

Museums and Digital Media
Engaging with Users Who Might Never Visit

Student Name: Chloe Aftab

Student Number: 459439

Supervisor: Matthijs Leendertse

MA Media & Business

Erasmus School of History, Culture and Communication

Erasmus University Rotterdam

Master Thesis

June 21, 2018

MUSEUMS AND DIGITAL MEDIA

ABSTRACT

This thesis explores how museums can strategically use digital media to engage with people who might never visit physical museum spaces, as many new opportunities online have been created by the proliferation of the Internet. While previous research primarily focuses on using digital media within the museum sector as a method of recruitment for physical visitors, this thesis explores possibilities for museums with digital users. With current technology and the Internet, museums can now expand their reach and engage with new audiences using innovative digital media products and processes. Because of the highly competitive cultural sector that museums operate in online, they must strategically position their organizations using differentiation strategy to entice these new audiences to engage with them online. This requires the innovation of current business models in order to tailor digital media to the new, digital audiences. The research was carried out through ten qualitative interviews with experts who were defined as people who have created digital products and services either for or within museums.

By analyzing the transcribed interviews using theoretical thematic analysis, several important findings were discovered regarding the viability of innovating customer segments, value propositions, customer relationships, channels, and revenue streams. To segment users, data and location were proven to be effective strategies. Value propositions that museums can offer digital audiences are authoritative knowledge, exclusive content, edutainment, and accessibility, but they are of the most value when combined. Online communities and personal assistance are both relationships that are well suited to digital audiences, whereas co-creation may not be. Integration of online channels, otherwise known as the omni-channel approach, is important to create recognition amongst digital audiences. By effectively managing the latter four sections, new streams of social and commercial revenue can be generated by museums with digital users.

KEYWORDS: museums, digital media, business models, social value, commercial value

Table of Contents

1. Introduction	1
2. Theoretical Framework	3
2.1 Museum Objectives	3
2.2 Digitization Offers New Opportunities	4
2.3 Strategic Positioning	6
2.3.1 <i>The Need to Differentiate from Online Competition</i>	7
2.3.2 <i>Differentiation as a Strategy</i>	9
2.4 Executing Digital Strategy Through Business Model Innovation	9
2.4.1 <i>Customer Segmentation</i>	10
2.4.2 <i>Value Propositions</i>	12
2.4.3 <i>Customer Relationships</i>	16
2.4.4 <i>Channels</i>	20
2.4.5 <i>Revenue Streams</i>	22
2.5 Conceptual Framework	23
3. Methodology	24
3.1 Research Design	24
3.1.1 <i>Interviews</i>	25
3.1.2 <i>Reliability and Validity</i>	25
3.1.3 <i>Need for Experts</i>	26
3.1.4 <i>Expert Selection</i>	27
3.2 Operationalization	30
3.2.1 <i>Interview Questions</i>	31
3.3 Data Analysis	37
3.3.1 <i>Thematic Analysis</i>	37

4. Results	38
4.1 Customer Segmentation	38
4.1.1 General	38
4.1.2 Data	42
4.1.3 Location	43
4.2 Value Propositions	45
4.2.1 General	45
4.2.2 Authoritative Knowledge	46
4.2.3 Exclusive Content	48
4.2.4 Accessibility	50
4.2.5 Edutainment	52
4.3 Customer Relationships	53
4.3.1 General	53
4.3.1 Co-Creation	54
4.3.2 Communities	55
4.3.1 Personal Assistance	57
4.4 Channels	58
4.4.1 General	58
4.4.2 Omni-Channel Approach	60
4.5 Revenue Streams	62
4.5.1 General	62
4.5.2 Social Revenue	62
4.5.2 Commercial Revenue	64
5. Conclusion	67
5.1 Significant Findings and Theoretical Implications	67

5.2 Societal Relevance	71
5.3 Limitations.....	72
5.4 Future Research	73
6. References	74

1. Introduction

Museums have historically been regarded as “stewards of cultural materials” (Bertacchini & Morando, 2013, p. 60) that actively preserve and disseminate cultural information and heritage throughout society. They are responsible for “distribut[ing] community knowledge and [acting] as custodians of cultural content” (Russo, Watkins, Kelly, & Chan, 2006, p. 1). In addition, museums are sites of inception for learning, where important cultural exchanges and understandings are born and fostered over time. Museums are organizations that act as a “meeting ground for both official versions of the past [and] histories offered through exhibitions” and thus are not only relevant cultural institutions but necessary ones (Russo, Watkins, & Groundwater-Smith, 2009, p. 161). The complex relevance that museums have for society on multiple levels, as being authoritative sites of meaning making, history, and learning, positions them as one of the most important cultural institutions that are necessary for all societies.

Because the technological environment has changed due to the creation and proliferation of the Internet and mediated technology, the cultural sector has been drastically affected as people have moved away from traditional methods of cultural consumption (Padilla-Meléndez & Águila-Obra, 2013). The development of the Internet and other media such as social media has completely changed the way that the world works, and thus how businesses and organizations function. Cultural institutions that in the past have only used analogue methods of communication, have been forced to adapt to using digital mediums to communicate to continue functioning in an ever more competitive environment. In particular, museums have been affected by this change as people choose more and more to use mediated content to engage culturally. As a result, “the needs and expectations of museum visitors have become increasingly sophisticated” because people want to be engaged with on a number of levels (Padilla-Meléndez & Águila-Obra, 2013, p. 892). Especially for museums, that often act as non-profits and rely on the public as a key source fiscal existence, it is especially important “to increase engagement with their publics, who are after all often their main sources of support” (Fletcher & Lee, 2012, p. 506).

There is a significant body of research that has been conducted regarding the exploration of the strategic use of digital media to engage with users in cultural institutions, especially in the museum context. For the most part, these articles focus on the experience of users who visit the

physical museum. Thus, their research focuses on how digital media can be used to supplement the physical visit itself in a variety of different ways. Social media is one of the most widely recognized forms of digital media. Scholars such as Fletcher & Lee (2012) explore the incorporation of social media strategy into their communication with their visitors to expand from one-way communication, that was traditionally used by museums, to multi-way communication, a much more innovative and modern strategy. Kidd (2011) also explores how social media can be used to connect with visitors to enhance their experiences at museums and claims that with the advent of digitization and the changing media landscape, “there has been a desire to rescript both the traditional audience/visitor encounter...and the demographic of that visitor” using social media (p. 64). Stevens & Toro Martell (2003) looked into multiple digital media annotation systems to see how these could help by providing complementary knowledge to visitors while they are at the physical museum. Marty (2008) has done research on the impact of museum websites on the lives of visitors, and how the digital media that museums create becomes enmeshed into the lives of their visitors. Most of this research has only focused on one customer segment, namely the users who will act as visitors to the actual museum and their experiences before, during, and after the visit.

As most of the primary research has only focused on the obvious customer segment of users who visit physical museum spaces, there is a lack of research regarding another potentially important customer segment which are users who may never visit museums in person but want to have access to the cultural heritage, knowledge, learning, and exchanges that occur in these institutions. This customer segment may not have been relevant before the advent of the Internet, but in the current technological landscape, these users comprise a potentially important and untapped portion of the overall customer base. New avenues that exist as a result of digitization may “allow a company to create and exploit new opportunities in existing markets” (Amit & Zott, 2012, p.42).

We now live in a “flattened world” as the result of computers, the development of Web 2.0, and the age of Google, which is the driving force of most people’s lives, in which people have access to a hugely vast body of knowledge and culture all the time (Tonta, 2008, p. 3). This flattening has contributed to and aided in the process of globalization, as people are more easily able to communicate with each other and participate in cultural exchanges with others in far away places. This has led to the digitization of traditional spaces such as libraries and in

particular, museums. It is precisely because of this expectation of instant access that users now demand to be able to obtain a variety of different types of information and digital products within seconds. In tandem, users also want to have the option to visit digital rather than physical spaces and the manifestation of this can be seen in online classes, digitized library collections, and digitized museum collections (Tonta, 2008).

There are very few scholars who have explored the idea of engaging with users who might never visit museums. Most of the literature that touches on this idea refers to digitizing museum collections, which can be seen as a rather one-dimensional way to engage with non-physical users. Scholars such as Conway (2010) and Cameron (2003) extensively explore the digitization of museum collections as a means to engaging with non-physical users, but it is imperative for communication and media professionals to look beyond the obvious. Discovering new ways “to engage the digital generation in an appropriate, mutually agreeable and profitable manner” is important if organizations want to be able to tap into the fully digital customer segment (Ryan, 2016, p. x). Organizations must understand what users who might never visit museums want, how they are using technology, and how to leverage that to engage with the targeted audience (Ryan, 2016). Thus, there is a significant research gap into past digital media engagement with non-physical users and more importantly, potential developments for the future. In a world where a hypothetical user in China, who might lack the economic means to travel to Amsterdam to visit the Rijksmuseum, might still want to be able to engage with the Rijksmuseum digitally, it is necessary to explore how and through which digital mediums to engage with these users. Therefore, the following study will seek to explore how to engage users who might not ever visit museums as a customer segment, using digital media.

The following research question is hence introduced:

RQ: How can museums strategically use digital media to engage with users who might never visit the museum?

2. Theoretical Framework

2.1 Museum Objectives

Museums and other non-profits strive to achieve two main objectives, which are commercial and social in nature (Felício, Gonçalves, & da Conceição Gonçalves, 2013). Although their main

objectives are focused on the dissemination of culture, which usually places museums in the non-profit sector, they must also pursue commercial goals that will result in profit, and thus, “may easily be likened to other for-profit organizations” such as traditional businesses (Camarero, Garrido, & Vicente, 2011, p. 248). This is due to the fact that museums are often concerned about being faced with a lack of funding and as a result, this has “forced museums into income-earning ventures” that will increase their commercial value (Hughes & Luksetich, 2004, p. 205). Through the selling of merchandise in museum stores, charging money for tickets, “government grants and benefits, public and private monetary donations, voluntary acts and services, and finished goods”, museums are able to generate revenue. In turn, this creates commercial value for the organization (Felício, et al., 2013, p. 2139).

The other main objective of museums is to create social value. This is done by “providing educational experiences [and] by offering public access to curated and intellectually stimulating exhibitions” which are activities that add value to society (Tam, 2012, p. 856). The concept of social value is one that is difficult to define concisely as there are very different definitions depending on the field and application of this concept. The most widely encompassing explanation is that “social value refers to the necessary goods and services provided by organizations with social purposes such as promoting community development, advocating for more inclusive and fairer policies, or dealing with a variety of other social problems” (Felício, et al., 2013, p. 2140). Essentially, social value is created when organizations respond to societal needs that are subsequently fulfilled (Di Domenico, Haugh, & Tracey, 2010). In the context of museums specifically, education, preservation of heritage and history, and dissemination of culture are all necessary services with social purposes that add to the fabric of society. Without museums, people would have no institution to turn to for specified authoritative historical knowledge and preserved cultural objects all underneath one roof. This means that the existence of museums is necessary to fulfill this gap, and the knowledge, culture and history that the public is able to extract from these institutions is creating social value as the effects of this knowledge ripple from individuals to the rest of society.

2.2 Digitization Offers New Opportunities

As previously stated, the main objectives of museums are twofold: to add social value to society by providing an educational, cultural, historical and leisure pastime, and in addition, to increase commercial value by attracting more visitors and selling merchandise in the pursuit of generating

increased revenue (Camarero et al., 2011). Reaching these goals in the past was a straightforward process, before digitization created new avenues for museums to create more value for new audiences. To understand how businesses and organizations strategically use digital media to engage with audiences, it is first important to understand what digitization refers to. As it is a broad concept, it is not usually explicitly defined in literature, however Schmidt, Zimmermann, Möhring, Nurcan, Keller, & Bär (2015) offer a few different perspectives. These authors claim that digital media is “the networking of people and things...and the convergence of real and virtual worlds”, and that digital media is associated with “the creation of new opportunities that break down industry barriers and at the same time destroy existing business models” (Schmidt et al., 2015, p. 264). In the context of museums, it can be seen how digitization does not necessarily destroy existing business models, but can be effective in breaking down barriers, which in turn facilitates the building of new business models based more heavily on social value.

Digitization has added a new dimension to the goals of museums, as new media technology now “enables museums to redesign traditional products and promote new cultural experiences by involving a worldwide network of potential visitors” (Padilla-Meléndez & Águila-Obra, 2013, p. 892). A thorough examination of the literature pertaining specifically to museums and digitization reveals the two most common ways that museums use digital media in the past: by digitizing collections (Tonta, 2008; Bertacchini & Morando, 2013; Cameron, 2003; Bakhshi & Throsby, 2009) and by interacting with the public through organization websites and various forms of social media such as Facebook, Twitter, Flickr, and Youtube (Marty, 2008; Padilla-Meléndez & Águila-Obra, 2013; Fletcher & Lee, 2012; Russo et al., 2006; Kidd, 2010). It is important to mention that this list is not exhaustive, as there have been new developments in the ways museums use digital media in the past few years such as apps and new social media pages. Museums that are digitizing collections and interacting via social media are still gearing their engagement towards potential visitors, so digital media has mainly been used as a medium for recruitment. Only using digital media to connect with potential physical visitors, who comprise a small section of the population, is not using digitization to its full potential. For example, in 2017, only 35.55 million people visited art museums in the United States, which is roughly 11% of the total population (The Statistics Portal, 2017). There is a much larger sector of the global society at large that may never visit museums, but could potentially be reached through digital means. This presents untapped opportunities for museums.

Digitization presents museums with new opportunities to expand their reach beyond physical visitors to connect with digital users through relationships that will exist entirely in the digital realm. “Digital technologies create new possibilities for museums to exploit their cultural assets and create more value”, prompting organizations to assess how they can deliver value propositions and in what ways to reach digital audiences (Padilla-Meléndez & Águila-Obra, 2013, p. 893). Although the main missions of museums have not changed, the audiences have, and the challenge is in adapting the old missions to these new audiences. Museums can use digital media to engage with the new audiences by providing online cultural and educational services (social value) and selling more merchandise online (commercial value). The online strategic objective of museums is therefore to get new digital audiences to use engaging digital products and services. This can be done through the implementation of digital business strategy if museums want to capitalize on these new opportunities created by Web 2.0 (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013). One effective business strategy that is especially applicable in the advent of Web 2.0 is strategic positioning. With the vast amount of cultural resources available for public consumption online, museums must use strategic positioning to gain competitive advantage and entice users who might never visit the museum to engage with their institution over another.

2.3 Strategic Positioning

Museums do not operate in a vacuum online, which means that digital users have more choices online than ever before to fulfill their needs for knowledge, leisure activities, and culture (Bakhshi & Throsby, 2009). “Publicly funded cultural institutions...operate in an [increasingly] challenging environment”, made more so by globalization and the Internet, that allows the public to choose from and access a wide range of cultural activities both on and offline (Bakhshi & Throsby, 2009, p. 1). This has forced museums, in particular, to position themselves strategically to sustain competitive advantages and reach new, digital audiences through online media (Bakhshi & Throsby, 2009).

Strategic positioning is a concept that can be applied across all industries and fields especially in cases where sustaining competitive advantages is difficult. Porter (2001) argues that the Internet is an excellent medium through which to use strategic positioning because changes can be implemented quickly, but once achieved, it can be difficult to sustain operational advantages because there is a low barrier of entry for new competitors. According to Porter,

strategic positioning is simply “doing things differently from competitors in a way that delivers a unique type of value to customers” but requires creativity and insight to discover (2001, p. 70). This can mean offering different products and services or conducting business in different ways or through alternative means.

Strategic positioning dictates the trade-off organizations must make in choosing which actions to implement into their business operations (Porter, 1996). Because changing one element in the system can be costly and affect other elements in the organization, Porter (1996) suggests that when strategic positioning is implemented it should be a long-term rather than short-term strategy. Organizations are always competing and trying to find new ways to strategically position their businesses, and this means that more strategic positions become occupied as time goes on. Thus, Porter claims that “finding a new strategic position is often preferable to the second or third imitator of an occupied position” (1996, p. 25). For an organization to use strategic positioning to their advantage, they need to compete with rivals on different dimensions (online) and offer different types of value that are not already being offered by competing organizations.

2.3.1 The Need to Differentiate from Online Competition

There are distinct characteristics about digital audiences that make it necessary for museums to strategically position and distinguish their organization from others in this highly competitive, online environment. Because the Internet has low barriers of entry and therefore many options for online cultural consumption, it is important to understand two characteristics of these online audiences to better understand how to deliver value to them. The two main characteristics are that the majority of digital audiences are low-involvement and globalized.

2.3.1.1 Appealing to Low-Involvement Audiences

User involvement is “defined and measured as a set of operations or activities that individuals have or have not performed”, and is an important characteristic to examine when targeting users online to discover how to best serve them (Barki & Hartwick, 1989, p. 53). Bano & Zowghi (2015) claim that a user is someone who will directly use the product or service an organization provides and involvement is the participation or engagement with the content provided. Therefore, the level of user involvement of customers greatly affects the relationships and value propositions that organizations will use to engage with them. The majority of digital users that are targeted in this research comprise a low-involvement audience because they are not present

and therefore, are not forced to perform actions and engage with the museums through digital media. This inherently means that they will be less involved than physically present audiences who are considered high-involvement users. A user who is never physically present at a museum lacks the catalyst of a physical visit to encourage them to engage with digital media, and thus, they must be offered different value propositions, communicated with differently and (perhaps) through different channels to engage them in an ongoing relationship with the organization than physically present customers who are easier to engage with. A user who visits the museum is much more likely to be more highly involved with an organization's digital media because they may go to the website to look at current exhibits, buy tickets, or follow the museum on social media after being inspired by their visit. Although it is possible for digital users to be highly involved, they are a minority of the overall digital audience of museums and because of this, museums should attempt to engage digital users primarily in ways suited for low-involvement users, as this will engage more of the overall digital customer segment. It has been shown that user involvement predicts the system success, so if museums cannot entice these low-involvement digital users who might never visit, they may not be able to create more value for their organization online (Bano & Zowghi, 2015).

2.3.1.2 Appealing to Globalized Audiences

Another differentiating factor about digital users as a customer segment is that they comprise a very wide audience, and due to this can be considered globalized because they may exist anywhere in the world that has access to the Internet. This means that digital users can come from a variety of different cultures and speak different languages, so this must be taken into account when creating channels through which to communicate with these various sub-groups of the digital population. Globalized content management presents many challenges compared to localized content, such as “decontextualizing and repurposing of text...and handling the linguistic idiosyncrasies of particular languages” (Batova & Clark, 2014, p. 221). Fletcher and Lee (2012) cite a 2009 report that claimed that 67% of the online global population visited online communities, and because of this, they assert that digital media, in particular social media, can be very useful in engaging with these audiences. However, online communities and other cultural content must be accessible to a wide range of users in terms of language in particular, which means that organizations need to create tailored content per country and language. Globalized audiences, although they present new challenges such as their diverse needs and

communication styles, “present opportunities for practitioners to expand their organization’s reach” (Fletcher & Lee, 2012, p. 507). Because of the unique needs of low-involvement, globalized digital audiences, museums must implement online strategies such as differentiation to entice the audience to engage with their content.

2.3.2 Differentiation as a Strategy

Differentiation is a method of strategic positioning, and is defined as the act of creating a product or service bundle that is unique and satisfies customer needs in ways that are not already being met at all or in the same way by competitors (Porter, 2001). Operational objectives such as “quality, delivery, flexibility, and *innovativeness* are all...consistent (fit) with differentiation oriented strategies” (Das & Joshi, 2007, p. 647). To execute differentiation strategy, it is very important for museums to understand what they can offer digital audiences that the competition cannot because “the worst error in strategy is to compete with rivals on the same dimensions” (Porter, 2006, p. 2). Providing online access to exclusive knowledge that is not accessible elsewhere is then not only an easy means of differentiation for museums but also reinforces their public mission to preserve and disseminate cultural information and heritage throughout society. Additionally, museums possess unique artifacts, in the form of art, transcripts, autobiographical material, and videos that online audiences cannot gain access to through other organizations that can be offered as unique digital content as a means of differentiation. Leveraging these two distinct positions (knowledge and content) to appeal to the digital-only customer segment can differentiate the museum and create new value for the organization to complement the value that they create through digital engagement with the other customer segment that visits the museum such as increasing physical visitors per year. The key is to create value for digital users that is not generic, and this in turn, differentiates the organization from others.

2.4 Executing Digital Strategy Through Business Model Innovation

The final goal of this research is to discover how museums can execute their digital media strategy to engage with users who might never visit museums, which can be examined through the lens of business model theory. Business models are essentially the way that firms are configured to best fit a market, and there are many different models that fit various sectors and types of businesses (George & Bock, 2011). Organizations may change from one business model to another, or choose to innovate and change an existing business model to stay relevant in an ever more competitive market because “business model innovation is the cornerstone of long-

term performance” (George & Bock, 2011, p. 85). To truly innovate a business model, two or more elements in the business model, such as value propositions or channels, must be altered to better suit the market environment that the business operates in (Lindgardt, Reeves, Stalk, & Deimler, 2009). The multi-dimensionality of business model innovation makes it difficult to execute, because when one part of it is changed, it affects the entire value chain and is difficult to imitate, but this makes it an excellent competitive strategy if executed correctly (Lindgardt et al., 2009). Gaining and then sustaining competitive advantage are a direct result of business model innovation that can be applied to museums that operate in the extremely competitive cultural sector.

Using the Business Model Canvas, a “tool for describing, analyzing, and designing business models”, museums can identify what parts of a business model need to be innovated and changed (Osterwalder & Pigneur, 2013, p. 8). The sections of the Business Model Canvas that will be focused on in this research are those that are customer centric, because the object is to discover how to create value by meeting the needs of the specific customer segment comprised of users who may never visit museums. Since the primary goals of museums are to create social and commercial value, they have to perform activities that differentiate them from organizations offering similar products and services to position themselves strategically and gain competitive advantage (Porter, 2006). Through a thorough examination of how to leverage differentiation as a strategy with targeted customer segments to create enticing value propositions through strong customer relationships and integrated channels, it will become clear how to generate new revenue streams in the form of social and commercial value.

2.4.1 Customer Segmentation

Customer segmentation is essential to understand the two types of customers of museums in the advent of digitization, namely users who visit the museum and those who do not. In this case, customer segments are the different groups of users that the museum interacts with, and mapping them requires defining “for whom is [the museum] creating value?” (Osterwalder & Pigneur, 2013, p. 21). The customer segments need to be divided because various user groups have different needs and will be reached through different digital channels. This division justifies the application of the diversified customer business model, in which the organization seeks to serve two totally unrelated customer segments (Osterwalder & Pigneur, 2013). In this case, users who

visit the museum and those who do not are unrelated because the organization needs to offer them different value propositions to engage with them. The focus of this research, as stated before, is on the customer segment that may not potentially ever visit the museum and thus exists solely in the digital sphere. Therefore, it is important to understand how these users work in order to best serve them as an audience. To view all digital users as one customer segment would be an oversimplification, and thus, they will need to be divided further to create the best strategies to reach them. According to Hsu, Lu, & Lin (2012), customer segmentation is the result of understanding customer behavior and is essential for organizations attempting to develop tailored services for these different clusters. The following sub-question is:

How can museums best segment users who might never visit the museum?

2.4.1.1 Data

Digital media engagement strategies used by museums in the past have been fairly one-dimensional and only focused on attracting new visitors to existing museums (Gilmore & Rentschler, 2002). Thus, customers were not even usually segmented at all, and were viewed as one potential cluster of new visitors. Now, with the use of the Internet and the many different needs that digital users have, the necessity to appeal to differentiated audiences has created new challenges for museums in segmenting these users (Gilmore & Rentschler, 2002). One way to segment digital customers is by using data about user behavior to understand different audience needs and better appeal to them. Brown, Chui, & Manyika (2011) claim that the use of big data to segment customers in customer-facing companies has been done for quite some time and is a good strategy because it permits real-time personalization. By being “able to track the behavior of individual customers from Internet click streams [from] Internet purchases, social-network conversations, and, more recently, location-specific smartphone interactions”, museums, like retailers have done in the past, can segment different types of digital users to create customized content and services that will be valuable to them (Brown, Chui, & Manyika, 2011, p. 24). Additionally, using behavioral online data of digital users allows museums to prioritize some customer segments over others in terms of developing engaging digital media products and services (Hsu, Lu, & Lin, 2012). For example, since it is assumed that most digital users will be low-involvement, prioritizing this segment over a high-involvement section that may be quite small could be useful for museums in achieving their goals to educate and promote merchandise to the largest audience possible.

2.4.1.2 Location

Another way to segment users is based on location, because of the fact that “the web has helped to dissolve geographical boundaries, bringing businesses and consumers together in a low-friction environment...[and] firms may be faced with the need to deal with international customers who might be quite different” (Barnes, Bauer, Neumann, & Huber, 2007, p. 5). “Location-based services are an exciting research topic” because targeting people based on location has potential benefits such as a more tailored experience, but it also presents difficulties such as understanding what the differences are in what people in different locations want (Hennig-Thurau, 2010, p. 321). In particular, because of the fact that the museum is marketing to a global audience that could be located anywhere in the world, it is important to account for cultural variance and language differences. These many different international customers may want to be communicated with differently because of cultural differences and languages. They may also be interested in some aspects of digital museum products and services more than others depending on the country that they come from. In online marketing research done on online shopping, customers had very different behavior from country to country, and as a result, treating customers in one standard way has not proven to be effective (Barnes, et al., 2007). By segmenting based on location, vendors have been able to optimize shopping experiences for customers in different locations. If this research is applied to online consumers of cultural content and merchandise relating to museums, it seems that it would make sense to segment customers based on location and treat these segments differently. Thus, segmenting based on location can create an experience that suits the needs of different countries in a more tailored way and help museums create the maximum amount of value with these new audiences as possible.

2.4.2 Value Propositions

It is important to explore what value propositions museums can deliver to the users who may never be physically present, and how to deliver them. A value proposition “describes the bundle of products and services that create value for a specific customer segment” (Osterwalder & Pigneur, 2013, p. 22). Value propositions are the main tie between organizations and their customers or users, and are by nature an exchange (Holttinen, 2014). This exchange can be in the form of value for money (commercial value) in more traditional businesses, but in the case of the cultural sector, the exchange can be value for knowledge (social value) (Holttinen, 2014). Since

museums offer cultural content in the form of knowledge as well as merchandise, if someone consumes cultural content from a museum digitally, the user is gaining social value that fulfills one of the main missions of museums. Thus, museums “get an opportunity to co-create value with their customers with the help of the value propositions” in the form of both social and commercial value (Holttinen, 2014, p. 103).

Creating value propositions for non-present users is different than creating value for physically present users, which exemplifies the importance of customer segmentation. Value propositions are the reason that customers choose one source or organization over another because the value that organization has to offer is more appealing to them; in other words, value propositions have to be innovative to satisfy the needs of the customer segment (users that might never be present) that have many other choices (Osterwalder & Pigneur, 2013). By differentiating themselves from other online cultural knowledge sources and leveraging themselves as authorities, museums can create unique value propositions that will appeal to the targeted user segment.

Museums are unique in that they are not only sites for fun and leisure but also for knowledge gathering and learning, and are widely accepted as authorities of history and cultural knowledge (Kidd, 2011). In a world where people are faced with an overload of information and instant access to it on the Internet, museums can strategically position themselves as authoritative entities of a vast scope of knowledge and content to differentiate from the competition (Porter, 2006). Russo et al. claims that “if museums did not take a proactive role in the establishment of authoritative web-based cultural information sources, their audiences would seek cultural information elsewhere, possibly through less reliable sources” (2006, p. 5). This leads to the following sub-question:

What value propositions can museums offer to users who might never visit the physical museum?

2.4.2.1 Authoritative Knowledge

Museums possess exclusive knowledge that is not available through other sources which is the first possible proposition that museums can offer to digital users through digital means. A non-physical user does not necessarily need to visit a museum to access this authoritative knowledge if it is made available digitally. According to Weinberg & Lewis, “the value proposition of many museums today will likely connect the value of museums to K-12 education and Twenty-First Century learning environments” which offers an opportunity for museums to leverage its access

to exclusive knowledge and create online educational programs both for children and for adults (2009, p. 264). These can, as stated earlier, be presented as edutainment where learning is presented in a fun and interactive way. For example, museums could possibly create online educational games in multiple languages tailored to children, that will aid in children's knowledge of history and art on which a museum is an expert, and provide a fun leisure activity that can be enjoyed from anywhere in the world. The added value of fun within the sphere of education is yet another proposition under the umbrella of education, and this is quite important as we now live in a leisure-focused society. Museums have the ability to “capture human imagination...[and] teach a myriad of lessons about past, present, and future” (Taheri & Jafari, 2014, p. 203). Transferring the exclusive knowledge through imaginative and interact methods (edutainment) through Web 2.0 is a fun way to make this knowledge accessible to digital audiences.

2.4.2.2 Exclusive Content

All museums own unique collections of art or science and artifacts that other museums and institutions do not have. Traditionally, people have had to visit museums to have access to this exclusive content, but in the current media landscape, it can be digitized and offered to a wider audience. For example, the Louvre has offered two value propositions under this umbrella when they decided to update their business model in the 1990's. They provided access to a permanent collection and diversified cultural content as well, in the form of temporary collections that allowed visitors to experience collections that they were familiar with as well as consistently updated content (Weinberg & Lewis, 2009). Although they have not done so digitally, other museums can do the same in digital form to expand access to their larger, potentially digital-only audiences. By digitizing both permanent collections and temporary ones, they can create exclusive online content that is both familiar but also continually draws new interest from digital users. Using new technology to digitize collections and providing a wide range of art collections can attract new users (Weinberg & Lewis, 2009). Additionally, the museum can provide live access to unique content through live streaming events, to give a real-time look at exhibitions (another form of digitization), and provide recorded versions of this on a YouTube channel that allows the museum to have a “bidirectional interaction with potential visitors” (Arends, Goldfarb, Merkl, & Weingartner, 2009, para. 1). Live streaming is yet another form of edutainment, as people are able to educate themselves on new art exhibits and cultural events

while being entertained. This content is valuable to digital users precisely because it is not available from any other sources. If museums are able to successfully digitize collections and engage in live stream and the creation of engaging YouTube content that reflects their physical collections, they can position themselves as unique holders of specialized content that is available to users no matter where in the world they are at a given time, while appealing in particular to low-involvement users.

2.4.2.3 Accessibility

The key value proposition within the former two propositions is accessibility to digital users. Siu, Zhang, Dong, & Kwan define accessibility, saying that “information accessibility is the ease in obtaining information and the availability and adequacy of the information of an organization” (2013, p. 295). When speaking about accessibility, it is not simply access to the content itself that is valuable, but also the way in which it is presented and the ease of accessing it for digital users. This is especially important for low-involvement users, who want to be able to obtain things as quickly and easily as possible. If they are forced to perform too many actions to obtain information or content, they may lose interest and simply stop engaging with the museum’s digital media entirely.

Since “online presence is not bound to the physical space, many museums also offer ways to explore their content sorted according to various categories like artist, region, art form or epoch” that makes it easier for users to locate and select the content that interests them the most (Arrends et al., 2009, para. 6). For example, the Smithsonian has a plethora of databases, but struggled to integrate them into one system due to the fact that creating and maintaining them was nearly as expensive as building physical infrastructure (Weinberg & Lewis, 2009). However, in an age where people demand instant access online, being able to create one succinct database that is updated regularly would position a museum as uniquely available online and offer digital users a value proposition that would be highly competitive. Since “consumers may perceive information accessibility as a necessary tool for museum operations”, it is imperative to make information available in ways that make sense are easy to use for digital users (Siu, et al., 2013, p. 298). Again, this is increasingly important as the cultural sector continues to become more and more competitive which creates within these institutions the “pressure for value creation” (Coblence & Sabatier, 2014, p. 10).

2.4.2.4 Edutainment

As discussed earlier, the vast majority of digital users are considered low-involvement because they have no point of contact with the physical museum. This presents a challenge for museums to create value propositions that will engage low-involvement users whose attention is, by definition, difficult to hold. One way to present digital media is through edutainment, a concept that was born in the cultural sector after the development of new technology changed the landscape of this industry. Edutainment is the intersection of education and entertainment, and is different from traditional cultural consumption that occurs between a subject and an object, because the object is replaced with a message (Addis, 2005). According to Addis (2005), edutainment is well suited to digital technology because of the ability to use multimedia to engage with users, and the fact that digital technology is interactive and flexible. This makes the cultural content more easily accessible and fun, which is an excellent reason for low-involvement users to choose to engage with museums. If museums approach the delivery of their value propositions from an edutainment perspective, this makes edutainment itself a value proposition because it is a reason for users to choose to engage with one institution over another.

2.4.3 Customer Relationships

Building relationships with physical users requires a completely different strategy of engagement than building relationships with digital users as the latter occurs entirely through digitized media. Additionally, the digital media itself has dramatically changed organizations' relationships to their customers mainly because of the switch from one-way to multi-way communication, meaning that customers can now talk back to organizations through Twitter and other social media platforms which holds organizations more accountable for their actions (Hennig-Thurau et al., 2010). Digital media also affects consumption of traditional products and services, so it can both help and hinder organizations if their physical services are replaced digitally (Hennig-Thurau et al., 2010). Thus, maintaining digital customer relationships is nuanced and often difficult. Learning how to keep digital users who might never visit museums engaged requires an understanding of what leads to customer satisfaction in this segment. This can be examined using business model innovation.

The customer relationship section of the Business Model Canvas “describes the types of relationships a company establishes with specific customer segments” (Osterwalder & Pigneur, 2013, p. 28). As previously established, the users who might never visit museums are low-

involvement and globalized, so keeping this user segment interested over time is complex because museums need to create engaging digital media content that inspires audiences to develop a deeper relationship with the organization absent from the physical experience of visiting a museum while making the content easily accessible and fun. Managing these relationships is a key to the success of businesses and organizations such as museums, that rely on creating bonds with the public to generate (social and commercial) revenue, and one of the most effective ways to do this is through digital media due to its flexible, speedy, and interactive nature (Fletcher & Lee, 2012). However, as stated earlier, there are many new dangers associated with digital media as well as benefits, so executing strategy well is necessary to reap the rewards from these digital customer relationships. There are several types of relationships, according to the Business Model Canvas, that can co-exist and be developed with digital users that would be applicable for museums seeking to create relationships with non-physical users. Several types of relationships that could be of benefit are communities, co-creation, and personal assistance. These will be explored through the following sub-question:

How can museums build customer relationships with digital users?

2.4.3.1 Co-creation

Typically, organizations in the past have decided what was valuable to customers and delivered it to them. In the digitized world where more choices exist than ever before, consumers want have more power in what they consume, and thus co-creation has emerged as a way to successfully allow online users to have their voices heard (Prahalad & Ramaswamy, 2004). Prahalad & Ramaswamy define co-creation as “creating an experience environment in which consumers can have active dialogue and co-construct personalized experiences” (2004, p.8).

In co-creation relationships, the museum could potentially engage with digital users from around the world to create video content that can act as a form of free publicity for the museum and help users to learn more about a particular subject as they become involved in creating content. By successfully managing “co-creation and exchange, companies can seek to maximize the lifetime value of desirable customer segments”, which is a process than can be done entirely online, and thus provides a way for the museum to build strong customer relationships with digital users (Payne, Storbacka, & Frow, 2008, p. 84). Furthermore, co-creating content can “assist firms in highlighting the customers’ or consumers’ points of view and in improving the

front-end process of identifying customers' needs and wants" (Payne, et al., 2008, p. 84). Payne et al. claims that co-creation can create mutual value for both the organization and the user, and is an outside-in process, because it requires the organization to think from the perspective of the users; the museum must discern what interests digital users and how to entice them to become involved (2008). Co-creation inherently requires more interactivity between the museum and digital users, which is required in a competitive cultural environment where digital users have many choices. Creating more interactivity not only strengthens relationships, but also leads to more bidirectional communication as it facilitates a dialogue between the museum and the online-only customer segments (Payne, et al., 2008).

2.4.3.2 Communities

In community relationships, groups of users from all over the world who might not ever be present at the museum can share knowledge through online forums managed by the museum that can mitigate knowledge sharing. Porter (2004) claims that "a virtual community is defined as an aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported and/or mediated by technology and guided by some protocols or norms" (para. 1). According to Hennig-Thurau et al., digital communities are "consumer groups that interact online to achieve personal as well as shared goals of their members" (2010, p. 319). In this case, the digital users would be sharing knowledge or consuming cultural content online facilitated by the museum. "Firms are increasingly trying to use online communities to enhance their customer relationships", for example, Hewlett-Packard and Microsoft have facilitated online communities where customers can provide each other with peer-to-peer support for product problems (Hennig-Thurau et al., 2010, p. 319). Museums can learn from this example and apply it to their own and other digital users' knowledge of specific cultural objects or history rather than product problems.

The majority of Internet users have interacted with or been a part of a virtual community, both to fill social and economic goals (Porter, 2004). The two main types are communities of transaction and communities of interest, the first being used primarily to buy, sell, and discuss merchandise and the second to discuss shared interests and facilitate the exchange of knowledge (Porter, 2004). Being part of a community of interest that relates to an aspect of a museum can support, in particular, the value proposition of exclusive knowledge that the museum can offer

digital users, because people would be able to interact directly with museums as well as other digital users who share their interests and may have access to more exclusive knowledge. As the museum is also trying to tackle these two goals at once, it can also provide an avenue for them to popularize and sell exclusive merchandise to people in these community relationships who may have a particular interest in merchandise that reflects the specific art and culture housed in the museum. Although this type of relationship would not at first seem suited for low-involvement users, it would potentially be a great way to tie together the lower involvement users who want authoritative answers or knowledge and higher involvement users who are interested in providing them. Additionally, if the museum is able to respond quickly and provide results that other searches on Google cannot, this would be valuable to users and thus engage even those who are less highly involved.

2.4.3.2 Personal Assistance

Personal assistance relationships are “based on human interaction” but this interaction can occur through digitized means such as “call centers or email” (Osterwalder & Pigneur, 2013, p. 29). This type of relationship would afford digital users the opportunity to ask questions and learn more about certain subjects that a particular museum is an authority on by directly communicating with experts and curators. Not only would this facilitate the exclusive knowledge value proposition for users who might never visit, but it would also help to strengthen the bonds between the museums and digital users. This could go hand-in-hand with digitizing collections, because museum personnel with expertise in certain exhibits could be available via instant chat or even through more complicated means such as virtual and augmented reality to provide direct personal assistance to interested digital users.

Web-based chatting can broadly be defined as “an online tool that allows for interactive consumer communications, both socially and commercially” which makes it a versatile tool that museums can use as it combines commercial and social components, that reflect their core missions (Zinkhan, 2003, p. 18). According to Zinkhan (2003), online chat is an important component of marketing and relationship building with users as instant chat increases both the amount of time spent on a site and the return rate of users. Taking this relationship one step further, the experts could possibly be automated in the form of robots. Digital users, like physical visitors, need assistance when it comes to understanding exhibits and getting more background on art, by being able to ask questions and have a dialogue. Similar to within physical museums,

where automated guides have been created to meet the needs of all visitors, this could be done by using chat bots or “virtual reality [that] have led to the development of many interesting ideas for enhancing user experiences when visiting a museum” (Toyama, Kieninger, Shafait, & Dengel, 2011, para. 1). With the development of new IT, personal assistance relationships can be taken to the next level to offer rich value propositions to knowledge-hungry digital users.

2.4.4 Channels

The correct integration and use of a combination of channels is essential to fostering positive relationships with users who might never visit museums. The channels section of the Business Model Canvas describes “how a company communicates with and reaches its customer segments to deliver a value proposition” (Osterwalder & Pigneur, 2013, p. 26). Managing the relationship between museums and non-present digital users will require a more integrated approach as the face of the museum needs to remain the same across all channels. Users who visit the museum should ideally be communicated with through different channels than users who might never visit the museum because publishing content about new, in person exhibits, calendars of events, and anything related to the physical visit will not apply to the other user segment that may never be physically present at the museum. “Finding the right mix of channels to satisfy how customers want to be reached is crucial to bringing a value proposition to market”, and thus this study will evaluate what channels are most effective in engaging with digital users (Osterwalder & Pigneur, 2013, p. 27). Whether using indirect channels, such as partner channels, or direct, owned channels, such as the museum’s own website or social media, is more effective in delivering value propositions to the targeted users who might never visit the museum is important to discover how channels can contribute to the generation of new streams of revenue (Osterwalder & Pigneur, 2013). Thus, the following sub-question is:

What channels can museums use to best communicate with users who might never visit the museum?

2.4.4.1 Omni-Channel Approach

With the current overload of information and choices of what to consume on the Internet, users have become increasingly demanding in terms of the experience they expect when engaging with an organization (Verhoef, Kannan, & Inman, 2015). The Internet has also drastically changed the user journey and experience itself, in that it has become dynamic, accessible, and continuous (Carroll & Guzmán, 2013). The traditional customer journey, that was considered to be a linear

funnel, has now become more dynamic. Instead of exiting at the purchase point or, in this case, engaging with the online service, users continuously cycle through earlier stages of the traditional customer journey when they are accessing products or services online, knowing that there are many competing options to be discovered that might be better. Additionally, a vast amount of products and services of the same type are available online at all times, making the market overly accessible and difficult for companies to attract new customers.

The current models of the online customer journey have become continuous circular rather than linear as a result, and companies need to not only differentiate themselves, but also create an integrated user interface across all channels to make interacting with their organization more appealing over another (Carroll & Guzmán, 2013). Rather than the previous multi-channel approach, which used different messaging across different channels, the omni-channel approach has now proven to be a more successful way to engage with digital users (Carroll & Guzmán, 2013). According to Carroll and Guzmán, the omni-channel approach is “a synchronized operating model in which all of the company’s channels are aligned and present a single face to the customer, along with one consistent way of doing business” (2013, p. 4). The idea is to create a seamless experience for the users that leads to stronger bonds between these users and the organization (Carroll & Guzmán, 2013). The main difference between multi- and omni-channels is that with multi-channels, users were only expected to interact with organizations through one channel or another. With omni-channels, which are much more relevant now, users are expected to interact through the organization through a variety of touch points (both on and offline) and thus the experiences needs to be integrated across all channels. For museums, creating one image and experience that is echoed throughout all of their digital media channels is very important in attracting and retaining digital users. According to Verhoef, Kannan, & Inman (2015), search, display, e-mail, affiliates, referral websites, apps, and other social media are all considered to be different touch points that are part of the omni-channel approach and need to provide a coherent message to users. Thus, it is imperative that all of the online media are created with one image and integrated messaging in mind that reflect the core of the museum brand itself. Additionally, although not the focus of this research, the use of the omni-channel approach can also help strengthen relationships with users who visit museums in attracting them to engage both on and offline and increasing brand awareness (Kohli, Suri, & Kapoor, 2015).

2.4.5 Revenue Streams

There is a vast discrepancy between firms' online efforts and how they affect the development of new revenue streams particularly for organizations that provide information goods as they are more difficult to measure (Gallaughar, Auger, & BarNir, 2001). People are moving away from traditional cultural consumption and increasingly using digital means to consume cultural information, so "an understanding of various revenue stream options available is critical as firms faced with resource constraints consider whether and how to leverage options created by technology" (Gallaughar et al., 2001, p. 473). Products and services that used to occur physically, such as the museum experience (including information gathering, knowledge sharing, and cultural consumption), can now be reproduced cheaply and distributed online, creating new streams of revenue using the same original content (Gallaughar et al., 2001).

If viable value propositions are created, and delivered through effective channels to interested digital users who have strong customer relationships with museums, this will lead to new revenue streams for the organization in the form of social and commercial value. Revenue streams are the "arteries of... a business model" because they provide the organization with the ability and reasons to continue existing by fulfilling goals (Osterwalder & Pigneur, 2013, p. 30). This section will explore how engaging with the digital customer segment can result in increased social and commercial revenue for the museum, although the main focus of this research is on generating social revenue. The following sub-question is:

How can museums generate increased social and commercial revenue by engaging with users who might never visit the museum?

2.4.5.1 Social Revenue

The users who might never visit museums comprise a new customer segment that museums can tap into by using strategic differentiation to increase their social value as an organization by providing exclusive knowledge, unique content, accessibility, and edutainment that cannot be obtained through other means and organizations. Differentiating in this way automatically gives museums strategic advantages because they are offering digital users value propositions that are exclusive and enticing. As stated earlier, one of the main goals of museums is to "provide educational experiences by offering public access to curated and intellectually stimulating exhibitions" which creates social value (Tam, 2012, p. 856). When the new customer segment that may never visit the museum engages with and learns from the educational opportunities

provided to them through digital channels by museums, this will generate a new stream of social revenue as one of the main missions of the organization is fulfilled.

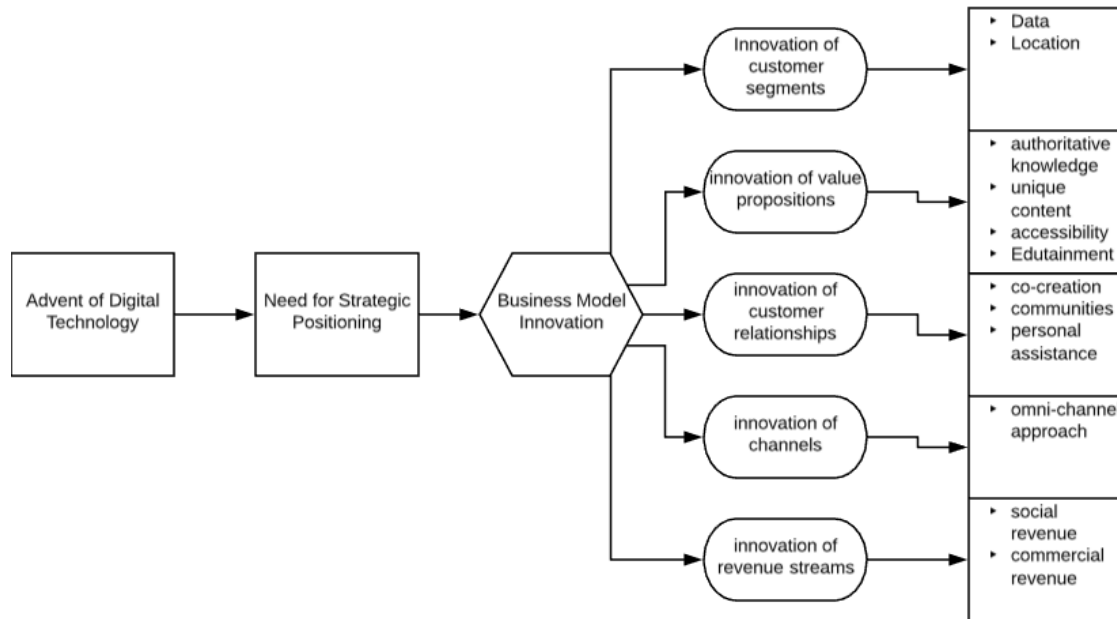
2.4.5.1 Commercial Revenue

The second primary goal of museums is to generate commercial revenue, which can be done by receiving free publicity, selling merchandise, and through subscriptions to educational resources. Free publicity can be generated through collaborative, co-created content which digital users then distribute themselves along with the museum to create more interest. This acts as free publicity that can reach digital only users, but also potential visitors as well as it becomes more widely distributed throughout the Internet. More conventional forms of commercial revenue are generated through two types of interactions with digital customers. The first is transactional revenue, meaning that the digital user pays a one-time fee for a product or service, which in this case would likely apply to merchandise that the digital user buys online (Osterwalder & Pigneur, 2013). The second is recurring revenue, that is a result of subscriptions to a service (Osterwalder & Pigneur, 2013). This would potentially apply to digital users who could subscribe to rotating, temporary digitized collections that can be viewed online or educational games or resources.

2.5 Conceptual Framework

The conceptual framework in Figure 1 is a visual representation of the previously discussed research. It illustrates how digital technology has led museums to need to use strategic positioning during the innovation of their existing business models to differentiate in the competitive online cultural sector. More specifically, the conceptual model illustrates how each of the five sections of the Business Model Canvas being used in this study can be innovated, based on literature, to help museums engage with users who might never visit museums.

Figure 1: Conceptual Framework



3. Methodology

3.1 Research Design

The method of this research takes a qualitative approach, and thus, this study will be conducted through qualitative interviews with experts who have created digital content for museums. This is done to gain a deeper insight into how digital media can be used to engage with users that might never enter the physical museum. It is necessary to use qualitative research methods in this case because the purpose is to answer the question of how to engage with online users using digital media by learning from experienced experts, and “to learn from the experience of others it is necessary to understand how an experience happened and which kind of action the person involved has performed” (Crescentini & Mainardi, 2009, p. 438).

Qualitative analysis seeks to answer questions that are framed in a qualitative way, namely questions of how a particular phenomenon occurs in a natural setting, such as “how organizations function, and how interactions shape relationships” (Teherani, Martimianakis, Stenfors-Hayes, Wadhwa, & Varpio, 2015, para. 2). Since the purpose of this research is to understand how to use digital media to engage with a new user segment that has not been

researched extensively in the past, the research question fits best with qualitative analysis. To approach research qualitatively, the researcher is inductive, and generates ideas and theories that are general after learning more about what has specifically been done in the past (Bryman, 2012).

This research will first examine what has been done in regards to strategic digital media engagement in the past with users who might never visit museums and then make generalized conclusions about how to more effectively do this in the future and create more value for both the users and the museums. Additionally, qualitative research is experience-based, and focuses on events and their outcomes that can only be described by the person who has carried them out to then be understood and further interpreted by the researcher (Teherani, et al., 2015). Thus, this study seeks to gain answers by examining the experiences of experts through interviews.

3.1.1 Interviews

Ten semi-structured, face-to-face in person or Skype interviews were conducted for this research. Each interview was timed and ranged from 30 minutes to 1 hour. Interviews are the best method to obtain the information necessary to conduct this research for a number of reasons. Conducting interviews face-to-face gave the researcher the most possible information because in addition to what the interviewees said, they also gave verbal cues, intonation, and body language, such as facial expressions, that prompted the researcher to ask more or different types of questions. Additionally, because face-to-face interviews are synchronous, the interviewee's responses were "more spontaneous, without an extended reflection" and an advantage of this is that the researcher "can directly react on what the [interviewee] says or does" (Opdenakker, 2006, para. 7). Because of the need to pursue some answers further and ask sub-questions, it is imperative that the researcher is able to adjust the questions asked depending on the specific interview and not be constrained by a more structured or mediated form of interview. Face-to-face or Skype, semi-structured interviews facilitate this need for malleability because the "design is flexible, iterative, and continuous" (Babbie, 2008, p. 335). These methods lead to the most valuable answers from interviewees and therefore, more insightful conclusions.

3.1.2 Reliability and Validity

Ensuring reliability and validity is important in qualitative research to prove that the study is both relevant and the conclusions are worth audiences' attention (Golafshani, 2003). The results need to be dependable in order to contribute to the body of literature already existing about this

particular topic, and this requires that other researchers are able to trust the results of this study. According to Babbie (2008), reliability refers to whether similar conclusions would result if this research were to be repeated. Validity refers to the quality and transparency of a study (Golafshani, 2003). Ensuring reliability can be difficult with qualitative research as it is inherently a more subjective process than quantitative research, but in the case of this study, the reliability is as high as possible because the researcher has followed a systematic approach to both data collection and analysis that could be replicated in further studies. The validity and trustworthiness of this research can also be considered to be quite high, as the researcher has been transparent in the methodology, and thus others can see exactly what has been done that has led to the conclusions of this study. Additionally, the conclusions reflect themes found in theoretical literature, which contributes the relevance of the study and further proves both the reliability and validity of this research.

3.1.3 Need for Experts

In the case of this particular research, it was imperative that the researcher spoke to experts who have had experience developing stand-alone, digital content for museums to discover how digital media can be strategically tailored to users who might never visit museums. In other words, there is no way to answer this question without speaking directly to the source, which in this case are experts in the field. “Ultimately, anyone who is responsible for and has privileged access to the knowledge of specific groups of people or decision-making processes can be seen as an expert” so in this case, an expert will be defined as a person in strategic management, strategic media, or a related field with significant experience dealing with digital media creation and digital media strategy for or with museums (Bogner, Littig, & Menz, 2009, p. 100).

The number of participants was ten, because this number meets the qualitative methodological guidelines and is sufficient to reach saturation, meaning that “no new or relevant data seems to be emerging” (Bryman, 2012, p. 421). In addition, experts that are viable candidates to interview, meaning they possess a similar background in jobs pertaining to digital media, are not plentiful in nature. According to Bryman, sample sizes for qualitative interviews should be large enough to reach saturation but not so large that “that it is difficult to undertake a deep, case-oriented analysis” (2012, p. 425). Therefore, although the sample size is not very vast, ten expert interviews will yield knowledge and insight that is high in value because it is not

accessible through other sources and should provide sufficient information to achieve data saturation.

3.1.4 Expert Selection

Ten experts were carefully selected as interviewees for this research. Interviewees were qualified as experts if they had experience developing digital, stand-alone content for museums. This meant that they needed to have created or managed content that can be accessed and utilized without ever visiting the physical museum space. Most of the experts are currently working for museums, and are either educators, digital media creators, digital media managers, or digital marketing managers. Out of the ten interviewees, only three do not currently work at museums, but they all have extensive past experience creating digital, stand-alone content for museums or are currently working for digital agencies that museums outsource their content creation to. Seven of the interviewees live and work in the Netherlands, and the other three live and work either for or with museums in the United States. Because location was not informant of a person's level of expertise developing digital, stand-alone content, location was not a constraint when choosing interviewees. However, having interviews with people from two different countries adds to the depth of this research.

Because there are a limited number of people who possess the aforementioned expertise that qualified them as experts to be interviewed for this research, a form of non-probability sampling, namely purposive sampling, was used. By definition, purposive sampling “is the deliberate choice of a participant due to the qualities the participant possesses...[and] does not need underlying theories or a set number of participants” (Etikan, Musa, & Alkassim, 2016, p. 2). Purposive sampling is necessary because the research requires the gathering of very specific information and is targeted at experts who form a small group, and thus, other sampling methods such as random sampling would not provide the researcher access to this group. Homogenous sampling, a technique under the umbrella of purposive sampling, was used to select candidates who all possess a certain similar set of characteristics, which in this case consisted of job history and experience. Because “the idea is to focus on this precise similarity and how it relates to the topic being researched,” homogenous sampling provided the most insightful conclusions because it helped reveal themes within the opinions of experts in similar fields and levels of experience (Etikan, Musa, & Alkassim, 2016, p. 3).

To connect with experts, the researcher gained access to the first two interviewees through a gatekeeper (Matthijs Leendertse), who has worked with the Rijksmuseum before and has experience facilitating similar projects. The Rijksmuseum, in addition to agreeing beforehand to give access to experts who are willing to participate in interviews, has an ongoing relationship with the gatekeeper. The researcher gained access to an additional expert through the first two experts at the Rijksmuseum, in addition to systematically contacting people on LinkedIn who possess the correct characteristics to be qualified as experts. Additionally, experts were recruited directly through museum websites. The researcher recorded all interviews for later transcription and data analysis, so before each interview, the researcher asked for the interviewees to sign a standardized consent form provided by Erasmus University stating that they accepted to be recorded and that their answers will be used for conducting this research. Additionally, the researcher received verbal consent that was recorded at the beginning of each interview.

3.1.4.1 List of Experts

Expert 1: Wouter van der Horst, Rijksmuseum (In-person interview, April 17, 2018)

Wouter van der Horst is a Museum Educator who focuses on digital educational products at the Rijksmuseum in Amsterdam, the Netherlands. He creates educational products that are suited for both people in the actual museum or at home, and is currently working on a new podcast for the museum. He has participated in the development of many important digital educational products such as the Snapguide for the Rijksmuseum.

Expert 2: Frederique van Reij, Rijksmuseum (In-person interview, April 17, 2018)

Frederique van Reij is a Museum Educator at the Rijksmuseum in Amsterdam, the Netherlands who participates in the creation of digital museum products and is also currently working on a podcast that is scheduled to be released by the Rijksmuseum in the near future. Her background as an art historian helps her share her knowledge through the development of new digital products for the Rijksmuseum.

Expert 3: Martijn Pronk, Van Gogh Museum (In-person interview, April 25, 2018)

Martijn Pronk is the Head of Digital Communication at the Van Gogh Museum in Amsterdam,

the Netherlands. Therefore, he is responsible for the museum's digital communication strategy including the coordination of the website and social media that serve as stand-alone digital products that people can access from anywhere in the world. This expert preferred to not be referenced by name in the results and conclusion sections of the thesis and thus will be referred to as expert 3.

Expert 4: Fransje Pansters, Van Gogh Museum (In-person interview, April 26, 2018)

Fransje Pansters is a Digital Communication Advisor for the Van Gogh Museum in Amsterdam, the Netherlands, and currently works with expert 3 to create digital communication strategy for the museum. She previously worked at the Teylers Museum in Haarlem, the Netherlands also working on social media and the website which serve as stand-alone digital content.

Expert 5: Freek Staps, Dept Agency (In-person interview, April 24, 2018)

Freek Staps is a Digital Content Strategist at Dept Agency in Rotterdam, the Netherlands, an international digital agency that creates digital strategies for an array of different companies and industries. Among those, Staps has worked on digital strategy for museums in the Netherlands including creating digital products such as YouTube videos.

Expert 6: Judith Veraart, ARTtube (In-person interview, May 1, 2018)

Judith Veraart is the Director at ARTtube, a platform that was born at Museum Boijmans van Beuningen in Rotterdam, the Netherlands and has now expanded as an independent foundation that created videos for approximately forty museums throughout the Netherlands. At ARTtube, Judith works on creating digital content, mainly videos, that share exhibitions, collections, and education in mini documentary format.

Expert 7: Geoff Schumacher, Mob Museum (Skype interview, May 2, 2018)

Geoff Schumacher is the Senior Director of Content for the Mob Museum in Las Vegas, Nevada, United States. At this nonprofit museum, all digital content flows through Geoff's department including website content, educational information, a blog, and podcast that is set to be released soon in the future.

Expert 8: Sophie Heijkoop, Museum Boijmans van Beuningen (In-person interview, May 4,

2018)

Sophie is an Educator at Museum Boijmans van Beuningen in Rotterdam, the Netherlands. She works to create digital educational products that cater both to people visiting and those who do not plan to visit. A stand-alone digital product that caters to non-visitors that she has worked on creating is the Gek van Surrealisme, a game in which players can input words based on surrealist paintings and surrealist poems are automatically generated as a result.

Expert 9: Sewon Barrera, The Exploratorium (Skype interview, May 4, 2018)

Sewon Barrera is a Digital Marketing Specialist at The Exploratorium in San Francisco, California, United States. She oversees everything digital that The Exploratorium creates, including website content, supporting content, social media, and email marketing strategy. This expert preferred to not be referenced by name in the results and conclusion sections of the thesis and thus will be referred to as expert 9.

Expert 10: Corinne Colgan, MOMA SF (Skype interview, May 4, 2018)

Corinne is the Multimedia Content Producer at Digital Promise, a digital educational nonprofit agency based in San Francisco, California, United States. Corinne is also a freelancer for the MOMA museum in New York, New York, United States where she creates educational video content. This expert preferred to not be referenced by name in the results and conclusion sections of the thesis and thus will be referred to as expert 10.

3.2 Operationalization

Emergent themes in the literature guided the development of the topic list. The topic list is based on the theory from the theoretical framework, primarily the Business Model Canvas and the innovation techniques described in sections 2.4.1 through 2.4.5 of the theoretical framework. Therefore, the first topic will cover customer segmentation and will seek to explore if the experts have experience engaging the customer segment that might never visit the museum, how they have done so before, and ideas for carrying it out in the future. The second topic will be about developing worthwhile value propositions for users who might never visit the museum. The third topic will cover customer relationship development and how digital media can foster these relationships. The fourth topic will be about channels through which to reach users who might

never visit the museum and this section will focus on digital media and how to use it effectively. The fifth topic will be focused on revenue streams and will help connect all of the previous topics. This section of question list will cover how users who might never visit can help the museum generate new revenue streams and add to the commercial and social value of museums.

3.2.1 Interview Questions

Customer Segments	
<i>General</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘How do museums segment digital users to reach different target groups?’</p>
<i>Data</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘What is the importance of user data for museums and why?’</p>
<i>Location</i>	<p><i>Interview</i></p> <p>Measured by asking the following questions to the interviewee:</p> <p>‘Do you think that segmenting users by location is an important strategy for museums creating digital content? Why or</p>

	<p>why not?’</p> <p>‘Is creating online content in different languages according to location important for museums? Why or why not?’</p> <p>‘Do you think that creating different content for different countries is important? Why or why not?’</p>
--	--

Value Propositions	
<i>General</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘What value do you want to deliver in the digital world?’</p>
<i>Authoritative Knowledge</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘How can museums offer authoritative knowledge online?’</p>
<i>Exclusive Content</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p>

	‘How can offering exclusive content online help museums connect to digital audiences?’
<i>Accessibility</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘How can museums make authoritative knowledge and exclusive content easily accessible online?’</p>
<i>Edutainment</i>	<p><i>Interview</i></p> <p>Measured by asking the following questions to the interviewee:</p> <p>‘How can presenting online educational materials in fun and entertaining ways—through edutainment—be valuable for museums?’</p> <p>“How can museums use edutainment to connect to digital audiences online?”</p> <p>‘Have you heard of or seen edutainment implemented in museum communication strategy before? In what ways?’</p>

Customer Relationships	
<i>General</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p>

	<p>‘How do museums maintain and foster relationships with digital users?’</p>
<i>Co-Creation</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘How can co-creating digital content help to foster relationships between museums and digital users?’</p> <p>‘In what ways or through what platforms can museums co-create content with digital users?’</p>
<i>Communities</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘How can online communities and forums foster relationships between museums and digital users?’</p> <p>“In what ways can online communities be useful for museums?’</p>
<i>Personal Assistance</i>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p>

	<p>‘Is it important for museums to provide personal assistance to digital users? Why or why not?’</p> <p>‘How can this be achieved (through chat boxes or other question and answer forums)?’</p>
--	---

Channels	
<i>General</i>	<p><i>Interview</i></p> <p>Measured by asking the following questions to the interviewee:</p> <p>‘How can different online channels be used by museums to connect with digital users?’</p>
<i>Omni-Channel Approach</i>	<p><i>Interview</i></p> <p>Measured by asking the following questions to the interviewee:</p> <p>‘How can the omni-channel approach to presenting digital material online be helpful for museums?’</p> <p>‘What is the importance of integrating all of the online channels for a museum (website, social media, etc.) to create one face for customers? Why?’</p>

Revenue Streams	
<i>General</i>	<i>Interview</i>

	<p>Measured by asking the following questions to the interviewee:</p> <p>‘In what ways do museums seek to generate revenue with digital users?’</p>
<p><i>Social Revenue</i></p>	<p><i>Interview</i></p> <p>Measured by asking the following questions to the interviewee:</p> <p>‘How important is creating social revenue for museums? Can this be achieved digitally? How?’</p> <p>‘How important is it to measure social revenue?’</p> <p>‘How is social value measured in the context of museums? How is this reported to funders and the government?’</p> <p>‘Why is generating social revenue online important for museums?’</p>
<p><i>Commercial Revenue</i></p>	<p><i>Interview</i></p> <p>Measured by asking the following question to the interviewee:</p> <p>‘How important is creating commercial (monetary) revenue for museums? Can this be achieved digitally? How?’</p>

	<p>‘How important is it to measure commercial revenue online?’</p> <p>‘Why is generating commercial revenue online important for museums?’</p>
--	--

3.3 Data Analysis

3.3.1 Thematic Analysis

After recording all of the ten interviews with experts, the recordings were each manually transcribed into written text that could be further analyzed to discover dominant themes. This thesis does not seek to generate new theory, so theoretical thematic analysis was used, “a process for encoding qualitative information”, that lends itself well to this study because it is an inductive process that extracts findings from the data based on the theoretical framework (Boyatzis, 1998, p. 8). Using the theoretical framework that has been previously established allowed new insights to surface regarding the five sections of the business model canvas that were described in chapters 2.4.1 to 2.4.5. This process required reading through the data multiple times to look for the most broad and important themes corresponding to theory and then grouping the important concepts to later draw conclusions from.

The first step in conducting theoretical thematic analysis was to code the data that reduced the data through the process of induction (Ayres, 2008). During this process, the data was decontextualized and given specific labels that served as codes. After reading through the interviews multiple times and finding no new categories or subcategories, the data reached saturation (Ayres, 2008). At this point, the researcher reorganized and regrouped the codes into dominant themes that were discovered in relation to the original research question and the theoretical framework. According to Ayres, it is important for the researcher to “consider the relevance of each theme to the research question and to the data set as a whole, thus keeping the developing analysis integrated” (2008, p. 868). Additionally, the connection between the themes developed must be kept in mind in order to maintain the integrity of the original data, despite the fact that the data was originally decontextualized (Ayres, 2008). This form of analysis is thus holistic in nature as the researcher had to look at both the individual pieces of data and the larger themes both in relation to each other and the research as a whole. In this way, the researcher was

able to draw conclusions that reflect the original ideas expressed during the interviews as well as to draw meaningful insights that were reported as themes in the following results section of this thesis.

4. Results

4.1 Customer Segmentation

4.1.1 General

As previously mentioned, customer segmentation is necessary to understand customer behavior and is essential for organizations attempting to recognize customer needs and deliver to each segment appropriately (Hsu, Lu, & Lin, 2012). In the interviews, this proved to be true. Almost unanimously, experts agreed that customer segmentation was a highly important aspect of engaging with a digital-only customer segment, and specifically used the word ‘important’ to describe the process of customer segmentation (interviews 1, 2, 3, 7, 9, & 10). As the aim of this research is to discover why segmenting digital users is important and how to carry this out, the following section will seek to answer the sub-question: *How can museums best segment users who might never visit the museum?* This section will explore the possible answers to this sub-question through the systematic analysis of themes that were discovered in the expert interviews.

4.1.2.1 Translating the Physical to the Digital

Additionally, experts pointed out the fact that segmentation is essential in translating the physical to the digital (interviews 1, 2, 4, 7, 9, & 10). Interviewees mentioned that in this new, digital realm where museums are attempting to engage with people who might not visit a museum, a strategy used to segment customers is to view the digital realm similarly the physical, and agreed that digital users should be viewed as a new visitor segment. This idea contradicts the idea of the diversified customer business model developed by Osterwalder and Pigneur (2013), a model in which an organization seeks to serve two very different customer segments. Rather than created two unrelated strategies, experts felt that they could take strategies that were used to segment physical visitors and apply them to digital users online. This contradiction was exemplified in particular by a quote from Wouter van der Horst in interview 1:

I think that the same strategies and same ideas go for the offline world as the online world. There’s really no big difference between whether you’re online or

offline...because we have our mobile phones with us all the time. A museum visitor in this day and age with all this technology is much more than just a physical visitor.

As van der Horst points out, the online and offline worlds are now merging into one as people become more intertwined with technology, which affects the ways that people culturally consume content. According to Padilla-Meléndez & Águila-Obra (2013), people are consuming cultural content in increasingly digitized ways, which could support the experts' views that segmentation of digital users should follow what they are already doing for physical visitors. Frederique van Reij reiterates van der Horst by stating "Content wise, I think we pretty much segmented the same offline as online" (interview 2). Additionally, expert 10 describes this translation from the physical to the digital realm through her experience working for the MET in New York City in the following quote (interview 10):

I think that the MET for example...was thinking about the way that there are lots of people who know about the museum, who know about that museum's collection, that are unlikely to come to New York City to spend a day at the museum but they want resources available online that kind of almost over-explained for someone who was coming to the museum.

The vast majority of the interviewees highlighted this translation that Corinne references from physical to digital, which some explained as expansion, as new user groups develop in the digital world and then need to be segmented for the organizations to meet their needs.

4.1.2.2 Various Methods of Segmentation

However, different experts had very different ideas about segmentation, and how to go about doing it, especially with audiences that exist solely digitally, as these have become emergent and important customer segments only recently. Some experts used specific strategies or a combination of strategies to segment digital users, such as segmenting by age (interviews 6, 8, & 10), segmenting by audience type (interviews 1, 2, 4, 6, 9, & 10), and segmenting by platform (interviews 1, 3, & 4).

4.1.2.2.1 Segmenting by Age

Experts who segmented based on age were all experts who focused more on education and creating educational digital museum material, so it makes sense that they would want to segment

digital users by age as adult digital educational content differs severely from children's digital educational content. Sophie Heijkoop, an educator, explained the importance of age segmentation by stating (interview 8):

You can think in advance that you want to focus on younger people and try to reach them and then do audience research and see that older people also like your digital tool.

In this case, the age segments may even need to be grouped together or the digital museum product may need to be tweaked to adjust for discrepancies in the mannerisms of the different target age groups. Thus, it is important to understand the ages of a museum's digital target audiences and segment accordingly to deliver value to the different age groups appropriately.

4.1.2.2.2 Segmenting by User Profile

Another prevalent method of segmentation was based on audience type or as some described it, type of person. Experts who advocated this method described different types of people based on characteristics such as level of knowledge, and then these various types of digital users could then be separated into different digital segments. If digital users are segmented like this, it is easier for museums to then create content that fits the specific needs of these segments. Van Reij gave a good example of how this has been executed (interview 2):

We have different target audiences that we segment from an educational point of view, and I think that we do the same offline as online, so we have the cultured tourists, the art lover, families and children, schools, and professionals.

By understanding these various user profiles, it is easier for experts at museums to know what will interest different digital user segments. For example, an art lover may want digital products with much more in-depth knowledge such as a podcast about a particular painter, while families and children may want a more fun, surface level view such as short YouTube videos that present educational content in easily understandable ways.

4.1.2.2.3 Segmenting by Platform

Another strategy that became a theme among the experts was segmenting by platform according to content type, which entails finding out what users on various platforms typically like and what they want to see. Someone on YouTube may be looking for shorter content that is easier to digest than a visitor to a lengthy blog. Expert 3 clearly stated that this is one strategy that the Van Gogh

Museum employs (interview 3):

Basically, we are here for everybody. So basically, everybody is one big group, and then we segment according to platform. We will try to find the best platform for this particular type of information, trying to connect it to a typical user group on LinkedIn or Facebook.

Fransje Pansters, who also works for the Van Gogh Museum, elaborated on this (interview 4):

In the whole segmentation of audiences, it's important to know how to tell your story, and it can be different for different users. It only makes sense to use a certain platform if you know you can reach the audience there that you want to reach there.

Her emphasis here was on the fact that certain people may only use certain platforms, or may only be comfortable being reached through certain platforms. And as expert 3 stated earlier, meeting people on the right platform with the appropriate content for that platform is important. Along this line of thinking, experts explicitly stated that museums should focus on platforms that are already very popular currently, rather than trying to reach customer segments through new platforms that museums create themselves (interviews 1, 2, 3, & 4). Because people are already on popular digital platforms such as YouTube and Facebook, it is easier to get in touch with them there rather than trying to entice certain customer segments to come to a newly built platform.

4.1.2.3 Segmentation Strategies Need Work

The last theme that was clearly noticeable among experts in their accounts of segmentation was that many expressed the fact that they do not feel that they are as advanced as they would like to be. This is linked to the claims made by Gilmore & Rentschler (2002), who stated that digital media has created new challenges for organizations in segmenting online customers. Discovering how to overcome these new challenges means that museums are therefore less advanced in their segmentation of digital users than physical visitors. Experts felt that segmentation of customer segments in the physical museum was quite advanced, but that digital segmentation, as it is continually emerging, still needed work (interviews 1, 3, 4, & 7). Expert 10 pointed out that, based on her experiences working for multiple museums, they often lag behind industry in their segmentation and ability to track different user groups digitally (interview 10). Van der Horst backed up her claim by stating (interview 1):

We very clearly segmented our visitors in the museum, for example with our school visitors, we have thirty-five different school programs to serve the different needs, and that's amazing if you think about it. But that doesn't translate to our online strategy.

With the increasing importance of reaching digital user segments, museums still seem to have work to do in knowing who these users are and through which means to get into contact with them if they want to capitalize on the opportunity to engage with these new user groups.

4.1.2 Data

4.1.2.1 Making Sense of Big Data

To appeal to the many different audience needs, segmenting users is particularly important, especially in a digital environment (Gilmore & Rentschler, 2002). Van der Horst and Pansters reiterated the importance of using user data to appeal to properly serve the various needs of different digital customer segments (interviews 1 & 4). They cited this need to understand what the individual user segments want as the most important driving force behind the use of big data to understand various user segments,

Using big data to segment digital users has proved to be a viable strategy, but the difficulty is often in knowing how to use it to an organization's advantage (Brown, Chui, & Manyika, 2011). Experts often expressed this difficulty, citing the incredible volume in user data that is now available. This ties back to the fact that many experts felt that their online user segmentation was not up to par, as it is difficult to know exactly how to make sense of all of the data and use it to their advantage. Expert 3 explained this in the following quote about the Van Gogh Museum (interview 3):

We have lots and lots of followers, so there is volume in the data. So we will be working...to find out what we can do with all these data...how we can use them to improve [digital] products and services to connect with more people.

4.1.2.2 Using Data to Find the Audience

Expert 3's previous quote also ties into another emergent theme, which is that many experts felt that the main use of data was to discover how to connect with more people or where to meet them. Knowing the audience well and where to reach them was cited as the main result of interacting with and analyzing big data (interviews 3, 8, 9, & 10). Interestingly enough, some

experts said that along with analytics and other sources of user data, the organizations that they work with gather data through surveys either online or within the museum, and then apply this knowledge that is gathered online. This is a different method than what was expressed in literature. Brown, Chui, & Manyika (2011) advocated using internet click streams to gather data, while some of the experts gathered user data by conducting surveys instead. Expert 9 gave an example of how The Exploratorium uses in museum research or surveys to segment users digitally (interview 9):

Here at the Exploratorium, we segment our [digital] users based on our actual, in museum research. User data is incredibly important...because data is able to things that I may not know about where visitors are coming from and how they find us, and what they do when they access one of the pages on our website.

It is interesting to note that the audience research that the various experts conducted was mainly through in-person surveys rather than online ones, despite the fact that they are using this data to segment digital customers. This echoes the earlier theme of translating the physical to the digital, rather than coming up with entirely new ways to segment digital users.

4.1.3 Location

4.1.3.1 Reaching International Audiences

When it comes to segmenting based on location, literature states that because location-based boundaries do not exist online, organizations must be able to deal with a variety of digital user types from different international backgrounds and account for cultural differences in the process (Barnes, Bauer, Neumann, & Huber, 2007). A vast majority of the experts agreed with this, and stated that segmenting based on location was an important strategy in order to reach international audiences online (interviews 1, 2, 3, 6, 7, 8, 9, & 10). One of the most important reasons for this, as stated by the experts, was to account for language and cultural differences. Experts wanted to meet different digital user segments online, if possible, in their own language. For example, van Reij stated (interview 2):

Yes, [we segment] nationally, internationally, or by languages...because you're going to have to create different content for different people who speak different languages.

Additionally, two experts said that location plays an important role in segmenting national digital

users alone. Geoff Schumacher said, “One thing we know is that certain areas of the United States are particularly attracted to certain content” (interview 7). Expert 9 elaborated on this in the following quote (interview 9):

I think that segmenting users by location is really important knowing that such a huge percentage of our current physical visitors to the museum are local to here, it supports that we should reach them digitally.

4.1.3.2 The Importance and Difficulty of Using Multiple Languages

Many experts acknowledged the importance of creating content in a variety of languages online, because they believe that posting in the audience’s native language is more engaging (interviews 3, 4, 9, & 10). This opinion is supported by Barnes et al. (2010), who discovered that treating digital users from different language backgrounds and countries in the same way has not been an effective strategy. Thus, it is important to tailor content based on language and location. As expert 3 said, “We have seen from tests we’ve already done...that posting in the language of the audience is much more engaging” (interview 3). However, many also stated that a problem with managing content in a variety of different languages was both too expensive and time consuming. This opinion correlates with Hennig-Thurau (2010), who stated that segmenting by location is both exciting but also quite difficult. Expert 3 explained that if content begins being posted in a new language, it needs to be consistently maintained and edited, and this requires having someone on-site every day to manage all of the content in a particular language (interview 3):

We cannot start posting in Spanish...and then quit. So once you start you have to commit. So you have to budget for translating, and also you have to consider that your production time will be much longer.

In the previous quote, he also noted the added time it takes to produce new digital content as more languages are added, and this creates complications for an organization trying to consistently produce engaging digital content online for various user segments.

4.1.3.3 International Versus National Focus

Another interesting phenomenon to note among the experts was that the Dutch experts seemed to have a much more international focus than the American experts, who were not quite as

concerned with creating content in multiple languages. For example, Schumacher simply said that he expects that Facebook and Google auto-translate to be enough for international digital audiences to become engaged with the Mob Museum's digital content online (interview 7). However, this is contradictory to expert 3's previous statement emphasizing the importance of posting in the language of the audience from the beginning. For low-involvement audiences who may not want to sift through loosely auto-translated text, Facebook and Google auto-translate may not be enough for museums to engage with international customer segments online.

4.2 Value Propositions

4.2.1 General

As discussed earlier, value propositions are products or services that organizations offer their users and they are the reason that people choose to engage with one organization over another (Osterwalder & Pigneur, 2013). This section seeks to answer the sub-question: *What value propositions can museums offer to users who might never visit the physical museum?*

Experts had a wealth of opinions regarding the value that they wanted to deliver to the digital world. Their opinions varied widely and they had many different ideas about what kind of value was best suited for digital users, but there was one overarching theme that was laced throughout almost every single interview. This theme is more abstract than the value propositions that were generated in the theoretical section of the research, and is storytelling.

4.2.1.1 Storytelling

Almost unanimously, experts mentioned the idea of storytelling as being one of the most important forms of value that they wanted to deliver to digital users (interviews 1, 2, 3, 5, 8, & 9). A popular buzzword in the communication and business worlds today, the power of storytelling has been becoming more widely recognized as an essential, intangible value proposition that gives a feeling of human connection and personalization to communication with customers. According to experts, storytelling provides digital users with inspiration (interviews 1, 3, 4, 5, & 6). Storytelling was also mentioned as a way to convey positive notions about art and museums to digital users who otherwise might remain less interested in online museum content. Experts also mentioned that storytelling helps people connect emotionally to museum content that might otherwise seem dry, because it helps to evoke emotions in audiences and enrich the lives of digital users. Staps explained the importance of museums as storytellers and

why these organizations should use storytelling as a value proposition not just in the physical museum, but online as well (interview 5):

Well, most of all, I think it's important [to] realize that the museums are storytellers. So, they must realize that telling a story is done in more shapes and forms than just a small sign on a wall next to that painting...I'm a great believer in that element of storytelling in there, and museums have a unique capability but maybe even a responsibility to tell those stories online as well and not just in a physical place.

To connect with digital audiences requires more than just presenting information on art or science online. To connect with people, experts claim that digital users need to feel a sense of connection to the museum and this is facilitated through good storytelling techniques. Van Reij agreed with Staps's previous quote in the following statement (interview 2):

I think from an educational point of view, the goal of reaching an audience online would be not only to educate them...[but] also [to] give them an online experience that offers not only insight into our collection but also the stories we're telling as a museum.

4.2.2 Authoritative Knowledge

Authoritative knowledge was agreed upon by the majority of experts as being a highly important value proposition that can be offered to digital audiences. Knowledge was mentioned as being useful for establishing authority (interview 3), increasing the interest of digital audiences (interviews 1 & 4), and helping to make art and science more relevant by connecting past to present (interviews 1 & 3). Often referring to authoritative knowledge as education, experts mentioned that educating (digital) publics is their core business and possibly the most important value proposition that can be delivered online (interviews 1, 2, 4, 7, 8, & 9). This supports the opinions of Weinberg & Lewis (2009), who claimed that the main value propositions that museums can offer digitally are linked to education. Expert 9, speaking about education in the context of the Exploratorium, which is a science museum, described how education can be offered as a value proposition online in the following quote (interview 9):

Our main mission is to transform learning worldwide. And, so you know, if visitors anywhere in the world are kind of able to take away from our website...to learn about experiments that they can do at home using simple materials that they have in their

homes...I think that's really exciting and encouraging and I think that's one of the value propositions that we can provide.

It was also mentioned that museums needed to work on appearing as one of the first websites on search results if they are to be widely used as sources of knowledge and education online (interviews 1, 2, & 7). Experts wanted educational and informational museum content to appear higher up on search results when digital users look for information online, rather than the organization itself appearing high on websites like Trip Advisor, which they expressed as not being useful for connecting with digital-only audiences, as websites like this are suited to physical visitors. Additionally, knowledge cannot be communicated through these websites, so experts said that they need to work on finding ways to compete with websites like Wikipedia when people Google search for answers regarding cultural, artistic, historical, or scientific knowledge that they are authorities on. This opinion is supported by Russo et al. (2006), who claim that if museums do not provide factual, educational content online, digital users will seek this knowledge from other sources that are likely less reliable. Experts spoke about a few innovative ways that museums were sharing authoritative knowledge online with digital users that are explained in the following subsections.

4.2.2.1 Educational Games

Museum Boijmans van Beuningen is currently operating an online game called Gek, which exposes audiences to surrealist art in a fun way (interview 8). This game can be used in classrooms in other parts of the world, assuming audiences have access to the Internet. Because this museum has a large collection of Surrealist paintings, they created a game in which people can enter words into a generator that then creates abstract, Surrealist poetry and connects it to an image of one of the paintings that is housed in Museum Boijmans van Beuningen that is then displayed digitally. In addition to exposing children to Surrealist painters' works, it also helps them to better understand Surrealist poetry and the movement as a whole in a fun, easy, and simultaneously educational way.

4.2.2.2 Educational Videos

Additionally, Museum Boijmans van Beuningen has videos online for children where a parrot named Paulo rearranges artwork to explain how paintings are constructed (interview 8). Again, this is digital product that can be shared with audiences anywhere online. ARTtube creates

videos that can be considered to be almost exclusively educational, as their content is always about art, artists, or the art industry as a whole (interview 6). ARTtube's videos are created for a variety of art museums across the Netherlands, but they can all be accessed online for free from anywhere in the world to help people understand more about content in these museums such as the Dutch masters. ARTtube is also experimenting with creating MOOKs, otherwise known as massive open online courses. They are attempting to collaborate with universities to create Mooks based on knowledge pertaining to art that digital users can use, and strive to have these MOOKs accredited so that users can receive a diploma after the completion of a course.

4.2.2.3 Educational Blogs and Archives

Another way for museums to showcase their authoritative knowledge and share it with user who might visit museums is through educational blogs and archives. For example, the Mob Museum has multiple microsites, or dedicated websites to specific topics and a blog on their main website that features solely educational content about mob and crime history (interview 7). Digital users from all over the world can use the microsites and blog as a way to obtain reliable educational information about this subject that the museum is an authority on, all in one place.

The Rijksmuseum offers digital educational content through archives, that students can access online (interview 2). The archives act as an educational tool for students who are prompted to learn through being asked questions and given challenges. Additionally, they offer an online library and database which serve as a vast repository of knowledge that digital users can tap into if they are searching for knowledge that the Rijksmuseum is an authority on.

4.2.3 Exclusive Content

Exclusive content was most widely understood as being offered in the form of digitized collections. Many experts said that they either already had digitized collections or expressed that they agreed that digitizing collections has value and can be offered as a value proposition to digital users (interviews 1, 2, 4, and 7). According to Arrends et al. (2009), digitizing collections and offering other types of exclusive content can facilitate bidirectional communication.

Although experts did not specifically mention this in their interviews, many acknowledged the importance of digitizing collections and later in customer relationships, the importance of bidirectional communication. So the opinions of experts are therefore in line with those of previous literature. Many experts acknowledged that nothing online can beat the authentic

experience of seeing art in person, however, even those who stated this agreed that there is still value in digitizing collections for digital users. Digitization should not necessarily be compared directly with the physical experience of being in a museum and should be viewed as an entirely separate experience. When collections are digitized well in high resolution, users can get a closer look at art which can create a more personal connection for users, or give people who might not be able to visit a museum the opportunity to still be exposed to artworks that they would like to have the experience of seeing which provides context to learning about them in textbooks or through other online sources (interviews 1 & 2).

Issues can arise with digitizing collections for modern museums, as was mentioned by Heijkoop, where copyright issues bar museums from copying content into digital format (interview 8). Pansters also mentioned that digitizing alone is not enough to engage with digital users, and that it is only valuable if combined with storytelling and other forms of digital media (interview 4). However, if done right using high-tech software, it can prove to be very valuable. Weinberg & Lewis (2009) said that digitizing collections using high-tech software can attract new users, and Schumacher explained how the Mob Museum is implementing this strategy in the following quote (interview 7):

Last year, we acquired the software needed to improve our—to place our collection into a digital format, a proper modern format. And now we're able extract content because we've got another piece of software that allows us to extract that content and create digital exhibits.

In addition to digitizing collections, museums had other, innovative ways of offering their exclusive content as a value proposition to digital users. One of these ways is through YouTube channels that are specific to a museum or one subject within a museum, or other exclusive video content that is made available through alternative platforms such as a museum website. The Rijksmuseum is currently developing their own YouTube channel which will be able to engage with audiences anywhere, because the content will be focused on the art or artists housed in the Rijksmuseum. Additionally, Pansters mentioned that she had seen multiple museums using branded YouTube channels to share more about the content housed in their museums. Additionally, expert 9 gave insight into the Exploratorium's use of having a YouTube channel to share exclusive content with digital audiences online (interview 9):

Yeah, we have a YouTube channel and a video section of our website. And the cool thing about the Exploratorium is that we have an in-house photography team and an in-house video team called Moving Images. So we are always creating content in-house and are fully equipped to do that

Another way to provide exclusive content as a value proposition to digital users is through podcasts. Many experts mentioned that their museums already had podcasts or were working on them currently. The Rijksmuseum as well as the Mob Museum are both working to create podcasts, but these seem to be farther behind than some of the other digital products like digitized collections and YouTube channels. For example, Schumacher explained how the Mob Museum is currently working towards creating a podcast by exploring the podcasts that already exist pertaining to mob and crime history, and seeing how they can improve upon or add to that (interview 7). This will differentiate the Mob Museum podcast from other, similar podcasts and give digital users a reason to engage with their podcast over others.

One of the more interesting products that was mentioned by educators from the Rijksmuseum is Rijkstudio (interviews 1 & 2). Rijkstudio is an app that provides users with a digitized version of the Rijksmuseum's own collection. Users can curate their own collections, print one of the images, or use the images for other purposes such as an iPhone case or wallpaper. The images are all provided at ultra-high resolution and do not have a copyright if used personally, so users can engage free of charge. Rijkstudio helps to connect people with art in a fun and practical way, and this is something that can be enjoyed from anywhere in the world, most definitely without a visit to the physical museum. Thus, this is one of the most innovative digital products that museums can use to engage with people who might never visit the museums. Van Reij describes how Rijkstudio works in the following quote (interview 2):

Rijkstudio does is...they offer this online content for free so everybody can download these images and use them for their own purposes. If you want to use them commercially you have to pay a fee, of course, but what is great is that they focus on the image first and not so much on the stories behind them, which I think is very accessible for online users.

4.2.4 Accessibility

Experts logically tied the concepts of authoritative knowledge and exclusive content to accessibility, stating that the latter two were not worth anything if they were not made easily

accessible online and did not reach digital users (interviews 3, 6, & 7). This is supported by the opinions of Siu et al. (2013), who claimed that accessibility is a key component of success for museums, because digital users now expect knowledge and content to be easily accessible online. Expert 9 compared having great knowledge and content but not making it easily accessible to having a great idea and screaming it into the corner of a room filled with people interested in what that person has to say (interview 9). Many experts said that accessibility was simply about being in the logical places on the Internet, where people already are looking for information or content, which would fall in line with the idea of YouTube and podcasts being useful ways to make knowledge and content easily accessible to digital users (interviews 1, 2, 3, 6, & 9).

4.2.4.1 Creating Accessible Digital Products and Services

Because almost all business and communication now occurs at least partially online, experts said that it was important for museums to get on board and stop lagging behind industry (interview 10). Van der Horst said that part of making museums more easily accessible to digital users is about experimenting with what works, since they are at the beginning stages of figuring out how to do this and that quality is more important to quantity (interview 1). This means that making one product very easily understandable and accessible is more important than making everything digital all at once, rather than not having it presented in an understandable manner or not being on easily accessible platforms.

4.2.4.2 Establishing Centrality

An important component of accessibility is establishing centrality, meaning making a museum known as being the central point of contact for whatever subject they house in their museum (interviews 3, 6, 7, & 9). This may mean re-packing knowledge to be more understandable or suited to digital audiences, and as Pansters said, “the way we bring the information is we re-pack it in a different way and try to play around with the emotional sides, some interpretation, in order to make it attractive for people to delve into it” (interview 4). Another element of establishing centrality is creating content in multiple languages, or if it is video content, subtling the videos to make them more suited to a wider digital audience which echoes the importance of location based segmentation (interview 10).

4.2.5 Edutainment

Edutainment was unanimously recognized as being an important element for museums in delivering value propositions to digital users, and another way of increasing the accessibility of art for the average, low-involvement digital user. The opinions of experts corresponded to the opinions of Addis et al. (2005), who claim that edutainment is well suited to digital media engagement with low-involvement audiences because it is interactive and flexible. If users aren't interested in what a museum is offering online, then their value propositions automatically become irrelevant. To create more enticing value propositions, museums can take an edutainment perspective to their content creation to make the experience more fun for digital users. Edutainment was recognized as being a great way to close the gap between art and the average citizen or online user, who may feel an inherent distance between themselves and famous artists that might feel stuffy or pretentious to them (interviews 1, 3, 4, & 10). The high and lofty image that people may have about art can make it hard to relate to, but edutainment can use humor to help break down these barriers. The informal nature of the edutainment perspective inspires people to talk about art in new ways which makes it more accessible to the average, low-involvement digital user who likely has very little knowledge of famous art and artists (interviews 1, 2, 4, 6, 7, 9, & 10). Van der Horst gave more insight into how edutainment can help change the way people look at art that makes digital museum content more accessible in the following quote:

It's always a certain way of talking about art, which we agreed upon at some point, but I think breaking down those barriers—one of my personal missions is that everybody can make their own connection with art and that also includes talking about art in a complete different way, and having people discussing art in a completely different way.

Part of changing the conversations surrounding art online for digital users is recognizing that everyone's opinions are relevant regarding art, and that one does not need to be an expert to engage with art (interviews 3 & 10). As expert 3 said, "what you personally...think about Rembrandt is as valuable as what the museum has to say about him (interview 3).

Edutainment was also agreed upon by experts as a great way to make a boring or obligatory museum setting into a fun experience for digital users (interviews 1, 2, 3, 7, & 10). Experts were aware that museum visits, whether physical or online, can sometimes feel like

homework to people, and edutainment makes the learning that naturally occurs in museums more approachable and appealing to digital users. This is important if museums are to compete with their rivals, other cultural institutions, online (interview 7). Schumacher said of the Mob Museum that “we operate in a mode of being more like an attraction than a museum” (interview 7).

4.3 Customer Relationships

4.3.1 General

Managing digital customer relationships through digital media, as established earlier, presents a new set of challenges for museums as digitization creates an inherent sense of detachment. However, the iterative, flexible, and high-speed nature of digital media also affords many benefits (Fletcher & Lee, 2012). This section will seek to answer the sub-question: *How can museums build customer relationships with digital users?*

Experts concurred that digital media provides many new interesting possibilities to connect with people who might never visit museums, but they also acknowledged that it can be rather impractical because it requires a lot of management and it is harder to standardize the quality when multiple people are managing digital communications (interviews 2, 4, 4, & 10). Pansters pointed out that despite the fact that multiple people have to be hired as full-time employees to manage these digital relationships, it is worth it to the museum because they are able to get in touch with more people who then become engaged and feel a connection to the museum (interview 4, p. 8). Experts also agreed that the lack of physical contact with digital users makes it harder to develop relationships with them (interviews 2, 3, 6, 8, & 9).

If museums are to capitalize on digital media and attempt to engage with users who might never visit, experts provided tips that they believe to be important in developing these relationships. One main theme was the importance of showing a level of human connection and direct contact, and connecting to users on a more personal level (interviews 4, 5, 8, & 9). Some experts believed that social media could act as the main connector of these relationships and facilitate that feeling of humanity that digital audiences search for in order to keep them engaged in relationships with organizations over time (interviews 7 & 8). This requires museums to not simply think of what they want to share with digital audiences, but also to listen to what digital audiences want from them. Staps illustrates this point in the following quote (interview 5):

I would always say to a museum not to focus—not to start—from the focal point of the museum, but of the user...think about your target audience first and then about what you have to offer.

What Staps previously described reiterates the iterative and continuous nature of digital media and that it acts as two-way or multi-way communication rather than unidirectional communication as was more common of museums in the past. This opinion is backed up by Hennig-Thurau et al. (2010), who stated that digital media creates two-way conversations between users and organizations which is important in relationship maintenance. This theme is also expressed in section 4.3.3 on communities.

4.3.1 Co-Creation

Co-creation is a type of relationship that some experts expressed skepticism of due to the fact that it is not particularly suited for low-involvement users as it requires a higher level of participation (interviews 2, 3, 6, & 8). Some experts said that they had experimented with co-creation and found it to be relatively unsuccessful (interviews 8 & 10). Van Reij acknowledged that if it is to be done, it is important to keep it simple and not ask too much of the digital users; she uses the example of the success of Rijksstudio and how it only requires users to curate images, to illustrate the point that simplicity can lead to higher rates of success with co-creation (interview 2).

Despite the skepticism of some experts, other experts said that it is a type of relationship that is proven to be viable, and the evidence lies in the fact that they have either done it themselves or seen it done successfully before (interviews 1, 3, 6, & 7). Veraart used the example of scrollytelling and video creation done by ARTtube (interview 6). Schumacher described how the Mob Museum connects with experts around the United States to create digital content of the highest quality as another example of co-creation, although this is with other subject matter experts rather than audiences (interview 7). As previously mentioned, Rijksstudio has seen huge success as a creative tool that allows digital users to create collections of their favorite artwork from the Rijksmuseum and even use the images to create a cover for a phone or a print out as a wall hanging. Additionally, the Rijksmuseum gives out a Rijksstudio award which actively promotes people to create new things with the Rijksmuseum's own collection. Van der Horst sums up the success of Rijksstudio in the following quote (interview 1):

I think we've proven [co-creation] to be viable with Rijksstudio, it's one of the best examples. I think Rijksstudio is about five years old now and there's almost half a million collections being made by digital audiences.

The experts had varying ideas about what constituted co-creation and how this would look as a strategy to connect with digital audiences, but the previous avenues to co-creation that have been listed all qualify according to Prahalad & Ramaswamy (2004). These authors characterize co-creation as being marked by the ability to personalize experiences and have a dialogue. Co-creation can come in many different forms, and as can be seen by Schumacher's example, co-creation can be done with other authorities to create digital content that can be more engaging for digital users, as well as being done with digital users as is done at the Rijksmuseum with Rijksstudio.

4.3.2 Communities

Experts also expressed discrepancies in their definitions of what constituted an online community. Some saw social media posts as forums because people can comment, like, and respond to each other and the organization (interviews 1, 4, 8, & 9). Facebook groups were deemed by many experts to be very useful in developing interest around a particular subject relating to a certain museum's content (interviews 4, 5, & 9). According to literature, all of these relationships can be considered communities because people are interacting on a forum about a particular shared interest to achieve personal and shared goals (Porter, 2004; Hennig-Thurau, 2010). Additionally Staps explained that algorithms on Facebook are changing, and that organization and brand pages will appear lower on timelines, whereas interest groups will be pushed higher (interview 5). Because of this, it would make much more sense for a museum to create a Facebook group around a subject within their museum rather than the museum itself. He explained this concept in the following quote (interview 5):

That [creating online communities] would definitely be valuable if only for the fact that it makes it easier to get into the timelines of Facebook...Facebook is going to penalize organizations and brands, and they're going to put more accent onto communities. So if you build a community around a subject or and artist, that would be really helpful.

Besides social media, communities took form as microsites and blogs in other museums. For example, Schumacher explained how they have "microsites" as he described them, or sub-

websites around specific subjects at the Mob Museum, such as the prohibition era that he considers to be an online community for digital users (interview 7). This allows digital users to come to one, cohesive place for information. However, it does not allow for easy multi-way communication because there is no specific forum for people to have a conversation, despite the fact that they can directly contact the museum through email or social media to answer their questions.

4.3.2.1 The Importance of Multi-Directional Communication

Regardless of the varying ideas about what can be considered an online community, experts agreed that communities are definitely a type of relationship that museums should invest in because they provide a space for people to discuss, debate, and reflect on subject matter with a shared common interest (interviews 1, 2, 3, & 9). Experts pointed out that communities can connect museums to other, far away museums, museums to digital users, digital users to other digital users, and even physical visitors to digital users. Having a community centered around a shared common interest makes these many different relationships possible, and thus communities help spur digital interaction (interviews 1, 2, 3, 4, 8, & 9). Coming back to the point made in section 4.3.1, this increased digital interaction is a result of multi-directional communication that digital media affords (Hennig-Thurau et al. (2010). Digital users can now talk back to and question organizations rather than simply absorbing information that museums choose to funnel to their audiences. Having open communication and creating dialogue between museums and digital users helps to foster and maintain sustainable, long-term relationships because users feel more valued when organizations listen directly to them. Pansters sums this point up in the following quote (interview 4):

It's important that you start a dialogue...people have an opinion. People feel something with a certain artwork and if you can open yourself towards opinions from others [online] than you can have a dialogue or a conversation.

To create multi-directional communication more easily, experts also suggested capitalizing on subjects that are societally relevant or exhibitions that are currently going on in the physical museum that digital users might have an opinion on (interviews 2 & 3). This helps to create interest around a particular subject, rather than just the museum itself which may be less relevant to users who might not visit the actual museum.

4.3.1 Personal Assistance

Experts unanimously said that providing personal assistance to digital users is an important relationship to maintain, but some even went as far as to say that it is an obligation to society that museums must fill as authorities (interview 1, 3, 8, & 9). Heijkoop illustrates this in the following quote:

If people ask me questions via our question point online, I always react seriously. Even if people ask silly questions, I still respond...because I think we are a public space and it's a service to the people.

Using email and web-based chat as mechanisms to provide digital users with personal assistance can facilitate both commercial and social user communication, according to Zinkhan (2003), and it seems that the experts' experiences are proof of this. To fulfill the obligation of providing personal assistance, experts agreed that having a social media team is necessary for providing quality web care (interviews 1, 2, 3, & 9). This is because many questions tend to come through different social media channels, and the assistance relationship, therefore, needs to occur on whatever platform it is asked (interviews 1, 2, 3, & 9). Providing this support to users can increase the strength of their relationships to museums over time (Zinkhan, 2003). Some museums even had certain days that are designed as "ask a curator" on which digital users can ask questions about specific artists or artworks via Twitter or other social media. Although this requires additional management, expert 3 explained why this is worth it to museums (interview 3):

By improving web care we are increasing engagement, so we can attach value to it. We can prove that it helps us as an organization; that it helps to achieve the goals that the museum wants to, that the museum thinks are important.

When engaging in personal assistance relationships, experts said that it is important to quickly formulate thorough responses that are easy to digest and tailored rather than standardized (interviews 3, 4, 5, 8 & 9). Probably due to this belief, no experts had used or seen bots used on museum websites to answer questions. Bots provide basic and standardized answers that may not go deep enough to answer in-depth and complex questions that might arise from intellectual and artistic museum content. Multiple experts said that they provided personal assistance simply through email (interviews 7, 8, & 9).

Another important theme in personal assistance relationships was the idea of how museums rank when people input questions on search engines. Multiple experts mentioned that good relationship management and web care lead to higher popularity for museums on Google and other search engines, which holds a lot of significance for the museum's overall reputation and ability to connect with more digital users (interviews 5, 7, 9). This ties back to what was said in section 4.2.2 on authoritative knowledge. If digital users search for answers to questions that a particular museum is an authority on, museums strive to appear highly on search engines to provide answers, which creates an even stronger bond in these relationships as digital users' need for personal assistance is fulfilled.

4.4 Channels

4.4.1 General

In order for museums to be able to deliver value propositions to digital users, they must discover through what channels these users want to engage with museums digitally (Osterwalder & Pigneur, 2013). Thus, by analyzing the emergent themes that surfaced during the expert interviews, this section seeks to answer the sub-question: *What channels can museums use to best communicate with users who might never visit the museum?*

4.4.1.1 A Broad Range of Platforms

There were a variety of different platforms mentioned by each expert that they have seen become successful in connecting with users who only exist in the digital realm, from various social media to websites to more advanced technology like virtual reality. However, there was not one overarching, cohesive theme in the specification of the platforms used except that the experts unanimously emphasized the importance of having a social media strategy in general. It was also frequently mentioned that keeping up to date with the platforms that a particular organization is present on is very important. It was also noted that not one particular platform could be said to be the best (interviews 2 & 6). This is precisely because different target audiences want to be reached through different channels due to the fact that they may not be active on or comfortable using certain platforms (interviews 2, 4, 8, & 9). Because of this, many experts said that it is necessary for museums to have a broad range of channels or platforms that they are using to connect with digital users to compensate for these varying customer needs (interviews 2, 4, 8, & 9). This opinion is backed by Osterwalder & Pigneur (2013), who claim that a variety of

different channels are needed to interact with digital users due to differences in preference. Van der Horst summed this up well in the following quote (interview 2):

I'm not quite sure if there's any platform that's better than the other. I do think that we need a broad range of platforms...because every target audience asks for a different kind of platform...you can never squeeze everything into one tool or platform.

Adding to van der Horst's point, expert 9 added, "We use as many channels as we think would be helpful for our audiences" (interview 10). These two interviewees pointed out that having a variety of platforms is not only important to meet different audience needs, but also for the organization to be able to communicate a variety of different types of information.

4.4.1.2 Using Channels Correctly

Interviewees pointed out the need to create separated content layers, meaning that there are different types of content available to users based on accessibility and involvement (interviews 1, 2, 4 & 5). This means that if a user wants simple, surface level information they can access it easily without being forced to wade through heavier content which will likely cause loss of interest. However, if a user is more highly involved and is seeking in-depth knowledge, they are able to access additional resources through channels from the same organization. Van Reij described how this works in the following quote (interview 1):

Our professional target audience uses our website or Rijkstudio for professional goals...they [may] also go to the library online and the databases that we offer online, [but] the cultural tourist would never use Rijkstudio for the same purpose.

Similarly to how people want various amounts of information delivered to them on different channels, some channels or platforms are appropriate for certain kinds of content and not for others. Consequently, if organizations misuse or misinterpret the use of certain channels, they may damage the relationships with their valued digital users. For example, expert 3 said of the Van Gogh Museum (interview 3):

We will try to find the best channel for this particular type of information, trying to connect it to a typical user group on LinkedIn or Facebook...every time we post something corporate on Facebook, we lose ten thousand followers...This is the type of

news that we will post on LinkedIn because LinkedIn is like a corporate environment.

Here, it is apparent that even an extremely reputable organization such as the Van Gogh Museum can severely damage their reputation simply by communicating information fit for one channel on a channel meant for a different type of communication. Because digital users come to different channels for different needs, they may become irritated and unfollow an organization if they are receiving content that is perceived to be a nuisance and does not meet their needs.

4.4.2 Omni-Channel Approach

Almost all of the experts agreed that the omni-channel was a viable strategy online when deciding what channels to use and how to use them. While some of the experts referred to the omni-channel approach as a transmedia strategy (interview 1 & 2), Staps described it as a hub and spoke model, encapsulating their thoughts and building upon them (interview 5). In this model, the hub is the central part of a wheel, which in this case is the museum website. According to the majority of the interviewees, the website is the central channel where most of the information should be found and is to be regarded in some senses as a home base for digital users. The spokes of this hypothetical wheel are all of the secondary channels that give more specialized information through various platforms such as Facebook, LinkedIn, Snapchat, YouTube, Google+, Instagram, blogs, etc. As stated by Staps, this approach has many benefits (interview 5):

The hub is the website. Basically because it's the place where you can deliver the most information. It's a solid place that doesn't disappear over time. All the spokes deliver content as well. That content can be consumed without ever seeing one of the other spokes or without actually being on the hub, the website.

Staps describes, in the previous quote, the importance of having content on a variety of channels that is recognizable to users as coming from the same organization, but how each channel should be stand-alone. This means that users do not need to be familiar with other channels from the same organization in order to enjoy and engage with content from one particular channel, an opinion supported by Verhoef, Kannan, & Inman (2015). Essentially, the hub and spoke model is the omni-channel approach but with the added dimension of making each channel both integrated and, at the same time, independent from the other channels.

4.4.2.2 Integrated and Complementary

According to literature, the crux of the omni-channel approach is that the interfaces of all channels are integrated and complementary, and this makes users more attached to interact with one organization over another (Carroll & Guzmán, 2013). In addition to creating cohesive interfaces for all channels, the importance of creating content across all channels that is both integrated and complementary was noted by the majority of experts (interviews 1, 4, 6, 7, 9, & 10). A reason that was cited amongst many of the interviewees to do this is recognition and telling the organization's story in the right way. As previously established in section 4.2 regarding value propositions, storytelling is an integral aspect for museums in engaging with digital users. However, to tell stories cohesively in a way that makes sense to users from a variety of different backgrounds, the omni-channel approach is necessary (interviews 1, 5, 8). As van der Horst described about how the omni-channel relates to storytelling and integration (interview 1):

You really have to think about what's the story that we are trying to tell? And all the different channels, all the different approaches then just really have to fit that story...I think it's the effect that it has to be integrated and complementary.

Users need to be able to automatically recognize content from an organization and feel a sense of understanding of the overall aesthetic and story that a particular museum is attempting to tell.

4.4.2.3 Omni-Channel Approach as a Method of Branding

Another component in recognition of a firm through various channels is the inherent branding effect. According to literature, emotion plays a large role in brand awareness (Kohli, Suri, & Kapoor, 2015). When users recognize a certain organization and become attached through engaging with various channels online, this attachment creates an emotion that drives the branding process. Branding is therefore a consequence of using the omni-channel approach because users feel as if they are interacting with one coherent, almost person-like organization. Because of this, it is important to make sure that the content distributed across all of the channels is in line with the brand that an organization is attempting to foster. Expert 9 explained how the integration of the omni-channel approach leads to branding effects when she said, "Making sure each channel looks and feels and sounds like that same museum...I think it gives it that sense of recognition and branding" (interview 9). Additionally, Schumacher described how the Mob

Museum in Las Vegas takes advantage of this phenomenon (interview 7):

All of our social media delivery [channels] are very carefully coordinated and monitored and edited. Everything is thought through and focused on advancing the brand.

Making sure that information across all channels is edited and reflects the overall brand image is essential to protecting museums' images and creating the proper brand identity.

4.5 Revenue Streams

4.5.1 General

New revenue streams can be generated with users who might never visit museums, according to the answers provided by the experts in their interviews. The relevance, importance, and feasibility of generating increased social revenue with digital users will be explored, and thus the following section seeks to answer the sub question: *How can museums generate increased social and commercial revenue by engaging with users who might never visit the museum?*

When speaking about revenue streams, the answers were fairly inconsistent due to the fact that some of the experts did not have as much experience examining or managing revenue as others, in particular those that were educators. For example, three of the interviewees specifically said that they did not know what a good answer regarding museums and creating new revenue streams from digital means, either commercially or socially, however, they did provide as much insight as they could which was taken account for in the following section (interviews 1, 2, & 5). The experts who had a background in marketing or content management had much more input to contribute on this subject.

It was noted that museums are not commercial companies, and most often fit into the category of non-profit depending on whether they receive government subsidies or not (interviews 1, 2, 6, & 8). While some experts believed that digital media and museums were more focused on increasing commercial revenue, they also acknowledged a shift towards social revenue, citing that social revenue was becoming increasingly important for museums as an outcome of digital media engagement (interviews 2, 6, & 9).

4.5.2 Social Revenue

4.5.2.1 Importance and Feasibility

One of the most important questions during this research was to discover if museums could

actually generate social revenue digitally, without the catalyst of a physical visit to the museum, and if so, how it could be done. Experts unanimously agreed that museums can generate social revenue digitally, and some even used described it as being a highly important aspect of museum digital strategy, which corresponds to literature. Gallaugher et al. (2001) claimed that transferring content that was previous physical into the digital realm can generate new streams of revenue, and this can apply to the experience of visiting a museum, even if it is a digital visit. As stated by Heijkoop (interview 8):

Yeah [museums can generate social revenue digitally]! I don't think it matters if it's physical or online digitally, I think we should reach people with beautiful art and add value to their life.

4.5.2.2 Educational Focus

Experts agreed that museums' digital strategies should focus on educating the general public, disseminating culture and history, and creating entertaining experiences for those who choose to engage with their content which is the essence of generating social revenue (interviews 1, 2, 4, 5, & 9), an opinion supported by Tam (2012). Experts also said that in order to create this social revenue, museums needed to stay in contact with digital users to remain relevant in order to actually engage with them (interviews 1, 3, 7, 8, 9, & 10). Schumacher described the role of education in creating social revenue and his desire to make the Mob Museum website an international resource of knowledge (interview 7):

As far as social revenue or educational benefit, I think we're doing a lot of that. In our case, the website is much broader in the content that we're delivering...[we] have the goal of becoming the resource for the entire world.

4.5.2.3 Measuring Social Revenue

Clearly, measuring commercial or monetary revenue is important for any business or organization, but the question of how to measure social revenue online and if it is important to do so was one of the questions that arose during this research. When asked, most experts said that measuring social revenue is important, however a few said that it is not a main focus right now, and that simply creating the digital products that generate social revenue with digital users is what is currently most important. When asked if it is important to measure and report social revenue figures to the board of directors or other higher ups at museums, Van Reij replied

(interview 2):

No, not really...we're not really setting targets now, like say we need an "x" number of subscribers...But we do compare it with other institutions or other YouTube channels.

When asked how social revenue was measured, experts described the difficulties in truly knowing when they had generated it with various digital audiences due to the many barriers involved. Scholars such as Gallagher, Auger, & BarNir (2001) explicitly state that measuring social revenue is difficult due to its complexity, and experts seemed to notice this. However, they also defined how they attempt to measure digital social revenue in museums, and expert 9 summed it up well in the following quote (interview 8):

We're...also looking at our reach and the level of interaction and looking at social data and seeing the way our audience engages with us over time, and making sure that we're able to reach more people and be able to interact with them in more and more positive and frequent ways [digitally].

In the previous quote, expert 9 is able to describe the essence of social value and the fact that it relates back to engagement and creating a positive impact in society (. She briefly touches on the way in which social revenue is measured. For the most part, experts stated that social revenue is measured through analytics of both the museum websites and third party social media analytics such as Google, Facebook, or Instagram. By using these tools, they can track engagement and see what types of audiences are engaging with certain types of content. This allows them to create more content that is having higher rates of engagement or tweak content that does not seem to be having as large an impact on digital users.

4.5.2 Commercial Revenue

Although not applicable to this research due to the fact that the focus is solely on digital relationships, many interviewees highlighted selling tickets or conversion as a big part of the online relationships between museums and users. However, this research is about engaging with users who might never visit museums, and thus, conversion is not an area that was focused on. Although conversion seems to be one of the goals for museums, some experts said that it should not be the focus of digital strategy (interviews 1, 2, & 6). For example, van der Horst stated (interview 1):

Of course everything that we do we would like conversion out of it, but for me I don't think it should be the focus of digital strategy because people don't want to be targeted as potential customers, they want to be educated online.

4.5.2.1 Measuring and Reporting Commercial Revenue

Measuring commercial revenue is inherently much more straightforward than social revenue as money is tangible whereas social benefit is not. Therefore, it is fairly clear that commercial revenue generated with digital users is measured monetarily. Reporting and tracking commercial revenue varies with museums depending on how much the subsidies that they receive from the government are, and how much revenue they are already generating inside of the museum with physical visitors. Some experts said that the marketing and sales departments were mainly in charge of keeping track of commercial revenue that resulted from digital media engagement (interview 3 & 9), and some said that it was also important to report to the board of directors (interviews 3 & 8). Expert 9 described how the Exploratorium keeps track of commercial revenue from the web shop in the following quote (interview 9):

Actually capturing and tracking revenue on our website as well as taking a look at where [it's] coming from, and strengthening any of the channels that are performing the best against those revenue goals.

4.5.2.2 Web Shop Sales

Almost all museums have web shops where people can buy physical items from, and this can be relatable even to audiences who might never visit, especially for museums with very widely known and popular artists such as the Van Gogh Museum. Many experts pointed to the online web shop as a way for museums to generate revenue with users who might never visit museums (interviews 2, 3, 4, 7, & 8). This kind of revenue is considered transactional, since it is usually a one-time purchase (Osterwalder & Pigneur, 2013).

It was also noted how important it is to make products in the web shop relatable to wider audiences if it is to be marketed to people who might lack the experience of being in the physical museum, and the fact that it is important to make the experience of buying from the web shop easy for consumers. As stated by expert 9 (interview 9):

It's just making that e-commerce section of your website as seamless as possible. So

really replicating what others might be doing in the for-profit sector for museums...and then really adding calls to action with your communication so that when people are interested...in purchasing something, that they're able to do that in a way without having to search for it deeply.

Along with having a web shop, Museum Boijmans van Beuningen also owns a publishing house called Boijmans Studies, which generates revenue for them both in museum and digitally. In this way, they can leverage their knowledge to generate revenue, as opposed to web shops which usually focus more on fun, commercial products to generate monetary value.

4.5.2.3 Ads via Digital Content

Many museums already have large digital followings on a variety of different social media platforms, and experts wondered how to tap into these as potential sources of new commercial revenue that can be generated with users who might never visit museums (interviews 1, 6, & 8). Experts gave fantastic insight into how this can be achieved, by putting ads on these platforms that keeps the content free for users and helps museums generate more commercial revenue at the same time. This strategy was not explored in the literature section of this research, and thus is an interesting new finding. Conversely, museums can charge users to engage with certain video content, which also generates more revenue but could be damaging to the relationships with these digital-only users. Both of these methods would be considered recurring revenue, because the museum would generate a small amount of revenue each time a user watched a video (Osterwalder & Pigneur, 2013). Veraart explained how this could work at ARTtube should they ever decide to try to increase revenue with digital users (interview 6):

There are also organizations that try to find revenue from the viewers...so [they] have a streaming service kind of like Netflix and try to turn it around and let the audience pay. We are investigating or looking into opportunities to have a model like that as well, but because of our mission, we would always have content for free.

Because ARTtube is a nonprofit foundation, Veraart explains that they would always have at least some video content offered for free. However, this is an interesting way to generate more commercial revenue, especially if digital users value the content enough to pay for it.

5. Conclusion

The purpose of this research was to gain a better understanding of how museums can create strategies to connect with digital users who might never visit physical museum spaces to create more social and commercial revenue for organizations. The desire to understand this new avenue for value creation was prompted by the changing media landscape and the fact that the Internet and new technologies now make it possible for museums to connect with many more people around the globe than ever before. Thus, this thesis sought to answer the following research question: *How can museums strategically use digital media to engage with users who might never visit the museum?*

5.1 Significant Findings and Theoretical Implications

To strategically engage with users who might never visit museums using digital media, museums need to focus on differentiating their organization from others by innovating elements of their business models that are customer centric (Osterwalder & Pigneur, 2013). The innovations should be made keeping in mind that digital users are both globalized and spread out throughout the entire world, as well as low-involvement, which means that they have a shorter attention span than museum visitors (Batova & Clark, 2014; Bano & Zowghi, 2015).

One of the most significant findings was that the segmentation strategies of museums still need more work, as was exemplified by the responses of the experts. Most of the theory regarding the segmentation of users was not reflected in the interviews, or were strategies that experts felt needed more exploring. Currently, museums lag behind industry in their use of digital media to connect with digital users, as could be seen across the board in all sections of the business model canvas analyzed. Although other industries have moved completely in digital directions, museums are still in the beginning phases of learning how to use digital media to the utmost advantage.

Museums, due to their non-profit nature and the fact that they have financial constraints, seemed to struggle to allocate resources to create and present content in a variety of languages, which is integral if they want to connect with globalized audiences who speak a variety of different languages. According to Barnes, et al. (2007), treating customers from different locations in one standardized way has not proven to be effective, which suggests that museums still need to expand the languages that they are using to connect with more people. If they are to

do this, however, they need to find the fiscal means to hire people to translate and manage content in a variety of different languages, but according to the experts, it is worth the extra financial costs (Hennig-Thurau, 2010). Museums should segment digital users by mining user data to discover the characteristics of different digital user profiles and which platforms these various target audiences use and prefer (Brown, Chui, & Manyika, 2011). The confusion experts expressed in extracting useful information from the vast amount of user data at their disposal suggests that they may need to outsource this task to data scientists in order to properly examine user data and draw meaningful conclusions about how to better appeal to digital users through personalization of products and services (Brown, Chui, & Manyika, 2011).

Many experts said that they segmented by platform, but this can conflict with the theory regarding the omni-channel approach which states that all channels should be aligned to present one face for users (Carroll & Guzmán, 2013). If experts choose to segment by platform and put only certain types of information on some platforms and not on others, they may be missing the mark. According to Carroll and Guzmán (2013), the accessible, continuous, and dynamic nature of the user journey online necessitates the need to integrate channels so that no matter which channel a digital user is on, they have access to all of the information that they need and do not have to search for it extensively. Despite the fact that experts acknowledged the importance of the omni-channel approach in branding, they did not seem to be implementing it consistently.

Although museums seem to be struggling to segment users and decide which channels to present their value propositions on, they did seem to be creating very appealing and viable value propositions for users. If museums want to connect with digital users, they need to think outside of the box to deliver innovative content that acts as a bundle of products and services (Osterwalder & Pigneur, 2013). Simply being active on social media or digitizing collections is not enough. Although important, these need to be combined with other more innovative and engaging products like branded YouTube channels, MOOKs, and tailored products like Rijksstudio that entice low-involvement users to choose a museum over other digital methods of cultural consumption. This is supported by Russo et al. (2006) who claim that people will seek alternate methods of cultural consumption (online) if museums do not provide appealing value for users. Museums should strategically position themselves as organizations possessing authoritative knowledge and exclusive online content, and this can manifest as digitized

collections, multimedia games, educational or informational videos, and other interactive media. These value propositions should be presented in easily accessible ways, ideally for free, using edutainment to engage with low-involvement users who demand to be entertained as well as educated (Addis, 2005). As was evident in the expert interviews, authoritative knowledge, exclusive content, accessibility, and edutainment all serve as value propositions on their own, but they are most effective when combined. By presenting value propositions through storytelling, which takes an edutainment approach to museum material that may at times seem dry, museums can capitalize on the opportunities that digital media provides to support them in engaging with users who might never visit museums. Addis (2005) claims that edutainment is well suited to digital media because it is highly interactive, so if museums want to increase engagement, they should continue incorporating edutainment into the ways that they present knowledge and content online to break down barriers between museums as institutions and users as average people. Furthermore, accessibility was emphasized as being highly important across the board by the experts, which supports the views of Siu, et al. (2013) who claim that users demand and expect accessibility from museums online.

Experts revealed that one of the most important aspects in engaging in relationships with digital users for museums is to have multi-directional communication rather than one way communication, which supports the views of Fletcher & Lee (2012), who state that one-way communication is no longer enough to support relationships in the current media landscape. Experts also said that having an element of human connection and personalization in communication with digital users helped create bonds with digital users, and one way to personalize communication is to have a conversation with users rather than funneling information to them and not allowing their opinions to be heard. As the conversations around art change and shift, digital users may want to be able to have their voices heard by museums, and museums need to be prepared to engage in these conversations via social media or through personal assistance relationships in order to maintain long term relationships with digital users (Zinkhan, 2003).

It remains unclear whether co-creation has a place in facilitating the relationships between museums and digital users because it requires a higher level of user involvement than communities or personal assistance. For now, experts remain divided as to whether it is an

effective strategy. Contrary to Prahalad & Ramaswamy (2004) and Payne, Storbacka, & Frow (2008), who claim that co-creation helps increase multi-way communication and therefore strengthens relationships between organizations and digital users, many experts said that they had not had success with co-creation. However, some experts said that they had seen it work, and thus there is a need to conduct further research to see if co-creation is suited to museum communication with low-involvement, digital users or whether it should be reserved only for engaging with the minority of high-involvement digital users. Although co-creation is a type of relationship that needs more research, communities and personal assistance relationships appeared to be the most effective types of relationships for museums to foster with low-involvement digital users because they can engage with minimal effort.

The concluding two sections of this research regarding revenue streams aligned with all of the research leading up to that point. Experts said that they kept track of online users and do believe that social revenue is easily generated online, but no experts said that they specifically measured social revenue in a particular way or had targets regarding social revenue. This supports the views of Gallaugher, Auger, & BarNir (2001) who said that streams of informational (social) revenue are difficult to measure. Further research could explore creating a formula for measuring social revenue which would make it easier for museums to track and create targets similarly to in the physical museum, where many set goals of educating a certain number of people per year.

Creating commercial value online can come in two forms, transactional or recurring (Osterwalder & Pigneur, 2013). In an effort to keep most of their online content free, recurring revenue was not as popular as transactional revenue amongst the experts. However, Veraart mentioned that ARTtube was exploring the idea of creating subscription-based content that users would pay for, but she also expressed that some content will always remain free (interview 6). The unpopularity of charging subscriptions for online content in museums is probably because these organizations are nonprofits and therefore their main goals are not necessarily financial. Transactional revenue was seen as being most fitting with web-shop sales. One interesting finding was that many experts mentioned charging other businesses to put advertisements on their YouTube channels, which is one way to flip the script and generate more commercial revenue from other businesses and organizations while making sure that the content stays free for

digital users.

5.2 Societal Relevance

This research is highly relevant both for museums and society at large. As previously established, museums perform very important functions for society, such as preserving and disseminating cultural materials and histories, educating audiences, and fostering cultural understanding and exchange (Bertacchini & Morando, 2013; Russo et al., 2006). By using the insights from this research, museums now have a starting point with which to innovate their current business models to better fit the digital sphere and expand their reach to wider audiences. Museums can use this research to gain new ideas as to how they can segment users, what kinds of value propositions they can deliver, how to foster relationships with digital users, how to integrate and make the best use of online channels, and as a result, how to generate more social and commercial value. Although this research is not exhaustive, it provides a good starting point for museums to see what has worked for other experts in the field and what has not been as successful in making better use of digital media to fulfill their main missions.

Additionally, as museums function as a way for people to better understand other cultures through cultural objects and histories, digital audiences will now be able to have the museum experience online, which means that more people will be exposed to other cultures. The museum experience now does not need to only be suited for elite audiences who can travel to physical museums to experience cultural exchanges. People who may lack the financial means to travel to other countries in the world to visit museums can now gain this cultural understanding from their homes or schools around the world as long as they have access to the Internet. As most of the experts said that their online content was offered for free, this gives lower income people access to previously elite museum experiences. Having access to more education and cultural exchanges fosters understandings between people and can lead to more acceptance between people from various cultural backgrounds and countries.

As Padilla-Meléndez & Águila-Obra (2013) stated, people are moving away from traditional cultural consumption and into digital cultural consumption and expectations of museum visitors are now higher than ever because they want to be engaged with on a number of levels, including online. By implementing business model innovation across customer centric sections of the Business Model Canvas outlined in this research, museums can also appeal more

to their physical visitors as well, who may want to continue engaging with the museum online even after the end of their physical visit. In addition, by building relationships with digital users, these audiences may end up eventually wanting to visit because they value the digital media that a museum has been producing over time. As conversion is still one of the main goals of museums, in addition to fulfilling social and commercial missions online, a bonus result of focusing on digital media engagement strategies with digital users may be increased physical engagement.

5.3 Limitations

Although this research attempted to have as high of a level of reliability and validity as possible by remaining transparent in the methods used for expert selection, data collection, and data analysis, there were notable limitations that could have influenced the outcomes of this study.

The most obvious of these is the fact that the research only included interviews from ten experts, and although this was considered to be enough to reach saturation, having a larger pool of data may have yielded more generalizable conclusions. The more expert opinions that were included, the more consistent and balanced the insights were that could be extracted from them.

Additionally, experts were only selected from the Netherlands and the United States, the majority of who came from the Netherlands due to the fact that the researcher lives in the Netherlands, which made it easier to access these experts. And as the researcher is American by origin, it was inherently easier to leverage connections in the United States to access the remaining experts. Although having a mixture of experts from two cultures may have created more balanced results, the disproportionate number of Dutch experts and the lack of representation of other nationalities may have also created less generalizable results. The cultural differences between these two cultures may have also affected the results.

Lastly, the interviews with Dutch experts were conducted in-person that gave more information than the interviews that were done with American experts. Due to distance, three of the interviews that were conducted with experts at American museums had to be conducted via Skype, which detracted from the researcher's ability to communicate as freely and read body language that could have prompt follow-up questions.

5.4 Future Research

Based on the opinions of experts and literature, several opportunities for future research are evident. The first stems from the limitations section, as this research was done with experts from only two countries, the Netherlands and the United States. It would be interesting to repeat this study with interviewees from proportionate numbers of experts from a variety of different countries to gain a more generalizable answer to the research question. Perhaps, this research would have a more global perspective if experts from other continents were included as well, although gaining access to these experts would be a difficult task.

Secondly, the major discrepancy between what was stated in literature and by the experts regarding co-creation necessitates more research. Literature described co-creation as being a particularly good way to facilitate multi-direction communication and build strong relationships with digital users, but perhaps the fact that digital audiences are often low-involvement was not taken into consideration. According to experts, it was difficult to get digital users to engage in most types of co-creation relationships. Future research could expand upon co-creations like Rijksstudio to explore ways to tailor co-creation to low-involvement audiences.

Experts unanimously agreed that generating social revenue is important, which inherently means that museums need to find a standardized way to qualify, track, and measure social revenue. Due to the fact that experts were only looking at social media metrics and website analytics as measures of social revenue and did not have a standardized way of measuring it, this is an area that needs to be looked into more in-depth. Future research could explore the possibility of creating a formula or standardized system for museums and other cultural institutions to qualify, track, and measure social revenue.

Although some of the experts mentioned generating increased commercial revenue by charging advertisers to place ads on video content that has been uploaded to popular platforms like Facebook and Youtube, none of them had extensive experience with implementing this strategy. Future research could explore how to best use ads to generate increased commercial revenue to keep content free for users, and if this strategy is worthwhile in terms of monetary outcome for museums. It would be interesting to discover if this could be a significant income earning venture for museums and possibly offset some of the revenue that museums receive from ticket sales, proving the viability and importance of the relationship between museums and

digital users, not just physical visitors.

6. References

- Addis, M. (2005). New technologies and cultural consumption—edutainment is born!. *European Journal of Marketing*, 39(7/8), 729-736. <https://doi.org/10.1108/03090560510601734>.
- Amit, R., & Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, 53(3), 41-49. doi:10.2139/ssrn.1701660.
- Arends, M., Goldfarb, D., Merkl, D., & Weingartner, M. (2009). Interaction with art museums on the web. In Proceedings of the IADIS Int'l Conference WWW/Internet, 117-125. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.455.2303&rep=rep1&type=pdf>.
- Ayres, L. (2008). Thematic coding and analysis. In L. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods* (pp. 867–868). Thousand Oaks: SAGE.
- Babbie, E. (2008). *The basics of social research*. Belmont, CA: Thomson/Wadsworth.
- Bakhshi, H., & Throsby, D. (2009). Innovation in arts and cultural organisations. *Creative Industries Journal*, 2(3), 297-303. doi:10.1386/cij.2.3.297_7.
- Bano, M., & Zowghi, D. (2015). A systematic review on the relationship between user involvement and system success. *Information and Software Technology*, 58, 148-169. <https://doi.org/10.1016/j.infsof.2014.06.011>.
- Barki, H., & Hartwick, J. (1989). Rethinking the concept of user involvement. *MIS Quarterly*, 13(1), 53-63. doi:10.2307/248700.
- Barnes, S. J., Bauer, H. H., Neumann, M. M., & Huber, F. (2007). Segmenting cyberspace: a customer typology for the internet. *European journal of marketing*, 41(1/2), 71-93. <https://doi.org/10.1108/03090560710718120>.
- Batova, T., & Clark, D. (2015). The complexities of globalized content management. *Journal of Business and Technical Communication*, 29(2), 221-235.
- Bertacchini, E. & Morando, F. (2013). The future of museums in the digital age: New models for access to and use of digital collections. *International Journal of Arts*

- Management*, 15(2), 60-72.
<https://search.proquest.com/docview/1323008907?accountid=13598>.
- Bogner, A., Littig, B., & Menz, W. (Eds.), (2009). *Interviewing experts*.
doi:10.1057/9780230244276.
- Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage.
- Brown, B., Chui, M., & Manyika, J. (2011). Are you ready for the era of ‘big data’. *McKinsey Quarterly*, 4(1), 24-35.
- Bryman, A. (2012). *Social research methods*. New York: Oxford University Press.
- Camarero, C., Garrido, M. J., & Vicente, E. (2011). How cultural organizations’ size and funding influence innovation and performance: The case of museums. *Journal of Cultural Economics: Published in Cooperation with the Association for Cultural Economics International*, 35(4), 247-266. doi:10.1007/s10824-011-9144-4.
- Cameron, F. (2003). Digital futures I: Museum collections, digital technologies, and the cultural construction of knowledge. *Curator: The Museum Journal*, 46(3), 325-340. doi:10.1111/j.2151-6952.2003.tb00098.x.
- Carroll, D., & Guzmán, I. (2013). The new omni-channel approach to serving customers. *Accenture Google Scholar*.
- Coblence, E. & Sabatier, V. (2014). Articulating growth and cultural innovation in art museums. *International Studies of Management & Organization*, 44(4), 9-25. <https://doi.org/10.2753/IMO0020-8825440401>.
- Conway, P. (2010). Preservation in the age of Google: Digitization, digital preservation, and dilemmas. *The Library Quarterly*, 80(1), 61–79. doi:10.1086/648463.
- Crescentini, A., & Mainardi, G. (2009). Qualitative research articles: guidelines, suggestions and needs. *Journal of Workplace Learning*, 21(5), 431-439. doi:10.1108/13665620910966820.
- Das, S. R., & Joshi, M. P. (2007). Process innovativeness in technology services organizations: Roles of differentiation strategy, operational autonomy and risk taking propensity. *Journal of Operations Management*, 25(3), 643-660.
<https://doi.org/10.1016/j.jom.2006.05.011>.
- Di Domenico, M., Haugh, H. & Tracey, P. (2010). Social bricolage: Theorizing social

- value creation in social enterprises. *Entrepreneurship Theory and Practice*, 34(4), 681-703. doi: 10.1111/j.1540-6520.2010.00370.x
- Etikan, I., Musa, S., & Alkassim, R. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. doi:10.11648/j.ajtas.20160501.11.
- Felício, J. A., Gonçalves, H. M., & da Conceição Gonçalves, V. (2013). Social value and organizational performance in non-profit social organizations: Social entrepreneurship, leadership, and socioeconomic context effects. *Journal of Business Research*, 66(10), 2139-2146. <https://doi.org/10.1016/j.jbusres.2013.02.040>.
- Fletcher, A., & Lee, M. (2012). Current social media uses and evaluations in American museums. *Museum Management and Curatorship*, 27(5), 505-521. doi:10.1080/09647775.2012.738136.
- Gallaugh, J. M., Auger, P., & BarNir, A. (2001). Revenue streams and digital content providers: an empirical investigation. *Information & Management*, 38(7), 473-485. [https://doi.org/10.1016/S0378-7206\(00\)00083-5](https://doi.org/10.1016/S0378-7206(00)00083-5).
- Gilmore, A., & Rentschler, R. (2002). Changes in museum management: A custodial or marketing emphasis?. *Journal of management development*, 21(10), 745-760. <https://doi.org/10.1108/02621710210448020>.
- George, G., & Bock, A. J. (2011). The business model in practice and its implications for entrepreneurship research. *Entrepreneurship theory and practice*, 35(1), 83-111. <https://doi-org.eur.idm.oclc.org/10.1111/j.1540-6520.2010.00424.x>.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), 597-606. Retrieved from <http://nsuworks.nova.edu/tqr/vol8/iss4/6>.
- Hennig-Thurau, T., Malhotra, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010). The impact of new media on customer relationships. *Journal of service research*, 13(3), 311-330. doi: 10.1177/1094670510375460.
- Holttinen, H. (2014). Contextualizing value propositions: Examining how consumers experience value propositions in their practices. *Australasian Marketing Journal (AMJ)*, 22(2), 103-110. <https://doi.org/10.1016/j.ausmj.2013.10.001>.

- Hughes, P. & Luksetich, W. (2004). Nonprofit arts organizations: Do funding sources influence spending patterns. *Nonprofit and Voluntary Sector Quarterly* 33(2), 203-220. doi:10.1177/0899764004263320.
- Hsu, F. M., Lu, L. P., & Lin, C. M. (2012). Segmenting customers by transaction data with concept hierarchy. *Expert Systems with Applications*, 39(6), 6221-6228. <https://doi.org/10.1016/j.eswa.2011.12.005>.
- Kidd, J. (2011). Enacting engagement online: framing social media use for the museum. *Information Technology & People*, 24(1), 64-77, doi:10.1108/09593841111109422.
- Kohli, C., Suri, R., & Kapoor, A. (2015). Will social media kill branding?. *Business Horizons*, 58(1), 35-44.
- Lindgardt, Z., Reeves, M., Stalk, G., & Deimler, M. S. (2009). Business model innovation. *When the Game Gets Tough, Change the Game*, The Boston Consulting Group, Boston, MA.
- Marty, P. F. (2008). Museum websites and museum visitors: digital museum resources and their use. *Museum Management and Curatorship*, 23(1), 81-99. doi:10.1080/09647770701865410.
- O'Brien, H. L., & Toms, E. G. (2008). What is user engagement? A conceptual framework for defining user engagement with technology. *Journal of the American Society for Information Science and Technology*, 59(6), 938-955. doi:10.1002/asi.20801.
- Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research*, 7(4), n. pag. <http://nbn-resolving.de/urn:nbn:de:0114-fqs0604118>.
- Osterwalder, A. & Pigneur, Y. (2013). *Business model generation*. Hoboken, NJ: Wiley.
- Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the academy of marketing science*, 36(1), 83-96. <https://doi.org/10.1007/s11747-007-0070-0>.
- Padilla-Meléndez, A., & Águila-Obra, A. R. (2013). Web and social media usage by museums: Online value creation. *International Journal of Information Management*, 33(5), 892-898. doi:10.1016/j.ijinfomgt.2013.07.004.
- Porter, C. E. (2004). A typology of virtual communities: A multi-disciplinary foundation

- for future research. *Journal of Computer-Mediated Communication*, 10(1), n. pag. doi:10.1111/j.1083-6101.2004.tb00228.x.
- Porter, M. E. (1996). What is strategy? *Harvard Business Review* 74(6) 61–78.
- Porter, M. E. (2001). *Strategy and the internet*. Boston: Harvard Business School.
- Porter, M. E. (2006). *Strategy for museums*. Boston: Harvard Business School.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of interactive marketing*, 18(3), 5-14. doi: 10.1002/dir.20015.
- Russo, A., Watkins, J., Kelly, L. & Chan, S. (2006). How will social media affect museum communication? *Nordisk Museologi*, 1, 19-29. Conference Proceedings from Nordic Digital Excellence in Museums (NODEM 06). Oslo, Norway. http://www.tii.se/v4m/nodem/nw_06/papers/papers.htm.
- Russo, A., Watkins, J. & Groundwater-Smith, S. (2009). The impact of social media on informal learning in museums. *Educational Media International*, 46(2), 153–166. doi:10.1080/09523980902933532.
- Ryan, D. (2016). *Understanding digital marketing: marketing strategies for engaging the digital generation*. London, United Kingdom: Kogan Page Publishers.
- Schmidt, R., Zimmermann, A., Möhring, M., Nurcan, S., Keller, B., & Bär, F. (2015, September). Digitization—perspectives for conceptualization. In *European Conference on Service-Oriented and Cloud Computing* (pp. 263-275). Springer, Cham.
- Siu, N. Y. M., Zhang, T. J. F., Dong, P., & Kwan, H. Y. (2013). New service bonds and customer value in customer relationship management: The case of museum visitors. *Tourism Management*, 36, 293-303. <https://doi.org/10.1016/j.tourman.2012.12.001>.
- The Statistics Portal (2017). *Number of people who visited art museums within the last 12 months in the United States from spring 2008 to spring 2017 (in millions)*. Retrieved June 12, 2018 from: <https://www.statista.com/statistics/227483/art-museum-visitors-usa/>.

- Stevens, R. & Toro Martell, S. (2003). Leaving a trace: Supporting museum visitor interaction and interpretation with digital media annotation systems. *Journal of Museum Education*, 28(2), 25-31. doi:10.1080/10598650.2003.11510479.
- Taheri, B., & Jafari, A. (2014). 12 Museums as playful venues in the leisure society. *Contemporary Tourist Experience: Concepts and Consequences*, 27, 201-203.
- Tam, S. (2012). In museums we trust: Analyzing the mission of museums, deaccessioning policies, and the public trust. *Fordham Urban Law J*, 39, 849-901. <http://ir.lawnet.fordham.edu/ulj/vol39/iss3/8>.
- Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. (2015). Choosing a qualitative research approach. *J Grad Med Educ*, 7(4), 669-670, <https://doi.org/10.4300/JGME-D-15-00414.1>.
- Tonta, Y. (2008). Libraries and museums in the flat world: Are they becoming virtual destinations? *Library Collections, Acquisitions, and Technical Services*, 32(1), 1-9. doi:10.1016/j.lcats.2008.05.002.
- Toyama, T., Kieninger, T., Shafait, F., & Dengel, A. (2011). Museum guide 2.0-an eye-tracking based personal assistant for museums and exhibits. In *Proc. of Int. Conf. on Re-Thinking Technology in Museums*, 1.
- Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing. *Journal of retailing*, 91(2), 174-181. <https://doi.org/10.1016/j.jretai.2015.02.005>.
- Weinberg, M. L. & Lewis, M. S. (2009). The public value approach to strategic management. *Museum Management and Curatorship*, 24(3), 253-269. doi:10.1080/09647770903073086.
- Zinkhan, G. M., Kwak, H., Morrison, M., & Peters, C. O. (2003). Web-based chatting: Consumer communication in cyberspace. *Journal of Consumer Psychology*, 13(1-2), 17-27.

