: Do you think this is really important for digital teams to have this type of communication to be able to innovate?

P: It’s important for any team. Honestly it’s important for any team.

I: Any team.

P: Any team that’s trying to achieve something, make something, do something, needs to have the most effective communication tools available to it for what it’s trying to do. I can see museums as a whole using Slack. You can use Slack across an entire museum; it’d be great. You can plan exhibitions, you can do exhibitions with it. You can do anything with it. It’s better than email for some things. Doesn’t mean we don’t use email; we just use email in a more sparing way. We use email when we need to document things with other people. If I need to ask someone to bring me a cup of coffee, why would I use email for that?

I: Right. Doesn’t make sense.

P: I can use Slack for that and it’s really good. I could also send someone a draft of a report or a slide deck. We share a lot of our reading. All my team, we all post links to stuff, and we all read a lot of other things. Instead of clogging up each other’s inboxes with URLs for important business readings or silly videos of cats or whatever, we just do that on Slack. It’s there; it’s searchable if we need to get back to it; we can archive those things. It’s just that sort of thing, really. It’s just a [inaudible 00:50:11] communication tool. I guess that’s why I think a lot of people – yeah, it’s the same reason that you might use SMS still on your phone. It’s a quick messaging service. But it has search, you can share files, you can do all the other things that on SMS are a pain in the ass.

I: I want to ask you, what makes your team very famous for being innovative? If you give me the top two or three reasons, what would be the reasons? What makes your team different from other digital teams in museums?

P: Right now, I think it’s our speed of work, and our volume of work, and that we’re in the middle of trying to open a museum. We’re trying to open a [00:51:00] museum that makes a visible step change in how things happen publicly in – how exhibitions are done [inaudible 00:51:10] in museums. We do it all in public. We don’t – we operate in public, and we make incremental change in public, and we talk about – everybody here who writes code here has to write about their code. One of our new developers, Sam, just did a big post on how he changed the search interface; how he’s working on the search interface on our site to make it better. He didn’t come from the museum world. I was like, “Sam, you need to write about what you’ve learnt through this.” I think what’s interesting with the team here – and, to a
degree, the team at the Powerhouse – was – or my teams there in all the areas – was we tried to make our work public early. And I tried to get the staff to write about it publicly as a means of reflecting on their own way of working. Having a reflective practice.

But also that it helps us test our ideas. It helps us put our things out there and says, “This might be wrong.” We don’t shy away from that. I try to treat a lot of the work that I get done or have my teams do as a series of experiments. I welcome the criticism of them. I think part of what makes us an interesting unit here – an interesting example in a museum – is that we try to do that all the time. I would say that not everybody at this museum likes that. There’s numerous occasions where people have been upset by what we’ve posted on our own blog. Because they’ve felt that it’s been too open. But I’m on the senior leadership team; I make the decisions around that stuff. That’s fine. My job is to protect my team from that, and to let them continue to do experimental stuff and deliver what they have to deliver.

It’s not as if we’re not doing the work; just that we’re always looking for new ways to do it better. We’re building a risk tolerance in. I think part of my job has been to help the museum feel better about that risk. [00:54:00] I’ve never taken any of the things down that, perhaps, [inaudible 00:54:05]. I defend that work. It’s like the reason we’re doing this is this. You might not like it now, but in two weeks’ time it won’t be that; it’ll be some other thing, and we need to be here to get to that place in two weeks’ time. Or six weeks, or whatever it is.

I: Sometimes when you do a lot of experimentation, you fail.

P: Yeah. Totally.

I: And the museum sector in general fear failing. But if you do not fail, you’re not learning. If you’re not learning, then you’re not improving.

P: That’s right.

I: So it’s part of the process to innovate, is to experiment and fail, and learn from your [inaudible 00:54:47] and improve.

P: I think part of that – I think a lot of people say that now. Particularly in senior leadership positions. What they don’t say – which is the important part of that – is that it’s important to fail publicly.

I: Oh, yeah.

P: If it all happens behind closed doors, the only criticism you will get is from the people who are already doing it a particular way.

I: Right.
P: If you fail publicly, you will get people who will criticize you who will say, “I am already doing it better. Why aren’t you doing it like this?” You will also get supporters who say, “Wow, that was a really interesting way of trying that. Did you think about this other way?” If it’s only internal, you never get that feedback from people outside.

I: That’s true.

P: You don’t expose yourself to both the potential for public criticism, but also the potential for public support. Or for public ideas. Open innovation is very important; the open part is that it has to be open publicly. If it’s not open publicly you don’t get the benefit of the world criticizing your work. It’s hard to take that on though. It is hard to continually face that criticism. That’s part of what, I think, the opportunity is with network technologies now; is that someone in China can come and say, “I think your work is really crap. We’ve been doing this for three years now. It’s way better. Here’s why.” I’d love to hear that. I’d love to hear someone come in and say – actually it was interesting on Sam’s recent post about the search stuff. People came in and said, “Hey, I’m working on this in the Netherlands.” “Hey, I’m working on this in the UK. Have you tried it like this?” Sam had never been exposed to that before. Sam had come from another sector; he hadn’t worked in museums prior. He was like, “Wow, all these people.” There wasn’t all that many, really, in my world. [00:57:00] But in his world, for him, it was like, “Oh my god, these people actually –” Yeah. Go and talk to them. Send them an email. Follow it up. That’s the thing.

I think there’s a lot of opportunities for museums in that museums have to be a little less risk averse in that sense. I think what’s happening is that they’re mixing up the mission risk with the enterprise risk. They’re mixing up and thinking that if we make public failures in our mission, we will affect the enterprise. It’s not – I would disagree with that. I don’t think that there is – these are not spectacular failures which lose public trust. I believe they build public trust. But others might say they lose public trust, and thus turn people off donating money, or turn people off visiting the museum. I would say though that the proof in my work is that hasn’t been the case; in fact, during this public focus has resulted in – in this case – millions of dollars of money coming to this museum. And in the case of the Powerhouse, millions of dollars coming through new government projects and visitor action. You’ve got to trust that that’s going to happen. It’s not going to happen for everyone, and it’s not always going to work for me. But I think there’s a reasonably – at least in our case here – a clear line between our experimentation and literally millions of dollars of funding.

I: I see kind of fraction between the culture of innovation to experiment and fail on one side, and the leadership of the museum on the other side. Is that always the case in museums? And how does it put museums at risk not to innovate?
P: Of course, of course. But I think it's different. It's different in museums. If I was running MoMA or the Met, or working in those institutions in the senior leadership role, I would have very different audiences.

I: How?

P: I think if you work in a big tourist museum, you have a very different audience who you're innovating with. You're innovating with an audience that's probably only going to visit you once. You're innovating with an audience who's read what you're supposed to be like in a guidebook. And that tourist guide [01:00:00] says, “It's going to be like this.” They get disappointed if it's not, because that's what the tourist guide said. Like, what the hell? That's very different to what's possible in another sort of museum that doesn't have as much tourist visitation and perhaps works with local communities more. So that's where the enterprise and mission part come together more in defining who the audience is, who's paying for what, who gets to say what sort of museum it is, who gets to prioritize who's more important than others; lots of stuff.

With a public museum with government money, the government sets that. There's been plenty of examples around the world where it's free for people who live in the city, or free for people who live in this country, but tourists pay. Or free if you have a driver's license, but not for if you don't or whatever. That sort of thing. There's plenty of examples of that. The definition of who the audience is also creates parameters around what acceptable innovation – what the areas of innovation that are acceptable to do are. On the outside. On the inside, of course, it's all about collections, conservation, exhibition building; all that sort of stuff. Building of management. Anything that reduces the financial cost of those practices, but doesn’t reduce their effectiveness is important. There was a really interesting piece of research that came out a couple of years ago in the conservation space that was talking about being able to save 50% of the electricity bill of a museum storage facilities by raising the temperature a single degree. Right? Massive savings, potentially.

The museums that were experimenting with that had to weigh up what was the impact of a degree change on the preservation of stuff. [inaudible 01:02:01] forever. Was it worth the risk to increase the temperature from – I think it was from 17 degrees to 18 degrees Celsius in the storage facility; something like that. Was it responsible to do that for the preservation of all these objects purely on financial terms? What about in terms of sustainability and greenhouse emission; all that stuff. And the museums that did took a risk to do that. A very big risk, because if something starts decaying, it's not like you can put the temperature down and it goes back. It’s gone forever, right?

I: Right, yes. Yes.
P: I think that sort of business innovation is something that’s really interesting too in that museums have those challenges. Museums are not like a business that can fail. [01:03:00] When a museum fails, their collection is sold and distributed all over the world; it’s lost. I think you see this a lot. Museums – I think as Rob Stein kept saying – we’re loss makers. We have to be better at choosing the right things to lose money on. Because we’ve got to be around forever. Well, forever in quotes, obviously. We’re not, but it’s that sense of – and others would say, yeah, the thing that you should be preserving is your relevance to the community, not the collection. It’s more important that the community you serve wants that collection preserved than you preserving it. If the community doesn’t care about it, it doesn’t matter that it isn’t preserved. Others would say there are some things that you should preserve whether the community wants it or not.

I would say some of the destruction that’s going on in the moment of historic sites. A new community comes in and says, “We don’t want this.” and blows it up or burns it down. Those are losses forever. There may be some things as a society or as humanity we collectively agree we should preserve forever. Maybe the pyramids, maybe the Mona Lisa; who knows? How do we decide these things? Who decides these things? That’s what museums are there for. Museums need to make those calls – or some of those calls – around that stuff. But then, we need to make those calls with a sense of legitimacy. And I think the legitimacy of that call to preserve particular things – whatever they are – can only come when the community is actually supportive of that institution.

The public libraries thing, again, is a great example of that. Again, when someone tries to close a public library down, the community is like, “No way. Don’t close that library down.” You saw this also in some of those other examples – which have been the result of war and other things – which is communities come together to strongly protect stuff that really has been cultural heritage, and not in the grand scheme of things; that had a greater appeal. People will create human shields around museums in times of war. It’s crazy. In Egypt, the protection of the museum in Egypt during – that was really interesting. Why did the community do that? I would expect that almost none of the people who protected that museum actually visit that museum. [01:06:00] So why? That’s the sort of mission stuff that I think museums need to be careful about. That’s what matters.

I: Yeah, that’s true. Great, Seb. I really appreciate your inputs here. Really, really great thoughts and ideas. Yeah, thank you so much. I have no more questions for now.

P: Cool. No, no, no, if you want to do this again, no worries at all. [inaudible 01:06:32] probably a bunch of other stuff I can send over to you.

I: I would really appreciate it, yeah. Also I would like to interview more of your team, if it’s possible.
P: Sure. Yeah, of course.

I: Hopefully they can take the survey. You did the survey a few weeks ago and it was very helpful to me to inform my research. So they can do that. Also I have a form [inaudible 01:07:00] about how we work, and the pattern of teams. I want to just map out how you guys work. That would help me a lot, because your team is very innovative, and very well known for the work of digital innovation. That would be really, really helpful to me, and the sector in general. Can I send you this form and hopefully you can –

P: Yeah, of course. No, yeah, I'd like to have a look.

I: Okay. Sounds great.

P: Cool man. No problem. I'll send it [inaudible 01:07:31]. Probably the best people in my team to have a chat to would be Aaron, of course. Aaron would be really good. Aaron is interesting too, because he comes from the private sector; having worked also at Flickr for many years. [inaudible 01:07:45] from being startup to its phase at Yahoo. So he's got some really interesting insights into how innovation occurred there in comparison to here. He's very frustrated by some of the ways things happen in museums. But he's also – I think he's very aware that it's not like it's got a lot of things that are going for it that weren't present at Yahoo. I think the other thing importantly, I guess, in the way we work here is that people who work in tech like to be able to show their stuff. I think a lot of people who work in museums in tech never get the chance to show what they've done, because it never goes live. I think part of the – one of the things that keeps people excited in my team is that all the stuff that they do –

I: Goes out.

P: Goes live. It goes out. It's not like – I sign it off and it's there. It's done. That creates a very different sense of reward for their work. Because so much of this stuff is just hard work. [01:09:00] It's sitting behind a screen, and there's no public face to it. That's one of the things museums – I think a lot of people who work in museums – a lot of people who build exhibitions – where's their credit? There's no credit. They at least did a movie, those huge credits for people who made that film. The person who makes the sets, the person who served the coffee on those sets; they get a credit, right? Where's that in a museum? All that behind the scenes is hidden. I think part of this is about giving people public recognition – and responsibility for that recognition. I remember at Powerhouse. One of the things we did at Powerhouse – we talked about this a lot. And actually when I was running a bunch of teams there, one of the teams that one of my managers were in was very upset when we talked about crediting them. "No, we don't know. No, no, that means we're responsible. I don't want – no, I don't want my name on that." It was like, "All right guys, we need to talk about why you don't want your name on this."
I: Because you did it.

P: [inaudible 01:10:11] stuff, right?

I: Yeah, you did it. Yeah. That's interesting.

P: It was really interesting. But it was interesting that people had – because they'd lived in this culture of not being credited for things – they had also not been responsible for things. They didn't feel ready to take that responsibility, even though they were responsible. It's something that's crap.

I: It's psychological. Yeah, yeah.

P: But that's tough. That's tough. So it's not as easy as just saying, “Yeah, let's credit everybody.” Some people actively in this sector don't want credit, because they're a little bit embarrassed by what they do. Or they've had to make do because they haven't had enough money or staff to do it the way they want to do it. So they've had to do it in another way. Which I think is an innovative practice in its own right. But they’ve never had any feedback on that, so they're a bit wary or cautious about being blamed. Again, it's that risk tolerance is super important.

I: Also I think in the museum sector being too much – we self [inaudible 01:11:23] our self too much. Because the public come to us, and we want to look really good.

P: Yeah.

I: But this is not always the case. It's okay to make something and it doesn't work the best way, and you come back and fix it.

P: Yeah. Yeah, yeah, yeah. Completely. That's how it's supposed to be. But that means negotiating a new relationship with that public; with that audience. I think people are very tolerant of that – if you're upfront about it. If you go to the science museum in the UK – or basically any science museum [01:12:00] with interactive stuff – the Yelp and Trip Advisor reviews will be full of comments about things not working. Don't go there; when I went, these things weren't working. If the museum was upfront about how hard it is to keep those things working and how they were made, I think there would be a much greater tolerance for, “Oh, it's not working now. That's okay. We learned about how it was made, so that's fine.” But everybody sort of sees – I think when museums present a very polished face and don't reveal how hard it is to make stuff, they run the risk of being compared with Disneyland, or the places that have huge amounts of money and huge amounts of maintenance team whose only job is to make sure that stuff never breaks down. Museums don't have that.

I: No, no.
P: They need to be a bit more honest about, "Well look, we’re trying this out. At the moment it's broken, but we've got these other things going on. Here's a free ticket." Or whatever it might be; whatever it is. You know what I mean.

I: Yeah, yeah.

P: It hurts us when we don't – when we hide all our working.

I: Absolutely, absolutely. What do you suggest we go from here? Should I email you the form and the link?

P: Yeah. Send me the form, and then send me a request to talk to some others in my team, and I'll connect you up with them and you can figure that out.

I: Okay, sounds great. Sounds great.

P: Cool.

I: Well again, thank you so much Seb.

P: Yeah, no problem.

I: I hope we can stay in touch and –

P: Yeah, for sure. I'd really like to read the research when it's done to; it'd be great.

I: Yeah, great. All right.

P: Thanks man.

I: Have a good day. Thank you.

P: See you.

I: Bye-bye.

[end of audio 01:14:08]
Robert Stein Interview

It’s 2:23 p.m. right now. We are at Dallas Museum of Art, sitting in the coffee shop – beautiful place – with Rob Stein, the deputy director of the museum. Rob, would you like to start with giving us a little background about the museum, and how you took the job here in the museum?

The Dallas Museum of Art is located in downtown Dallas, and has been a museum in the city for about 110 years. I joined the museum in April of 2012; so a year and a half, plus a little. Before Dallas I was deputy director at the Indianapolis Museum of Art. And came to Dallas to see what we might be able to do in a larger metropolitan area in a museum that has really made itself about accessibility and openness to the public. That was something that the DMA had been doing before I came, and something I’m interested in continuing to do. My own personal background is in software and academic computer. But I’ve kind of gotten hooked on museums for the last decade or so.

That’s amazing. You were at Indianapolis, and you did very pioneering work with innovation. You came here and you continued to do this. I would like to talk about that. But before we talk about the practical part of innovation, I would love – if you don’t mind – to talk about some conceptual and generic questions about innovation. You as a thinker and museum director, I’m sure you’re going to have great input to help me understand innovation in museums. I want to start with the definition of innovation. What do you think is innovation?

That’s a really hard question.

It is.

I doubt that anybody really has the right answer. I know it’s not a few different things. Innovation is not technology. Digital technology, electronics, mobile, social media is not innovation necessarily. While I think change is part of innovation, I don’t think change itself is innovation. I’ve asked myself this question; is innovation always good? Is it inherently good? I don’t know the answer to that question. I think maybe by definition that innovation is a change that results in a novel or unique approach to solve a problem that hadn’t been tried before. I guess if it’s in fact solving a problem, then it could be seen as inherently good.

I think there’s a lot of pursuit of innovation; which is one of those things that I think may in fact spoil the innovation itself. It’s a little – you know the Heisenberg Uncertainty Principle? You know this? You can’t observe a very small particle without changing its nature. I think innovation might be a little bit like that. It’s hard to go after innovation for innovation’s sake and actually achieve it. I think if you are more driven by an outcome that has
intrinsic value, then you are more likely to innovate upon your way towards achieving that outcome.

I: I read a lot about innovation from business study’s point of view. They talk about process innovation, and innovation with products; you innovate products to sell to the public. We as a museum sector, we didn’t do much work on conceptualizing innovation. How can we reconcile the understanding for innovation within the museum sector with the business studies? Or is it even necessary to do this? What’s your take on that?

P: It’s difficult because we don’t have a product or service that’s equitable to the business and commercial sector in the same way. The things we have that are closest to product and service are our venues or our visitor experience as a service. But neither of those is necessarily the thing that we’re after in the non-profit sense of what a museum is. While – for instance, I could run a [00:06:00] museum for – theoretically; philosophically; hypothetically – I could run a museum for which 100% of the visitors are 100% satisfied with their visit, and yet not achieve my mission.

If we think of that mission as an education mission – more education in terms of learning, and emphasizing or enhancing a connected place of relevance for art in your life in a way that you would not have without the museum. Those are very intangible outcomes, so they’re very difficult – I don’t know that there’s a commercial equivalent to them. There may be more equivalence in the medical field. Health and wellbeing, personal self-image and identity, self-expression, creativity. I think creativity and innovation are sometimes duals of each other; one feeds the other, and vice versa. But no, I think it’s hard to apply the business sector models of innovation to the museum sector because the resulting products and services are very different.

I: Right. That’s true. If we want to take an example of innovation – of course in the business sector, it is easy to point out to a lot of things. Cars, airplanes, smartphones. In the museum sector, if we want to point to some key innovation projects, can you think of any?

P: Certainly. I think that a very early one – earlier, I should say – the San Francisco Museum of Modern Arts program called Making Sense of Modern Art was an approach that Peter Samis and his team there used to apply technology to the problem of learning connection and understanding of art that sometimes very conceptual; difficult to grasp. I think that that is a real example of an innovative program. I think that a lot of the things that Liz Neely at the Art Institute of Chicago, and Don Undeen at the Metropolitan Museum are doing in the area of [00:09:00] 3D printing, scanning, modelling, and mashups; are innovating a different relationship with objects. In our collection, two thirds of the objects are three dimensional. For a two dimensional object, you can possess it. I can give you a .jpeg image of it and you can have it on your phone, and you can live with it.
For a three dimensional object, I can't do anything of the sort. We've never really had the opportunity to form relationships with those objects in the way that we do poster prints, or an mp3 of a song. How personal people treat their music collections. You really can't do that for object collections. I think that's a really interesting area to think about. I think a lot of what Seb Chan's doing at the Cooper-Hewitt around collections. Not as much from the collection side of things, but from the process side of things. Really sincerely adopting the iteration as metaphor in the process of creating an online collection is seriously innovative; something that we're trying to do here as well. Is it meta-innovation? It's innovating around the process of creating a product; which in this case is a digital collection. Maybe there's an alignment for you with –

I: With the process innovation.

P: Exactly. Those are some off the top of my head.

I: Yeah. That's actually very good examples. What you said now made me think. For example, if there is a museum in the UK has been working on 3D scanning and printing. And then another museum in the U.S. a few years later come and start the same process. Would it be still innovation? Or it's kind of – or the innovation actually happens when you do it for the first time in the sector? Or does it even matter to think about it that way?

P: Right. There's probably context for innovation. Local context, national context, sector context. Many of the efforts I've been a part of have been called or named innovative by my peers; but really they're repackaging of approaches in a new way from other sectors. Are they innovative in the cross sector sense? No. Are they innovative in a local sense? Certainly. Are they innovative in a field wide sense? That's good to get that on the recording. We dropped a great big tray of food. Just so you can remember this. Sorry. Forgot what we were doing.

I: We were talking about local innovation and sector innovation, and how we can borrow from each other.

P: I think, for example, the exact same method applied in two different museums can be innovative in a local sense, in both places. It's new to you.

I: Yeah. That doesn't mean it's new to everybody. Makes sense. You wrote some things about the environment, or the conditions for innovation, which may include the willing to take risk. Would you talk a little bit more about the healthy environment for innovation, institution wise?

P: Yeah. I think one of the features we almost always see around successful innovation is that they are – they're often not the stroke of genius that you wake up in the morning and aha, I have innovated. In fact, they're a point along an arc of iterative practice. Some of what I’ve written about is why the technology sector is frequently highlighted as being innovative. In museums
particularly compared to the more traditional art, historical, curatorial practice. Why is one considered more innovative than the other?

What I think is probably true is that the project life cycle for a curator is either an exhibition, an acquisition of an object, or a publication. Those things can take between 18 months to ten years to complete. [00:15:00] The lifecycle of a project for a technologist in museums is sometimes on the timescale of weeks or months. A nine month project for a technologist in a museum is a long project. That’s not saying anything about innovation, but it’s saying that in a decade’s worth of time a curatorial professional may have completed two or three project lifecycles, but a technologist may have completed two or 300 project lifecycles. There’s just more opportunity for learning, evaluation, and change.

I think there’s an Air Force acronym that you may know more than I do. I think it’s OODP. It has to do with Air Force fighter pilots, and the decision loop. The strategy is to make your decision loop as small as possible, and that the fighter pilot that wins in a dog fight is the one with the shortest decision loop, because they can think and react faster than their opponents. I think that’s kind of –

I: Same approach.

P: That’s, yeah, sort of a mirror idea that I think – for, really, any field – the faster you can iterate a full product lifecycle, the more chances you’ll have to get it right or wrong. If you pay attention to whether you’re improving or not improving – if you self-reflect in that process, then more learning can take place. Then I think you’re more likely to innovate something new under those conditions.

I: That’s great. You mentioned the curatorial department in the museum in specific. But there are other departments in the museum as well. Like education departments and conservation, for example. Is this related to these departments as well?

P: Yeah.

I: Or that could be different in other departments?

P: So to take one, education; museum education. As I said earlier, I think education is part of our mission. A lot of what I’ve been thinking about in Dallas is, if what I really want to do is drive the mission, how do I do that? How do I know if it worked? In the education field in museums – and really in cultural heritage in general – there’s very little understanding about what the concrete products of an educational experience are, and how they might be observed and quantified. [00:18:00] We end up with a situation where the education staff does many thousands of programs in the course of a year.
Another one of these situations where intrinsically they’re all good. A program – which is a deep experience with five teenagers in Dallas – it’s very difficult to say that that was a bad idea. Likewise, another program with seniors who spent time in the galleries. It was very difficult to know that that was a bad or a good idea. Especially when you hold – you’ve got hundreds and hundreds, or even thousands and thousands of programs in a year. How do you know which ones you’re being relatively more or relatively less successful at? So very –

I: There’s no evaluation. There’s no –

P: There’s no evaluation. There’s no way to actually –

I: Reflect.

P: It’s not about killing one program and promoting another; it’s about continuous improvement over time in order to achieve those outcomes. We’ve done a lot of work here. The DMA Friends program is really a very practical early step at trying to qualify and quantify what successful engagement with art looks like on an individual basis at the scale of a museum. We’ve done things before where we can, in an abstract sense, tell you we have a bigger audience this year than last year. Or we took a sample of 100 people out of half a million, and they all have great experiences. We’ve never gotten to the point where Haitham came and Haitham did x, y, z followed by this, and he returned three months later. And in both of those scenarios he had a great experience.

We’ve never done that at an individual level for the entire audience. And no place has done that. We’re not getting it right yet, but we’re setting up a structure and condition and infrastructure to begin to learn about our own practice. I don’t know if that’s innovation yet, but it’s that same idea of set up the learning process and infrastructure so that you can repeatedly measure whether you’re doing a good job or not.

I: I think that the DMA Friends program is amazing. I have a lot of questions about it. I really want to start with the idea. How did the idea come about?

P: Well the idea is that we felt like what we really wanted to do – the function of a museum should be to act as a catalyst that connects people to experiences with art. Those experiences may be personal, they may be social, they may be completely internal, they may be academic, they may be idiosyncratic. Ultimately those experiences are the point at which learning, change, self-identify, self-expression happen. We made the decision that we wanted to eliminate the admission charge. From business model perspective, admissions were only driving about 2% of the overall revenues of the museum. Roughly 90% of the museum’s revenues were driven by philanthropy. So if you wanted to actually make a substantial change in the revenue picture of the museum, you’re more likely to do that through a philanthropic channel than through an earned revenue channel.
As we thought about it, what’s the best – why do philanthropists give money? They do that because they believe it’s doing some good work, and doesn’t – broad access to a diverse population in this city. Isn’t that evidence of good work? Our theory was if we eliminated the admission charge, welcomed a broad and diverse audience that may not have ever come before, that we’d actually do better financially. And we have. That was part one. Second part was that in wanting people to feel no impediment to experiences with art, we realized that for somebody that’s not used to coming to the museum the first question they got asked when they walked in the door was, “Are you a member?” That sounds and feels an awful lot like a country club mentality. In fact, what that meant for so long was, “Have you given us your money upfront or not?” That’s what it meant; that’s membership in most places. It’s a bet. The visitor’s making a bet that they’ll spend more time and money with you, and so save in the early parts by being a member upfront. And the museum’s placing a bet that you won’t.

What we figured we cared more about were the number of people who were invested in the museum who participated and did things with us first. We treated participation as the economy metric of membership; to say that the more you participate with us, the more benefits you earn. Some of those participations may cost money; it may cost money to park, or it may cost money to eat here, or visit an exhibition. The more you do with us, the more you can earn thank yous and credit for that. That was the business model.

I: It’s amazing because also I’m thinking about the loyalty program some businesses do. Like American Airlines or Target. It’s kind of taking a concept from businesses and applying it to a museum in a very, very clever way. Was that a leadership idea? Or did it come from the bottom up?

P: It was an idea that Max Anderson –

I: Max.

P: our director, and I had together. Here’s the iteration. We had both been in Indianapolis, and we were both a part of dropping the admission charge in Indianapolis. For the same reasons. So we did that. We did not make any shift to our membership platform in Indianapolis. What we noticed was there was a corresponding drop in the number of philanthropic members, because there was no incentive or initiative. There’s no way to really fix that. That was 2006. It took us another six years to have a second idea about how to address that and do it differently. When we came here, we decided we’d do it differently.

I: That’s pretty amazing. I want to go back to the healthy condition for innovation. How the leadership of any museum or art institution promote innovation in their institution? How do you encourage new ideas, nurture them, and turn them into real projects?
P: I think it's threefold. The first is that you have to reduce the penalty for failure. Because museums have been very conservative places for so long, there are very traditionalized practices for how things are done. To step outside of that practice is a perceived risk. You have to eliminate or lessen the perceived consequences of taking that risk in order for people to change. The second is to really think about reducing the size of the problems that you're trying to solve or attack. Most problems in museums are at that multi-year timescale. Many of them are, and many museum professionals think about their work in a multi-year time scale. It's why it'd be interesting to study the career trends in museums and correlate it to innovation. I think the churn is so low in many museums that fear of change is really high. If you could do anything to shorten the time cycle – both for exhibitions, for acquisitions, for publishing, for the web, for digital, education; if you can shorten the time cycle and include clear metrics of what you're trying to achieve – so many times we go into a project, we don't actually know what we're trying to get out of it.

What do I expect to see as a result of doing this? Clarifying that and making a viable way to actually track results is critical; you can't actually make a move forward without that. The third bit would really be to put a bounty on risk taking, or trying new things. In saying that I mean fund change. Have a small bit of money to try things that make no sense. That you would never do before, and you may not get anything out; you're not guaranteed of anything at the end of the process. Encouraging people to try something they would have never tried before that has no – is not mission critical idea. It almost doesn't matter what it is. It's exercising those muscles of thinking differently; getting outside of – you can't get outside of the box unless you actually step outside of the box. This example we talked about this morning with Raspberry Pi's light curtain in a gallery exhibit. We could do that with standard spotlights. But for me to put a few thousand dollars into buying some equipment so that a few staff members who are excited about it could experiment with embedded computing and electronics and installation and the visitor experience in a gallery – that's where innovation happens. That's where you're going to get an idea that nobody's ever thought of before.

I: That's true.

P: You can't get new ideas doing the same things.

I: No.

P: You have to start by doing different things. They are not in and of themselves innovation, but they're the fertilizer.

I: So eliminate the consequences of failure and invest in new ideas. Have a little bit of money; invest it in projects that you're not expecting anything out of them. They are not really important to the mission of an institution; it's just to try new things. And what else? You said two more things?
P: Cycle time.

I: The cycle time; that's very important. The cycle time.

P: And about the middle one, it's not that you don't attempt new things that aren't important to the mission of the institution, but attempt things that might be important that have no consequence for failing. It's like painting a room in your house a crazy color. You know what I mean? You would never do it, but it might give you a different experience in the room. And what, the penalty for failure is another can of paint to paint over it if you don't like it.

I: Exactly, exactly.

P: Stuff like that. It's buying small, little -- what seem to be toys? Right? Or trying to apply whatever's the hot flavor of the moment to something new, but in a way that's not -- you're not betting the farm that this is going to change the world. The more important outcome for that is the play and enjoyment at work; an experience that's out of the normal, that's specifically different than everything else you're doing. And something that has the hint of a potential for change. Or promise. You're kindling joy and hope and playfulness. Those things are really easy to kill.

I: Yeah, that's right. I talk to some people about museum innovation and they would say, "Why do museums need to innovate? They should focus on their work and do what they are good at. Innovation is not part of the museum function." I'm sure you disagree with this, but how would you respond to these type of questions?

P: Because the world changes.

I: Right.

P: [00:33:00] You can either be a rock in the stream or you can be a leaf. The world is the stream and its changes. It's flowing by us. You can either be anchored and left behind, or we could change with the world. Depends on your goals as a museum. For some museums, they may be very content with remaining exactly the same and having no public response or mission. If your sole and only goal is to collect, preserve, and interpret works of art, you don't actually need the public. You don't need to do -- the best way to care for a work of art is to lock it in the dark and not show it to anybody.

I: Exactly.

P: That's already known. I would say even for that, if all we're doing is collecting and preserving, you still need to innovate. There are new techniques for preservation.

I: That's right.
P: There’s new insight from scholarship. People who ask that question are ignorant and have a misinformed opinion of what innovation is.

I: Right, right. I agree. I want to move to the practical questions. Do we still have time?

P: You have a 1 o'clock. We're two minutes from one.

I: Two minutes.

P: But those guys can wait a little while.

I: Good. If we talked about – we talked about most of this stuff. [inaudible 00:34:56]. We talked about the environment for innovation. Let's talk about the digital team here in the museum. How is the team structured, and how do they work inside the museum with other departments and outside the museum with other organizations to make new things? To be innovative?

P: Right. The digital team is sort of a hybrid – at least my idea of it – is sort of a hybrid model. In that you'll have specialists who may be software developers or technicians. But the digital team expands into other departments as well. Ideally a really diverse core across all departments would see themselves as part of the digital team. Because in fact we use digital and technology in every aspect of [00:36:00] professional practice; from administration to financial analysis to art historical scholarship, to now digital publishing, to learning systems, new graphics design.

I: Everything.

P: There isn’t an aspect of the museum for which digital is not currently impacting their work. This is really about being a professional in your chosen discipline who uses whatever tools are available to them. Including digital. For an educator, they're a part of our digital team. Their job is to represent the goals and needs of education when it comes to the application of digital technology. We have curators on our team; we have marketing folks on our team; we have graphics designers on our team. Ultimately we form cross departmental teams around a job or responsibility. We have a team – cross departmental team – for the web that reflects as broadly as possible the variety of expertise that is inside the museum, and is essentially a consensus building, decision making team that decides what strategy for the web is according to a confederacy of those different interests.

I: That’s really interesting, how you make the connection between departments and link them together by other teams, so ideas get crossed. It’s kind of like making bridges between islands, or between – I don’t know.

P: Yeah.

I: Departments. This is a normal business model for museums, or this is –
It's not untypical. It’s normal to me. We did similar things in Indianapolis, and we are doing that here. We have a few – well, you know what, it is fairly normal for museums. Museums have exhibition teams, and have always had exhibition teams. They tend to span marketing, education, curatorial, and collections. As well as design. Exhibitions are a great model for that cross departmental collaboration. Almost all museums – art museums – are doing that in some form already. Extending that concept to the web – we have a web team – to our Friends program – we have a similar cross departmental Friends team. We have a branding team that is reflective of the whole museum. We have a staff recognition team that’s comprehensive.

I: Awesome.

P: When we do strategic planning, the strategic planning is done in that same sort of way.

I: It’s typical.

P: That is not that innovative. [00:39:00] That has been done many times before.

I: I heard people also talking about working with other museums. Even I heard something about a staff member who worked here and in another museum as well.

P: Yeah.

I: Do you do the same linkage with other organizations and other museums in the community?

P: Yes. The main competitive advantage that museums have over corporate America is that we don’t have the need for competitive advantage the same way a company like an Apple or a Google does. Apple needs to work very hard to preserve its trade secrets and its innovation when, in fact, a non-profit entity does not. The competition between museums is actually a myth. We’ve seen over and over again that museums who are more successful in their local area drive more success across the region. The real thing is you’re trying to evangelize local consumers to seek culture as a meaningful thing in their lives. If I succeed in doing that in Dallas, then the Nasher across the street is going to get the benefit. And the Kimbell in Fort Worth will see the benefit.

It’s especially easy to see that when you extend it to a national scale. Where in Chicago, if I collaborate with the Art Institute and I have a good idea, it does not harm me in the least for the Art Institute to adopt that same idea. In fact, it may actually increase my impact for people who may travel back and forth. That’s a key competitive advantage we have over the industry. We’d be stupid not to use it. Our real competition is sports teams, the television, and X-box and YouTube, and intermural sports and dance
lessons; that's our real competition. We might as well use every bit of our arsenal to take care of that. Absolutely, collaboration across institutions.

I: Wonderful! Thank you so much, Rob! Should we stop here?

P: [inaudible 00:41:46]

[end of audio 00:41:47]
Interview with Toni Kiser

[beginning of audio 00:00:00]

I: It is recording, I hope. Going to move this closer here to you. All right. Today is October 16th, and we have Toni Kiser from the National World War II Museum in New Orleans. Would you like to start with introducing yourself and your role in the museum?

P: Sure, sure. Toni Kiser. I'm the assistant director of collections and exhibits and the registrar. I started at the World War II Museum in 2008 as the registrar. Then about three years ago I took on the role as the assistant director of the department, as well as keeping my duties as registrar. One of those deals. Then as the registrar I was working extensively with our three dimensional collections; cataloging, object photography, nomenclature; all those standard things as well as packing and shipping and any of that. As the assistant director I started to take on more roles as far as organizing exhibitions, what goes out on exhibit, what goes out of things going out alone, and managing the department as a whole, and our overall project to work on digitizing collections and getting a new collections database. So that it would work for both our archival collections as well as our three dimensional collections. The database that we had previously was not really sufficient to handle both. We were kind of working around to get it to work to both types of collections. We, about a year and a half to go, we switched to KE Emu – E-M-U – database, which has modules for all the different types of collections that we have. Which is really helpful.

I: When I talked to you the other time, you told me about a very exciting project you guys are going to start on; a digital project.

P: Yeah.

I: You're over this project?

P: Yeah. One of the projects that we've been working on to help bring our collection digitally to people is – one of the things that we have at the museums that's really unique is over 3,000 oral histories with World War II veterans. These were started by Steven Ambrose, the author. Band of Brothers, if you're familiar with that. His work has continued at the museum where we have a team of five who regularly travel the United States – and sometimes even to Europe – to collect oral histories with World War II veterans. They offer a really unique and personal perspective on the war; because everybody's experience was unique in its own way, too. We wanted a way to bring together the oral histories [00:03:00] – bring them to life to people. But then also find ways to incorporate our archival and three dimensional artifact collections together.
What we did was we developed a program – well, we really call an experience that we're calling My Journey. We selected 50 real people – most of which we have oral histories with, but in some cases we don't. We did decide to feature people who were killed in action. It is part of the experience; about a 1/8- or so of World War II soldiers were killed in action. We wanted to make sure that we represented them well. What we did was we made it so that as you go through our galleries there'll be different stations – kiosks – where you can check in. You have a card, a dog tag – it has a dog tag printed on it; we call it the dog tag – but it's an RFID enabled chip, and you'll select your person out of the 50. We have different ways that you can do that – you can select by branch, you can select by theater of war. Then you'll see portrait photographs of them, and their hometown. You might just see somebody from Brooklyn, New York, so you pick them because they're from Brooklyn too. Sorry, that was mine.

Once you select your person out of the 50, as you go through the galleries you'll check in with them, and you'll see what they are doing at the same point in time as our gallery's kind of follow the chronology of the war. Once you get home – so you'll get a little short video at these kiosks that incorporate their actual words as well as some narrated video to give you the context of what they're going through. When you get home and you check in with your RFID card – which we've asked people to also give us their email, so we'll email you a link – you'll also be able to explore archival collections like photographs, letters, and diaries. Or three dimensional artifacts that tie to that person's story.

If, for instance, you picked an army nurse and you follow this army nurse all through the war – it's Battle of the Bulge, coming home and working at [inaudible 00:05:27] after the war – when you get home and you look her up on your computer, you'll be able to watch her entire two and a half hour oral history. You'll see pictures of other nurses serving in the theater. You'll see pictures of nurse uniforms or medical equipment; things like that to help give you a broader perspective on her service, or the experience of nurses in general. We've tried to pick a diverse group of people as far as all the branches of service – including the merchant marine, men and women, [00:06:00] different jobs throughout the service. An infantryman versus a nurse versus a ward platoon commander. Lots of different things like that. Then we also include Holocaust survivors, civilian internees who were imprisoned by the Japanese in the Pacific theater. We've done a lot to try and make sure that we have a really broad range of things that might interest people.

I:

It's very exciting because now we can connect visitors even after they leave the museum; they still can access the collection from the convenience of their home, work, or anywhere. Also, it allows you to engage museum audiences with objects in archives, which are not on display. It's really a fascinating project.
P: Yeah. What we kind of hope too is that kind of how you get sucked into YouTube – you know, you watch a YouTube video and then you click on another one, then you click on another one. Then two hours later you've just watched YouTube for two hours. That's kind of what we hope will happen. What you'll see is this person that you picked. But there will also be these elements that will pull you deeper into the collection. You can see if you like this photograph of nurses, well, we have 100 photographs of nurses that you might be interested in. That's kind of the idea; once we get you into the website with this –

I: [inaudible 00:07:26]

P: Yeah.

I: Stay and watch.

P: Yeah. We'll have about – we load them in batches as they go online. Pretty soon we'll have about 15,000 of our photographs online. Which, really, because we scan front and back is actually closer to 30,000 scans online. Then we'll have about 150 three dimensional artifacts. That'll start going up as well. 2D things were easier to figure out the standard on how to scan it and save it in the tif files and all that technical metadata and cataloging. It was a little bit more – mostly just because so many other institutions have been cataloging photographs and digitizing photographs for a long time, so there were a lot of really good standards already out there. So many museums are doing three dimensional items so differently when it comes to digitizing a three dimensional artifact. It's a lot different to digitize a three dimensional artifact. We've been trying to figure out exactly what our standard for three dimensional's going to be. We're going to have about 150 of these go online soon. Of the 50 people that we picked, they'll each have five elements around them when you get online. Some of it will be 2D, some of it will be 3D, and some will be oral histories. That'll be the next [00:09:00] batch of three dimensional pieces that get done; will be all the things that we photographed for that.

I: That's great, Toni. I want to ask you, how did the idea of the project come up?

P: It was initially the idea of our executive vice president Steven Watson. It was kind of – it started before I was at the museum. Probably more than ten years ago now was this idea that there had to be this way to listen to – because we always had oral histories available in our galleries. That there had to be this way that you could listen to pieces of a person's oral history as they went through. The idea that you would follow them chronologically. What often happens in oral history is that people don't usually sit down and tell you a chronological story. They might start out saying, "I was born and I was raised and then I went into the Army." They get you through basic training, but then after that a lot of times for these veterans it's just stories;
it's just one story after another. Some of which one connects to another, but they're not necessarily in chronological order.

It sounded like this really simple idea; that you would just play these snippets of oral histories as you went through. But then it's hard too, because sometimes people have a very good story, but they don't tell it very succinctly. It takes them five or six minutes to tell the story. Not everybody's going to stand there and listen to someone for five or six minutes. We know that it's about two to three max that most people will stand or sit and listen to something like that. You have to figure out a way to consolidate what they say; really get to the heart of what they say. Once we realized some of the complications that would arise from this, that's when we started to think about, “Well how would we keep track of who you're following? Would you have to listen to everybody's? Would it be a random one every time?”

The idea came along that we would somehow figure out a way to tie you to a particular person. We needed the RFID technology to get cheap enough to make it really happen with RFID. We had thought of a lot of other ways – like QR codes – for a little while. Even the magnetic keycards that you might get from hotel rooms or something; a way to tie one to one. None of the technology was quite up there with us until recently. And cheap enough to be able to make it so that we can, essentially – because that dog tag that we're going to give you, we're giving to you. We give it to every visitor. We have almost half a million visitors a year. You can imagine that if they were, say, a dollar a piece, that would be very expensive. Now we're getting them more for – it's like less than ten cents per. [00:12:00] It's a little bit more reasonable to be able to say we're going to give that away to half a million people a year.

I: And it's free; the experience is free.

P: The experience is free. It's part of your regular ticket price. I think right now our ticket price is $20 with no discounts. Of course we offer senior discount, student discount. Active duty military is free. World War II veterans are free. If you're a member you get in free. We're one of those museums where if you're going to come more than once you might as well just buy membership. We make it just cheap enough to –

I: You guys are smart.

P: Just a little bit cheaper. Which is good for local people, or people – there are a lot of people who come to New Orleans every year. That's part of their regular travel circuit. It's worth –

I: Do you guys get more locals or tourists?

P: We get more tourists. We get more unique one time visitors than we do overall repeat visitors. I think that's the nature of the city of New Orleans, and the nature of our location; being so close to the convention center.
There are a lot of hotels between – we’re between the convention center and several hotels. A lot of them walk by us to get to the convention center in the morning. I think we pick up a little bit of that, “Oh, I’m going to pop out of this conference for a little bit and go do something.”

I: Go see what’s going on.

P: Yeah.

I: That’s nice. The idea came from the museum director?

P: Mm-hmm. (affirmative)

I: Then what happens?

P: We’ve been expanding. We knew that we were going to build this building called Campaigns. Which was basically going to be two floors. One for the Road to Berlin, and one for the Road to Tokyo. One thing that – since we started as the D-Day museum, we really only talked about Normandy D-Day. Then we expanded to talk about D-Days of the Pacific. That was a little bit more about the island hopping campaigns. It really covered almost the entire Pacific campaign. Whereas our European gallery essentially was only about Normandy. We didn’t really have North Africa, we didn’t have Sicily, Italy, we didn’t have the march across the heartland; all that kind of other elements of the war in Europe. We knew that we needed to expand to really better cover the war in Europe.

What the plan always was was to build this building called Campaigns. One floor would be the Road to Berlin – all the way from the beginning; North Africa, Sicily, Italy. All the invasions of southern France across – you would get Normandy, but only as a small snippet. Then you push through to the Battle of the Bulge and all that. All the way into Berlin. We had a company – Gallagher and Associates – out of Washington D.C. that was helping us design the building overall. It was something that we threw to them. Like, how do we [00:15:00] incorporate this into the scheme overall? Where can people check in? Where would it be reasonable to incorporate those kiosks? What would they look like? We contracted with another company to help us develop a prototype. We basically built an interface like what we thought would be in the gallery, and loaded it with as much information as we could. We selected the 50 people. We wrote their different story points, we gathered their photographs; we did – everything that we thought we needed in this interactive we gave to them.

They built it and we tested it. It tested pretty well. But then once we saw it in action we were like, “Well this as text is kind of boring. Why don’t we do videos instead? Why don’t we do it from the first person perspective instead of the third person? Instead of writing about them, make it like they’re talking to you.” Which was kind of back to what we had really – what I think the initial idea was anyway. When you start adding in all the technology side
of it, you kind of simplify it, and then it got more complicated again, and then you scale it back, and then it gets more complicated. We built the prototype and tested it, and it tested really well. But what it really showed us was that we only have about two and a half minutes – that’s as long as anyone’s going to stand there – and that people really preferred not to read. They really preferred to watch.

I: Watch or listen.

P: Or listen. That inspired us, instead of having these blocks of text about what a person was going through at a particular point in time, instead to produce these small, short videos. These 90 second video. Some of them are up to two minutes, if they have a particularly compelling story that happened. We have some Medal of Honor winners. Sometimes when we tell the story of them winning their Medal of Honor, those stories are a little bit longer because they can be kind of complicated to parse down and still make sense in the greater context of what’s happening. Yeah. We tested it. Then that time we went back, did the videos. Tested it again, and found that it was working really well, but what people weren’t understanding was how to use the RFID component of it. Now we’ve went back and produced a short little video that you watch first that tells you –

I: [inaudible 00:17:39]

P: Tells you that you have to tap it. It was one of those things that – we have talked about it internally for so long that we didn’t realize that the visitor wouldn’t necessarily understand that they had to tap the card. That somehow just having it would be enough. So we’re like, “Oh, okay.”

I: You have to tell them.

P: Yeah, you have to tell them to tap it. [00:18:00] That’s one of the things that I think has been hard with a project like this – especially around technology – is that you get so deep in it yourself that you sometimes forget that you have to take a step back and think about what the visitor – what they’re going to see, and what their experience is going to be like as a novice; as somebody who has no clue what’s going to happen.

I: How did you [inaudible 00:18:26] – did you guys put the machine and ask people to come and try it themselves?

P: Mm-hmm. [affirmative] Yeah, we just asked our regular visitors. We tried to get a variety of age range. We know that most of our visitors are retirees, actually. But we tried to get a broad range of ages. Especially knowing that a lot of our demographic is not technologically savvy. We definitely think of this as a way for us to appeal to younger generations – because they are very technologically savvy. But we didn’t want to exclude our major demographic of the –
I: Senior citizens.

P: Yeah, senior citizens and older Baby Boomers, and some retirees who aren't necessarily as up on –

I: Technology.

P: Yeah, tagging and tapping and blah, blah, blah. Yeah. We set up the kiosks just off of our ticket desk area. We asked people to come in. the first couple of times we did it we offered an incentive; we offered them a free scoop of ice cream in our soda shop if they would do it. But then we found that most people were willing to do it anyway.

I: So you stopped giving –

P: So we stopped giving away the ice cream. It got complicated too, to give away the ice cream. That was just – it was hard on our restaurant to keep up. But we also started asking smaller – at first we really just wanted a lot of people. We just wanted to really get as much information from as many people as we could. Then we found that we can do smaller groups, but focus them – because now we've answered a lot of questions with the big groups, so now we can really focus on one or two things. We can ask people just to come in for five or six minutes, run them through one or two steps, get their feedback from that, and have a better sense of what we're doing. Whereas when we were testing it the first few times, we were testing the whole thing. How to select a person; how long it took you to put your email address in; how long it took you to read the text on the screen; how you navigated from one screen to the next. Now we've answered all those questions, so now it's sort of like, “Do you like the blue icon or the green icon?” We were a little bit more fine tuning it now. Which has been a key to the process, is that we just test it, test it, test it.

I: That's amazing. I'm going back to the process because I'm really interested in how the idea evolves and start from just being an idea to a fascinating project. How the team was built? How – you were the head of the project?

P: Yeah.

I: Then who else on the team, and how you guys were picked?

P: Once we got the basic documentation back from the company that was going to build the prototype, they were like, “In order to build it, this is what we need. We need pictures of all these people. We need to know who you're going to pick, we need to know – we need to have pictures of each of them. If we're going to put their hometown in there, and how old they were, and their rank. We just need data to fill the system.” So I got picked to be the project manager in the sense that I was going to be the consolidator of all the content – and all of the other aspects of it; like what color’s the dog tag
going to be? Because some of it’s content related; we needed to rely on our curators who know the stories of these veterans, and the history in the context of the war itself.

But then also to pull from the technological side of do we have the right computer systems to be able to run a program like this and what all? I kind of acted as the consolidator on both of those sides. I had a team of five content people, four curators, and then – well actually it was three curators and two people from our research department. Our research department is the department that does the oral histories. The curators are the archives and three dimensional people. Then the oral history folks knew what was in their collection. We basically just sat down and started brainstorming who we thought should be in it. That was probably one of the hardest parts. We knew we were only going – we actually started out with only 36. We upped it to 50, ultimately.

I: 36, 50.

P: 50. We started out with we were only going to have 36 people.

I: Wow.

P: Then we ultimately decided that we would do 50 people. We sat down with – and we each made a list of people that we thought should be included. And why. We had to talk internally about why we wanted them to be included. We would come up with a list of about ten people; ten to 12 people – and we would write out small snippets of – we had a timeline of where the kiosks would be, and so we knew about what timeframes we needed to cover where. We would look at that timeline and look at the person, and write out what they were doing in these timelines. For the very first timeline, basically it always started at Pearl Harbor. Almost everybody’s first story point was them talking about where they were, or how they experienced Pearl Harbor. Then running when they went to boot camp, and if they saw combat, or when, and their experiences.

I would gather all of that from the content team, and then I would go through a process that we called executive review. I would take these ten or 12 people at a time forward to our president, our executive vice president, our VP of operations, AVP of education and access – basically all the senior staff. All the senior staff who were involved in the project. I would say, “Okay. This is who the content team would like to put forward.” They would say yes or no, or they would give feedback on who they thought might be a better candidate. Or people who they thought in general should be included, just because of their story. That they were familiar with their story. I would get approved or rejected, or needs work, or that one’s good; take that back to the content team. Then we would do the next ten or so. That’s why ultimately we ended up with 50; was that we decided that in order to have the broad range of the branches of service, and to make sure that we
included people who were killed in action, that we really needed more than 36 to be able to cover all of those things.

Once the people passed executive review, then we would start digging deeper into their stories, to be able to essentially write the script that would become their little movie. I think of them as little movies. The scripts had to – so, same process. We would start working on the script. At this point with the scripts, we were working with a company that was making the movies. They helped us do a lot where – as curators we often write for the eye. We write for someone to read it, as opposed to someone listening to it. This group of people helped us write for the ear versus for the eye; which is totally different. Totally different. We helped give the historical context. We make sure that the words of the person sometimes were taken verbatim from their oral histories, or sometimes were paraphrased from their oral histories. Like I said, they don't always necessarily tell a really – they take five minutes to tell a two minute story. We need to get it down to two minutes. Kind of paraphrasing what they would say.

One of the people that we picked was Ernie Pyle, who was the writer that the GIs loved. We used a lot of his own writings; his own words. He's pretty well quoted and well known, so we were able to pull a lot of quotes from him directly. That was really easy, because he wrote beautifully. And in a really casual [00:27:00] way. That made it really easy to do. Then the same thing. Once we had looked at the scripts and we had worked with the production company to make sure that it would meet their standards, they would go through executive review and make sure that the executive review team liked them. Then we would go into production for the videos themselves. That was a lot of scrounging for archival footage, archival photographs to include. If we had photographs of the actual people that we were talking about, finding them. Getting rights to images from movies or – anything like that where something really famous – it's somebody that somebody would know or expect to see. Some of the people that we feature – like Paul Tibbets and Jack Bradley – their stories were featured in movies. Like 12 O'Clock High and all this. You got to call Warner Brothers and find out who owns the poster rights. Some of that kind of process.

Once the production team had made the video for each story point, the work team – the content team – would watch them and be like, “Oh, those are B-29s, not B-24s. You need to take that footage out and put B-24s in.” Incorrect plane. Or, “Those are Red Cross workers; not nurses.” Because they don't always know. They're pulling from large quantities of archival footage and stuff. Once we felt like it was accurate and all that we, again, would send it to executive review; where they would make their comments about if they thought pacing or music – one of the things was, “It's not dramatic enough.” I was like, “Well.”

I: It could be more exciting.
P: How to make things more dramatic, or how to give – I think part of what was really hard was to give the user, the visitor, the broader story of the war in addition to what's happening to that person. It sometimes doesn't make sense why they're going through what they're going through unless you understand –

I: The bigger picture.

P: The bigger picture. So we had to struggle with where – how much of that to give them, and how much of the personal story to let just happen. Or to come through. So that you kind of understand what is happening –

I: It's a challenge.

P: Yeah. Otherwise, you could make a two hour movie on anything.

I: [inaudible 00:29:33]

P: We had to pick and choose what to emphasize in each one so that it was what helped you understand that person's experience the best.

I: What's fascinating about the story you're telling me now – when I talk to other museums I find that most of the digital projects are happening within the IT team. They are the masterminds [00:30:00] behind everything. You guys – you didn’t mention anything about IT in the museum.

P: [inaudible 00:30:07] IT has been instrumental for us in the interface and in the technology that is the physical kiosk that people are actually going to touch and to tap, and to interact with. And what that screen is going to look like, and how it's going to function. The backend. They have done a lot to make sure that – and that it'll integrate with our other systems. One of the things that we've worked a lot with IT – when you go up to the kiosk initially to select the person that you want to follow, we have the system built such that sometimes we'll give you lots of choice and sometimes we won't give you very much choice at all. That's because if we're having a really high visitor day and we need to move a lot of people through, we might only let you pick one part. You get to pick Army, and then you get a person and we move you on. Whereas if it's a slower day you'll get to pick do you want a Road to Berlin person, or do you want a Road to Tokyo person? Do you want ETO or PTO?

We know that a lot of people come to us with a personal connection. They're like, "Well, my grandfather was a Marine. I'm going to pick Pacific, and I want to pick Road to Tokyo." Once you make that selection, then you can select a branch. Army, Navy, Army Air Corps, Coast Guard, Merchant Marine, Marine Corps, and then civilians; we have a category for civilians. You can pick one of those. Once you – say you pick Army. You pick Road to Berlin, you pick Army, and you see there's one female face in there. And you think, "Oh, I'm going to pick her." It's Josephine Pescatore. It's an Army nurse. You
know that you’re going to be following this woman throughout the war. Sometimes we’ll give you lots of choice. But on the backend of it, if we’re having a busy day, it can turn off some of those choices to help move you through the kiosks. We’ve timed it, and we know – they did a lot of – because we’re asking people to input their email address. They did a lot to figure out what keyboard to use, and what the keyboard should look like so that people will understand what to do as far as putting in their email address, and how to put it in. And the size of the monitors, and what RFID readers to use. They’ve done a lot on the technical side of it too, that has all kind of been having in conjunction with the content side of it.

The other team that I had besides the content team was what I called the core team. Which was the IT side of it; it was the interface. But it also involved a lot of – there was a team member from our education department [00:33:00] who helped us to figure out how we were going to make this work for school groups. And for other educational aspects of it. What it could do for the education department in addition to what it did for the regular visitor. There was also somebody from visitor services. Which, for us, is the ticket sellers, the [inaudible 00:33:18], the information desk; all that kind of stuff. The one-on-one, face-to-face part with the visitors. That’s where we got the idea of at times we’re going to shut down parts of it because we need to move people through; people aren’t going to stand and wait for a kiosk. How long you have to wait for a ticket.

Then there was an IT person on that team just to help answer a lot of the IT questions that the – because it was all built house. But we knew it had to integrate into systems that we already had in place, and then we knew what we needed it to do on our end. It’s getting built and designed by a company out of New York called Unified Field. But to specs that we’ve said that we needed it to do, and how we needed it to function. And how all those email addresses are going to work, and where they get stored, and when the email pushes out to you after your visit. All of that’s been taken into account too. But that hasn’t been the driver, I guess, is probably the difference. They have kind of –

I: The support part.

P: Yes.

I: The maintenance and the technical part.

P: Mm-hmm. (affirmative)

I: But they are not the mastermind behind it. They are not the people who are organizing it.

P: Yeah, no. they’re mostly trying to make what we want to do work.
I: Right. That’s fascinating. Because I’ve talked with many museums, and it’s actually the opposite in other museums. They are the ones who are trying to come up with new ideas and suggest how you can use digital in the museum. They ask people from other departments in the museum to cooperate with them to make these ideas reality. It seems that you guys have a different model.

P: We did hire in the meantime a position that we called a museum technologist. He’s this person who bridges the gap between the technological side of it, the IT side, and the innovation of how to push it out to people, or how to get users to work with it, and what people want to see. He’s not really a content person, but he’s good at knowing how a visitor’s going to expect a kiosk to function, and what people want to see online, or how they expect it to work online. And where you can push people and where you’re going to lose people. He’s been really helpful in fine tuning a lot of the ideas that we already had, and guiding and directing us into you can’t – [00:36:00] you can’t have that many buttons. You know? People are going to get lost. And where do we want people to get lost? Online, when they’re at home; versus getting lost in the –

I: In the museum.

P: Yeah. We want it to be very clear what they’re supposed to do when they’re in the building, when they’re at the kiosk. He’s been good to help us. He’s only been there maybe eight months or so. Really towards the tail end of this project. He kind of went in neck deep the first day. It’s like, “Okay, here’s the project that we have. We’re this far along.”

I: Lindsey talked to me about him. Yeah. She said I should talk to him as well.

P: His name’s David Robinson.

I: Robinson.

P: I’ll try to connect the two of you. He’s been really good at helping us, like I said, fine tune and think more about the visitor experience. We were so – we concentrated for so long on the content – because the content was so complicated – that we kind of just assumed, I think, in a way, that the technology would just be there; would just come along. Then we started thinking about it a little bit more and it was like, oh, no. Okay. We need to take a step back. We need to start thinking a little bit more about how this interface is going to work. I think that’s just – we were feeling really good about the content, and we just felt like, “Okay. We know what we’re doing now, and how to get these scripts approved, and how to get the photographs.” Our flow was working really well. It gave us a chance to take a step back and start thinking more about the technology side of it; which we had – not that we had forgotten about, but we knew it was in the background there somewhere, and that somebody was working on it.
I: It will happen somehow.

P: It will happen at some point.

I: The project is mainly cooperation between the museum team in the museum and another company in New York. Are any other people involved outside these two institutions?

P: The third entity is our design firm, Gallagher. Their involvement’s a little bit more tertiary in the sense that they designed – they did the physical design of the kiosk, and the signage, and the logo; what I call the logo for the dog tag. But it became important because of the size – the size of the screen that they wanted – and how many screens they wanted per –

I: Station.

P: What we call – yeah, per station. They had designed it a specific way. Everything that Unified Field in New York did, they had to make sure that whatever they were going to physically have to install would fit, or would meet the specifications of what was physically built or specified by Gallagher. [00:39:00] Gallagher’s role was not content, and not interface design or anything like that; theirs was mostly just the look of it integrated into everything else that they had designed that was around in the gallery. Their package for us was really – Gallagher’s package for us is really, really comprehensive.

I: It’s a very complicated project. It’s not easy one, huh? Wow.

P: Yeah. It’s been literally ten years in the making, to try and figure out how to do it.

I: Wow. So how far did you guys go now? Where are you in the project?

P: The project was always designed to have two phases. One, the Road to Berlin phase. Then the Road to Tokyo phase. That’s because we knew we couldn’t open – as an institution we knew that we could not open the two floors as the same time. We’re opening Road to Berlin in December. Road to Tokyo will open a year from now in December. We have a year between the two. There are a total of 50 people in the My Journey project. But only 29 of them will actually come online this December. We had 29 scripts to write – or, you know, 29 people to find, 29 scripts to write, get approved, blah, blah, blah. We have probably over half – probably over half of the people, their movies – as I call them – are done. We have maybe seven or eight that are still in work team. Then we have a couple that are still –

I: Early stage.

P: Early stage. It’s just been – some were easier to do than others. Some footage was easier to find than others. Some stories we knew would be hard
– like Paul Tibbets. He’s the pilot of the Enola Gay who dropped the atom bomb. We knew that his story would be kind of complicated to tell. We started with him early, knowing that – he did a lot of interview and stuff, too. We had a lot of –

I: Material.

P: Material to back up what we wrote in the script. Yeah. We’re almost there. Almost all the stories – all the 29 – are done. The building is done, which is always key. All the physical stuff is there. Right now it’s just a matter of – so for all the online parts of those 29 people, everything has been selected, scanned, or photographed as necessary. Any oral history clips or anything like that that we have included, those are all done. Right now Unified Field is working on loading all of that, essentially, into the webpage that they’ve built that’s about to go live. Right now we’re doing a lot of, “I can’t find this picture. Did you ever send me this picture? I never found this film.” It’s the loose ends. I would say right now a lot of the project is just the loose ends; the little follow up things that have to get done.

I: That’s pretty amazing. I cannot wait until I go to the museum and try and see how it works. It’s fascinating. I want to come to the financial part – which I know is not your area. But maybe you’re familiar with how the museum gets funded?

P: Yeah. Most of our funding is what in museum speak we call the earned income. That’s ticket sales, what we make in the gift shop, what we make in our soda shop. We do a lot of rentals of our facility. A lot of receptions or – especially because New Orleans is a conference town. We do a lot of conference receptions. A lot of – the Navy Ball is going to have their ball there this weekend. We do a lot of rentals. That’s where a lot of our income, really, comes from.

I: You guys have a restaurant too.

P: We have a restaurant.

I: Like you operate the restaurant, or you rent it out?

P: No, we lease the operation to somebody else. There’s a way that – I don’t exactly understand the tax structure of it, but we get to keep our non-exempt tax status. But the company that we have, Centerplate, they take on the burden of the cost of running it. I don’t exactly understand how that works. We get some cut of the revenue. It’s like they rent it from us or something like that. We have one of the largest memberships of any museum in the United States. We have more members than the Smithsonian.

I: That’s amazing.
P: Our membership prices start at $35. For really basic membership, $35. We have people all over the country who are members that will probably never come here; they just support us that way. Membership. We do some grants, but I would say grants are really a drop in the bucket compared to what we earn. Then we’ve been having a large capital campaign to build. Part of the capital campaign has been that we’re creating an endowment. For every – if you give us a million dollars, we’re putting 250,000 of that into the endowment, and then using the other three quarters – I don’t know if that’s the exact ratio – but the other three quarters to actually do the physical building that we’re doing it for. That’s part of I think what’s helping or inspiring a lot of people to give; is that we’re creating an endowment as we go. No government funding. Mostly just what we earn [00:45:00] from –

I: Right. I see the oral history videos and the images available on the website. Does the museum charge license fees to download the images?

P: We do. But we don’t make very much money at it right now. The idea is – so that’s one of the things that we do hope will help generate revenue. Especially as we get more and more stuff online. Right now it doesn’t really make much money. Not compared to what it costs to – the database, the server, the people to scan it, the people to catalogue it, the people to maintain it. You know? The people to travel through the United States and collect oral histories. The expense of that is so much greater. If we actually charged, no one would be able to afford it; what it actually costs us. It does help us offset the cost of what it takes to do that. It helps us justify continuing to scan; continuing to travel; continuing to collect, and put stuff online. I think we – for a watermarked image, though, if you were a high school student or even a college student and you just wanted to put an image in a PowerPoint presentation – as long as you didn’t care that the watermark was there, you really could use it for free. I think if you’re maybe a doctoral student or a master student working on something like a book or a paper, it’s seven dollars. It’s not exorbitant, I think, for the cheaper prices. What we really hope to capitalize on are film or textbooks, or print books where people are going to have a –

I: Commercial.

P: Yeah, more commercial purposes. Documentary production.

I: Magazines.

P: Stuff like that where people – companies and entities that have a budget for that kind of thing, and that they might pay us $1,000 to do a 10,000 run – I don’t know exactly what the prices are off the top of my head. [inaudible 00:47:03] that something like that would be to help offset the cost a little bit more than anything.

I: So, there is a mentality in the museum that digital can bring revenue to the museum?
I: Yeah. I think a lot of museums were always looking for ways to increase revenue. We hope that our collection, in a way, would be a way for us to help us increase our revenue. I don't think that – I don't think that it's ever going to pay –

P: Of course.

I: For itself. But it's a way to offset the cost of what it does. It helps, too. It gives you a good sense of who does want to use your collection. I think that when you're gathering information – I don't just mean credit card information, but if you see that documentary producers are buying three, four, five photographs at a time. Well that could tell us that maybe we need to go to some conference where we set up a booth and promote our – but we wouldn't know that if we were giving it all away. We wouldn't necessarily know who is using all of our stuff, or who would be interested in our stuff. I think we see it as a way to kind of understand our users, too.

I: That's really interesting. Another good point.

P: That we might not have thought about previously. I think the thing that came up, actually, is textbooks. We actually have photographs in several history textbooks that the textbook publishers have contacted us to use it. That's – you're like, “Oh. Do they have a conference? Who writes these things?”

I: Can we send more?

P: Can we send them more? Yeah, exactly. But I don't think that we – I don't think anybody had thought – I think we thought authors, and we thought documentary producers, and people working on dissertations. But I don't think textbooks had really occurred to any of us until this third one of them came in and we're like, oh, we should think about this.

I: You speak about conferences. One of the areas I'm interested in is to see how individuals inside the museum connect with other organization through professional conferences, workshops and events, and then go back to their museums and try to experiment with new things. Does the museum encourage you guys to go to conferences and –

P: Yeah, absolutely. Most of my conference travel has been more geared towards my registrar work, and my collections management work. Although I do think that there's an upcoming – ARCS, which is the Association of Registrars and Collections Specialists, they're going to be in New Orleans a year from now. Next November.
I: Really? That’s exciting.

P: I will probably present on this project there, about using collections in digital initiatives. But kind of from the perspective of what it took from the registrar perspective to get 150 items photographed and selected and dressed and undressed and put away. From that perspective to, more [inaudible 00:50:26] aspect of it, and what we’re going to do with them digitally now that we have them. Lindsey has travelled – I think she goes to MCN. She’s been there a few times. Our database, KE Emu, they have a user’s conference every year that has been really helpful too, to figure out on our end to incorporate all of this data that we’ve accumulated for these people, to be able to have – [00:51:00] like how to make the database work for that. One of the questions – she’s actually there now. One of the questions I asked her to feel out was, so now we have all these scripts. They’re just a word document. But it’s like – we have a multimedia tab in Emu. Should we set up a person for all of these people, and tag it, and how to tag it, and how to save it, and how to make it work for us. If the little video should live in the database. All that. Sort of see if people have done something similar; to find out how to make the database work for us too.

I: The conferences are a good chance to discuss new ideas and –

P: Yeah. And to see what other people are doing.

I: What other people are doing.

P: The ARCS conference that I went to last year – we meet every two years, so it was last year – there was a great one on how to do condition reports on the iPad. It was like, “I have an iPad.” People had developed apps. For 3.99 you could buy an app that helps you do condition reports.

I: That’s pretty cool.

P: Yeah. The conferences are a great way to sort of – especially to see what a lot of larger institutions are doing. Institutions like the Getty, and LACMA, and the Met. Where they have a lot of people and time and funds to be able to dedicate to something like developing an app for condition reporting. To see what they’re coming up with is cool.

I: Yeah, that’s really cool. Let me ask you another question.

P: Sure.

I: Does the museum have a systematic approach to reward innovative employees? If you come up with a new idea, is there any type of incentive?

P: No. Unfortunately, no. I think that’s probably the burden of a non-profit, is that the ‘atta-boy pats on the back are probably sometimes the most you’re going to get. Although we do have a raise and bonus system, at the end of
every fiscal year it’s always dependent on having a good fiscal year. If there’s a bad fiscal year –

I: You’re not getting anything.

P: Yeah, you’re not going to get anything. In my experience I don’t always know that it’s the fairest system either. So, no, unfortunately not. I guess that’s one thing about the business world that I wish we could be more like; is that I don’t think we’re always the best at being able to recognize, monetarily, the people who do sometimes exceptional work.

I: That’s right, that’s right. How about the mentality of receiving new ideas? You do not necessarily reward people, but are they –

P: Open to?

I: Receptive [00:54:00] and open to, okay, yeah, we can adopt a new idea [inaudible 00:54:06].

P: Yeah. I would say yes and no. that’s never an easy answer; it’s never black and white. In some aspects, yes. I think that when it comes to what we want to do with digitizing archival and photograph collections, they’ve been really keen to figure out how to get those online, how to get them scanned, how to make the most use of them. They have not been as open and as receptive to ideas about how to use the collection in other ways. I don’t know if that’s just because we’re – in some ways we’re – so many other institutions have already done the digitizing of archives, or the digitizing of photographs, and the crowdsourcing, and all that, that it’s like the path is already paved.

I: [inaudible 00:54:50]

P: Yeah. Sometimes they don’t always necessarily want to pave the path the other way. I do think though that the My Journey project and the war station project that we’ve been working on is probably paving a path that a lot of people haven’t done.

I: Absolutely, absolutely.

P: It’ll be interesting to see, I think, once these buildings open; or this building opens and we start getting some real user feedback on it. Not just testing feedback. If it doesn’t open the eyes to what else we could do.

I: Absolutely, absolutely. Okay, Toni, I think – that’s great. Do you have any documentation about the project you guys are working on? Minutes or –

P: Yeah, I have lots of – I have lots.

I: That would be very, very helpful.
P: I'll bring by some of what I have. If you want more, I could bring you more. I could bring you some of the initial wireframe designs that we went through. I also have a really good initial testing report that I could send. The company that helped us do the first prototype was a company called Cortina. We ultimately didn't select them when we did the full package out; we went with this company Unified Field. I do have a really good report from Cortina about the first – when we were trying to answer lots of questions, that might be really helpful. Yeah. Because we meet all the time.

I: That would be very, very good to have. I would appreciate it.

P: I'll make some copies of some stuff for you.

I: Cool. Thank you so much Toni.

P: Yeah, thank you. No problem.

I: I'm going to stop the recording. Yeah, that's really nice of you. Thank you for coming.

P: No problem. This worked out good. I'll make myself a note to get you some notes.

[end of audio 00:56:49]