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Applying Agile Project Management to Art Museums: A Proposal for Implementing a Generalist Scrum Master

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Applying Agile Project Management to Art Museums:
A Proposal for Implementing a Generalist Scrum Master

Keywords: museum studies, organizational change, agile project management, scrum master

by
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Capstone project submitted in partial fulfillment of the requirements for the Degree of
Master of Arts in Museum Studies

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Abstract

This capstone project examines organizational change, along with its challenges, through case studies in museums and businesses in the private sector, subsequently providing a possible solution for museums to adapt to the current global market economy through the use of Agile Project Management (Agile). I cite recent case studies of art museums implementing Agile for digital product development. This project proposal aims to introduce Agile outside of digital departments, including Exhibitions and Education, with the goal of developing better visitor-centered offerings from museums. This may be achieved through the proposal of a job description for a new museum position of Generalist Scrum Master, along with a three-year strategy of implementing Agile Project Management across various museum departments, including digital, exhibitions, and education.

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Introduction

In today's fast-changing global economy, sometimes referred to as the "sharing" economy (Botsman and Roo, 2010, p. xv), companies are vying to disrupt, or more specifically use or identify "disruptive technology," in order to be competitive (Christensen, 2016, p. xi). The current market has allowed companies like Airbnb and Uber to emerge as leaders in markets that previously did not exist. During this process, the traditional business models for the hotel and taxi industries have lost market share and customers. The museum field is no exception to the current and future economy. In an era of "Art in the Age of Instagram," a term coined by museum digital strategist, Jia Jia Fei (2016), contemporary art museums are facing fierce competition from pop-up installations, such as the Color Factory and the Museum of Ice Cream. On October 27, 2017, an article on Wired.com stated that in 2016, the Museum of Ice Cream in New York was sold out of its 300,000 allotted tickets within the space of 5 days. On November 29, 2017, ARTnews.com ranked the Museum of Ice Cream as the sixth most Instagrammed Museum in the United States, just ahead of the San Francisco Museum of Modern Art. I believe that if more traditional museums do not adapt to the current market place and the technological business models that support it, they too will lose visitors to other attractions like the aforementioned pop-ups. This capstone project examines organizational change through case studies in museums and businesses, subsequently providing a possible solution for museums to adapt to the current market and focus on delivering visitor-centered exhibitions and programming through the use of Agile Project Management. I propose a job description for a new museum position of Generalist Scrum Master to lead Agile teams that work in self-sustaining and horizontally structured teams in order for museums to develop better offerings.

The top-down organizational structure to which museums have traditionally adhered to is no longer relevant in today's economy. As prominent business theorist and writer Henry Mintzberg (1996) states: "The only thing a chief executive sits atop is an organization chart... The most prominent of all corporate artifacts never gets down to real products and real services, let alone the people who deal with them every day. It's as if the organization exists for the management" (*Harvard Business Review*, July 1, 1996). Mintzberg's article criticizing the organizational structure of corporate management was written well over twenty years ago. However, it is accurate in describing the current state of the museum field. While today the corporate sector adapts to the market and remains agile, the museum field struggles to adapt to the business environment of today and tomorrow.

This capstone project focuses on the writings by prominent change advocates in the museum field, including Robert Janes, Elaine Gurian, Nina Simon, and Peter Samis. These authors call attention for the need to break away from traditional and outdated organizational business models. In what follows, I cite commonalities from their research and museum work to support the need for change in museums. Next, I cite case studies of organizational change in the corporate sector, providing evidence of successful change measures applicable to museums.

I compare and contrast current business and design strategies, including Design Thinking and Agile Project Management. These iterative product and service design processes have roots in the technology (tech) sector. The tech sector has seen tremendous growth over the past quarter century, especially in the western United States. This growth has forced businesses outside of tech to re-evaluate their business models, or face failure in the market place. Think

about how companies like Amazon, Airbnb, and Uber have transformed the market. Even some of the companies that business guru, Jim Collins, once touted as “great” companies in his seminal book *Good to Great* (2001), such as Circuit City, have failed to survive the challenges of an ever-evolving business world due to their inability to compete with newer models of product development and distribution.

In the following chapter, I will cite a 2015 case study of New York City’s Museum of Modern Art (MoMA) implementing the iterative process of Agile as an evaluative method in the re-design of its website. This case study sheds light on the adoption of Agile by a major modern art museum and the potential for other museums to consider implementing Agile into the redesign of museum products and services. It also draws correlations to the exhibition team approach through the inclusion of the “audience advocate.” The exhibition team approach, described by Elaine Gurian, established a new way of developing exhibitions at the Boston Children’s Museum in the 1970s (Gurian, p. 163). This approach was considered radical at the time because it asked museums to consider the perspectives of a museum’s audience, as opposed to solely the point of view of a curator. With similar intent, MoMA’s current use of “audience advocates” is to “provide an excellent and accessible experience for a range of users by sharing their knowledge of MoMA’s public and conducting user testing of the website redesign” (Armstrong, p. 393).

Literature Review

A. Change in Museums

Nina Simon, director of the Santa Cruz Museum of Art and History (MAH), describes the “paradox of relevance” through the anecdote of using the right key to open the right door (Simon, p. 31). Through change initiatives, Simon has successfully turned around the faltering Santa Cruz Museum of Art and History by making the museum relevant to its community.

One change initiative implemented at MAH responded to an issue concerning relevance to the museum’s mission. In addressing MAH’s well-attended and free First Friday events, Simon (2016) states, “People spent all their time dancing, eating, and socializing on the ground floor. Very few made it upstairs to the exhibition galleries” (p. 46). The museum thus decided to discontinue free food for First Fridays, since the free food had no relevance to the museum’s mission to “ignite shared experiences and unexpected connections.” Simon describes the free food as a “literal barrier to people visiting the exhibitions, because they couldn’t bring their plates into the galleries” (p. 46). After eliminating the free food and simultaneously adding art activities which were relevant to mission to the First Friday programming, attendance ultimately increased three-fold over time. MAH successfully connected its community to the museum’s art. The added art activities served as the right anecdotal doors to the museum’s exhibition galleries. This change was sparked from the concept of relevance to MAH’s community, in conjunction with Simon’s progressive thinking. But why else might museums implement change?

The museum theorist Elaine Gurian (1990) states, “They change because they fear the consequences of not doing so, and only then are willing to override the cries of anguish from

the discomforted” (p. 77). Gurian’s list of reasons a museum might change its approach and operations include: the continual change in demographics of population, discovery of biased information, and even instability of the stock market. These external factors may induce museums to change or adapt to their audiences, re-evaluate content, or re-examine endowments. Gurian also suggests that museums continually reassess their mission statements.

The impetus for change at the Glenbow Museum in Calgary, Canada, was initiated by severe cuts in government funding. Upon starting his role in 1989 as Executive Director at the Glenbow, Robert Janes experienced the ineffectiveness of a vertical hierarchy first-hand. Janes was scolded for speaking directly with a department head, without first speaking with that department’s assistant director (Janes, p.14). This illustrates the disconnect of staff through the layers of bureaucratic hierarchy. Additionally, it exposes the difficulty in implementing change of organizational culture because people feel that they need to protect their territory and even their jobs.

Through the implementation of several change initiatives, the Glenbow was able to survive its challenging financial turmoil. The museum developed a corporate plan, which adopted management principles emphasizing a shift to a project-based organization, as well as an open culture for communication. The Glenbow affirmed its desire to become financially self-sustainable. Additionally, the Glenbow re-envisioned its mission statement to be inclusive of a “quality first” perspective. Finally, the museum developed a strategic plan that implemented performance measures. Janes (1995) states, “This is doubly important as the competition for public and private funding increases, forcing museums to be able to demonstrate effectiveness”

(p. 24). Subsequently, the Glenbow was able to negotiate funding with the province of Alberta a few years later.

In describing Janes' preference of organizational form, social anthropologist Michael M. Ames (1995) states, "Janes advocates a horizontal and participatory type of organization in contrast to what he describes as the more traditional hierarchical and centralized administrative systems... It comes from our anthropological experience: the hunting band, as opposed to urban bureaucracy... Leaders emerge according to the skills required for the task at hand. It is the classic team-based organization..." (Ames, in Janes, p. 2).

Technologist Peter Samis (2017) attests to the potential of, if not eventual, change of the hierarchical model: "Most museums have long-established and clearly defined protocols and hierarchies. New ways of working ultimately shift traditional structures and may end up equalizing roles or flattening hierarchies" (p. 6). Samis' visitor-centered case study of the Van Abbe Museum in Eindhoven, Netherlands, under the leadership of its director, Charles Esche, depicts a museum that breaks away from traditional modes through "radical hospitality" (p. 145). The concept of "radical hospitality" is similar to the approach used by Nina Simon in transforming the MAH to become relevant to the community.

One example of a radical hospitality change implemented at the Van Abbe featured a counter narrative to its El Lissitzky exhibition. By including graffiti text from Bulgarian contemporary artist, Nedko Solakov, the exhibition allowed for two countering narratives, allowing visitors to take in artist perspectives from different cultures and eras. Solakov's content countered the Soviet-era statements of the exhibition's primary narrative in order to spark an open dialogue for visitors (Samis, p. 149).

A more participative visitor engagement at the Van Abbe arrived via LETS, or Live Encounter Tagging System. Through LETS, visitors are able to apply their own wall labels next to object labels in the museum's galleries, further sparking new, visitor-centered dialogues. Samis states, "Esche undermined the time-honored 'museum as treasure house' mode of presentation" (Samis, p. 145). Esche encouraged visitors to tag their own labels, as opposed to relying on the viewpoint of one expert's object label. These new ways of participative inclusion would not have surfaced under the "museum as treasure house" approach.

In addition to re-examining the Van Abbe's approach to content, Esche also implemented organization change initiatives. Samis explains:

In the effort to break down entrenched silos and make the staff itself more collaborative, Esche instituted new team processes, reshuffled reporting structures, and created a new position—Experience Designer—whose job is to bridge the gulf between traditional curatorial and education roles in a way that is both clever about the art and attuned to the visitors (p. 145).

Esche describes organizational charts "as an orientation device. The more security you can give, the more capacity for change people have, actually" (p. 153). The organizational change initiatives, along with its radical hospitality approach to visitors, have enabled the Van Abbe to improve upon collaboration by connecting with audiences and breaking away from a traditional organization structure.

The synthesis of this material suggests that change is necessary for museums to be sustainable, whether it's for reasons of financial sustainability or finding more participative or engaging approaches to connecting with audiences. Janes, Gurian, Simon, and Samis all come to the conclusion that museums must shift away from traditional hierarchies. Their vernacular utilizes phrases like "relevance," "audience advocate," "visitor-centered," "radical hospitality,"

and “participatory” (Simon, 2016; Gurian, 1990; Samis, 2017; Simon, 2010). These museum leaders advocate for museums to refocus their efforts in delivering meaningful content to communities.

B. Change in the Private Sector

I have mentioned a number of reasons why museums may implement change, but now I will explore what drives change in business world outside of museums. Hirotaka Takeuchi and Ikujiro Nonaka (1986) state:

Changes in the environment – intensified competition, a splintered mass market, shortened product life cycles, and advanced technology and automation – are forcing management to reconsider the traditional ways of creating products. A product that arrives a few months late can easily lose several months of payback (*Harvard Business Review*, January 1, 1986).

Takeuchi and Nonaka researched Japanese and American companies, such as Honda and 3M, in advocating for an anecdotal “rugby approach” to the process of product development.

Takeuchi and Nonaka explain:

Under the rugby approach, the product development process emerges from the constant interaction of a hand-picked multidisciplinary team whose members work together from start to finish. Rather than moving in defined, highly structured stages, the process is born out of team members’ interplay (p. 138).

This approach to product development by working in a rugby “scrum” dates back over thirty years. In order to improve the process of product development, the rugby approach challenged the model of working in traditional hierarchies and silos. Takeuchi and Nonaka describe the rugby approach as a “holistic method... the ball gets passed within the team as it moves as a unit up the field... it is a vehicle for introducing creative, market-driven ideas and processes into an old, rigid organization” (p. 137). The authors emphasize that companies that do not adapt by adapting or changing their work methods will become obsolete.

Takeuchi and Nonaka cite a case study of the Honda City project team in Japan (p. 139). The goal of this team was to develop a car for young adults. Honda placed young engineers on the team, since the team would be developing this product for their own demographic. This approach draws comparisons to the “audience advocate” in the team exhibition model, discussed by Gurian. Audience advocates are able to provide insights at each step of the development process and this is an invaluable asset.

As Takeuchi and Nonaka explain, “The Honda team... consisted of hand-picked members from R&D, production, and sales. The company went a step further by placing a wide variety of personalities of the team. Such diversity fostered new ideas and concepts” (p. 140). Still drawing parallels to the museum exhibition team model, this process of building cross-disciplinary teams suggests that the status quo of non-cross disciplinary teams that rely on people with a singular viewpoint do not bring about new ideas.

Like Mintzberg’s 1996 article, critical of the traditional organizational chart, Takeuchi and Nonaka addressed the necessity that companies must adapt and become flexible due to challenges of the market, such as competition, the short lifespan of products, and rapid technological changes, some decades ago. Yet, aside from a handful of radical-ethos adopting institutions, discussed in the previous section, museums generally remain reluctant to change.

Another author critical of organizational complacency, Jim Collins (2001), asks the question, “Can a good company become a great company and, if so, how” (Collins, p. 5)? In 2001, Collins’ “good to great” companies included Circuit City, Kimberly-Clark, Kroger, and Walgreens. The study observed “good to great” companies over various 15-year periods of stock growth, brought upon by a “transition point,” a point in time where a significant change

occurred. These companies were then contrasted to direct “comparison companies” that remained just good.

Collins’ case study of Kimberly-Clark illustrates what brought change at the paper products company and how Kimberly-Clark advanced from a good to a great company. At a time when the company’s stock price underperformed the market by 36 percent, Kimberly-Clark appointed Darwin E. Smith as CEO (p. 17). Kimberly-Clark’s turnaround stemmed from Smith’s decision to sell the company’s mills, which accounted for the company’s “traditional core business” of coated paper. The company then refocused its efforts toward consumer paper products (p. 20). After the change in leadership and company direction, Kimberly-Clark outperformed its competition in the paper world and outperformed the stock market by over four times, according to Collins. Kimberly-Clark became a great company by addressing its challenge of significantly underperforming the stock market. It placed a leader in charge who was not reluctant to implement a major change to its core business. Ultimately, this is how the company withstood competition from rivals, like Proctor & Gamble, and enjoyed success for 20 years after its “transition point.”

This case study draws parallels to Robert Janes and the Glenbow Museum. Janes was appointed Director during a time of drastic cuts of government funding, in a similar manner to Smith’s appointment as CEO of Kimberly-Clark at a time of drastic downturn. Radical change initiatives were necessary to address the financial challenges these organizations faced.

Unfortunately, Collins’ study excludes startups, as many startups at that time did not meet criteria for his study. Since many of companies in this sample were traditional brick & mortar retailers or traditional spaces, the study didn’t account for companies like Amazon.com,

among other criteria ineligible due to its lack of a fifteen-year existence in 2001, that transformed retail. Circuit City, one of Collins' "good to great" companies, no longer exists, which emphasizes the need for organizations to continually be adaptive and flexible to succeed in the marketplace.

In order to become a global automotive competitor, Ford Motors streamlined various regional departments and focused on "horizontal integration" in the mid-1990s (Carnall, p. 47). This allowed the company to avoid oversupply to various markets under its operations. According to Colin Carnall (2014), whose work focuses on "change architecture," "Ford established five vehicle centres to take lifetime responsibility for the development of all vehicles of a given class produced and sold anywhere in the world. In addition Ford has created a single global unit for technology development" (p. 47). The strategic changes to its organizational structure allowed Ford to become more competitive in the global market, while facilitating its vehicle centers to become more responsive to the changed market under a unified leadership.

Ford flattened its hierarchies through its horizontal integration, comparable to the manner suggested by Samis regarding the future of museums. Ford also eliminated utilization of its sequential process approach to product development, which draws similarities to the "sashimi" method described by Takeuchi and Nonaka. Takeuchi and Nonaka state, "Sashimi is slices of raw fish arranged on a plate, one slice overlapping the other" (p. 141). The straying away from the sequential approach in favor of an overlapping model in Ford's product development addressed its previous challenge of disconnect between designers and manufacturers, according to Carnall. The change provides for greater organizational efficiency.

C. Design Thinking

One design method that the museum field has recently embraced is “design thinking.” Early use of the term, design thinking, dates back to 1987 in Peter G. Rowe’s book of the same name. Rowe’s book examines human problem solving approaches, primarily in architectural design. Rowe (1987) states, “I am concerned with the interior situational logic and the decision-making processes of designers in action, as well as with theoretical dimensions that both account for and inform this undertaking” (p. 2). The sequential models presented by Rowe, from various authors, allude to early, archaic, and complex processes of the design thinking model most people are familiar with today.

The phrase “design thinking” according to Tim Brown (2009), CEO of the design firm IDEO, is: “as a way of describing a set of principles that can be applied by diverse people to a wide range of problems” (Brown, p. 7). Design ideology from IDEO and Stanford University’s d.School in Palo Alto, California, are synonymous due to the work of David Kelley, one of IDEO’s founders. Design Thinking has evolved from Rowe’s early examination of reiterative design processes from architectural designers to an empathy-based process that is now commonly used in a variety of businesses, as described by Brown. Brown states, “From pediatric obesity to crime prevention to climate change, design thinking is now being applied to a range of challenges...” (p.7).

Dana Mitroff Silvers, former Head of Web at the San Francisco Museum of Modern Art (SFMOMA), discusses strategies to embed design thinking into museums. Using the Denver Museum of Nature and Science (DMNS) as a case study, Dana Mitroff Silvers (2017) states:

The museum’s senior leadership has kicked off a new, cross-museum initiative to investigate and explore ways to build deeper and more meaningful connections with the

local community. And one of the ways they have set out to do this is through a new way of working and collaborating internally: design thinking (p. 155).

The process of embedding design thinking to make the DMNS more relevant to its community involved organization-wide staff participation on new exhibitions, empathy towards DMNS' audience, and the willingness to try new things in a new way.

Design thinking served as the DMNS' change initiative to address the issue of relevance to its community. To reference Nina Simon's anecdote of finding the right key to the right door, design thinking may have been the right door to bridging the community to the DMNS.

The problem with Design Thinking is that it limits itself to a 5-step process. Every company and organization is different, so a 5-step design thinking process may not necessarily work for every organization. This leads me to suggest museums apply a more solidified organizational strategy: Agile Project Management.

D. Agile Project Management

Jim Highsmith (2010), co-author of early Agile doctrines: *Manifesto for Agile Software Development* and the *Declaration of Interdependence*, states, "Agility is the ability to both create and respond to change in order to profit in a turbulent business environment. Agility is the ability to balance flexibility and stability" (Highsmith, p. 13). Like Takeuchi, Nonaka, and Collins, Highsmith articulates the importance of flexibility. The term scrum, as in "scrum master" of an agile team originates from Takeuchi and Nonaka's 1986 article that addressed the holistic "rugby approach." While Agile Project Management has its roots in software product development, Agile has been applied to the automotive industry, among other fields. Agile's fast and iterative process allowed BMW to implement several automotive crash simulations, reducing actual physical automotive crashes for testing purposes (p. 7).

Highsmith emphasizes replacing the outdated “Iron Triangle,” approach to performance measurement, which focuses primarily on scope, then cost and schedule, with the “Agile Triangle,” which focuses primarily on *value*, then quality and constraints (p. 21). Highsmith places value/customers before the constraints of “scope, schedule, and cost.” The original “Iron Triangle” is commonly utilized in traditional project management settings. However, it fails to take into account value, or stakeholders, as illustrated in the “Agile Triangle.”

Highsmith lists key objectives for Agile Project Management: Continuous innovation, product adaptability, improved time-to-market, people and process adaptability, and reliable results (p. 10). These objectives are applicable to museums. While design thinking may spark initial creativity or innovation, the iterative structure of working in agile with an agile coach or scrum master suggests greater sustainability.

E. Agile in Museums

Agile has recently debuted in the museum field. Coinciding with its building renovation, the Museum of Modern Art in New York is redesigning its website, with the use of Agile evaluation. According to Armstrong (2017), MoMA “takes input from a group of “audience advocates” representing various departments at MoMA (including Digital Media, Education, Membership, Visitor Services, Management Information, and Marketing.)” (Armstrong, p. 393). This team of audience advocates meets every two weeks to assist with the website’s redesign. The audience advocates of MoMA’s various departments draw parallels to the 1970s process of the exhibition team design at the Boston Children’s Museum.

As Gurian states: “To prevent the unbalancing of the representation, each advocate formally acts on behalf of fellow colleagues and advisors in their field of concern, all of whom

have a stake in seeing that their interests are addressed” (Gurian, p. 163). This adoption of Agile as an evaluative method is significant because of the amount of stakeholders involved in the redesign process. The various department advocates can provide input for their demographic, similarly to the Honda City team designing a car for their particular demographic. Although Agile’s use here is primarily iterative feedback for a digital team, the cross-disciplinary efforts of MoMA illustrate the adaptability of museum staff to work in an agile team.

In the next chapter, I propose a job description for a new museum position of Generalist Scrum Master in a museum setting in order to apply Agile Project Management (Agile) to traditionally outdated organizational structures, with an emphasis of adding value and relevance to museum visitors. Curatorial departments in major art museums are generally structured through a top-down hierarchy, with a Head Curator supervising over Associate Curators and Curatorial Assistants. There are some exceptions in smaller museums, like the team exhibition model described by Gurian that takes into account “audience advocates” and museums that have adopted radical ethos of participatory curating, such as MAH and the Van Abbe. I seek to apply Agile Project Management to the three museum departments, including Digital, Exhibitions, and Education, in order to bring greater value to museum stakeholders. My proposal describes various aspects of Agile Project Management, including liftoffs and sprints.

I introduce counter arguments to other design methods (i.e. design thinking) that museums have currently embraced, including Natasha Jen’s 2017 presentation, *Design Thinking is Bullshit*, given at the 99U Conference in New York City, New York. These counter arguments will validate my choice of implementing Agile over Design Thinking. I will provide evidence of trends in museums starting to implement Agile, as in the case of the Metropolitan Museum of

Art's recent hiring of a scrum master for its digital team. Finally, I make recommendations to explore other departments, aside from Digital, that may benefit from implementing Agile Project Management.

Proposal of a Generalist Scrum Master

I propose to develop a job description for a new museum position of Generalist Scrum Master who could potentially implement Agile Project Management across various museum departments and improve museums' responsiveness to markets and audiences. Agile emerged from the technology sector for its use in software product development. In May of 2017, the Metropolitan Museum of Art in New York City (the Met) posted a position on LinkedIn.com for a Scrum Master for its Digital (Software) Department. This posting provides evidence that museums are interested in integrating scrum masters into their digital product development processes. The position would work with three scrum teams in the areas of "audience outreach, the Museum's collection, and transaction systems (2017)." The posted position is characterized by a "servant leadership style." A "servant leadership style" applies a team-first outlook to leadership approach. Other attributes listed in this job description include "self-organizing," "removing impediments," "improving transparency," and "collaborative problem solving." While the Met's Scrum Master focuses on software development across these three teams, my proposed Generalist Scrum Master position focuses on implementing Agile outside of a digital department, in order to imagine a different organizational structure in museums that will be more inclusive of diverse viewpoints, flexibility in the workplace, and focus on audience.

My proposal envisions that a framework of Agile Project Management can be adapted to individual museum organizations. I have chosen Agile Project Management because a Certified Scrum Master, who utilizes the principles and methods of Agile, possesses an advanced skillset in project management and can coach a team through a "servant leadership style." The goal of my proposal is to position the museum field to better compete in a fast-

changing global market space, through internal organizational change that may result in providing value to museum audiences. My proposed Generalist Scrum Master position would adopt the previously-mentioned ethos of Simon, Gurian, Janes, and Samis of “relevance,” “audience advocate,” “visitor-centered,” “radical hospitality,” and “participatory,” in order to add value to museums’ internal organizational structures and museums’ primary product, its exhibitions. In my hypothetical model, the product owner is the museum visitor.

Although the Van Abbe Museum, abiding by its “radical hospitality” ethos, had implemented a new museum position of Experience Designer to work across museum departments and operations, a designer doesn’t necessarily possess the project management prowess of a Certified Scrum Master or an Agile Coach. A designer “designs,” but may not necessarily see through all aspects and phases of a project. And unlike design thinking, which according to Pentagram designer, Natasha Jen, lacks a crucial component of the design process known as “crit,” short for critique, Agile provides a long-term viable strategy to product or service development. Jen’s 2017 presentation, “Design Thinking is Bullshit,” advocates for products derived through the Design Thinking process to be shared with the public in order for the design community to critique these products.

I envision that the Generalist Scrum Master will have both experience in digital product or service development and some experience in non-profit administration. The position will call for Agile Coaching, initially working with an art museum’s Digital Department, as a gateway to the first phase of Agile Project Management implementation. Current Digital team members at the museum will have previous experience or familiarity with scrum, allowing for a smooth initial implementation of a digital scrum team collaboration. As mentioned in the previous

chapter, MoMA is currently utilizing “Agile Evaluation” for the redesign of the museum’s website (Armstrong, p. 393). Initial work with a digital team will provide for tangible deliverables to be presented at future “liftoff,” or kickoff, meetings for new Agile teams, with benefits of the Agile process explained to individuals new to process.

This initial phase for the Generalist Scrum Master will double as a research and discovery process of museum departments outside of digital. The Generalist Scrum Master will research the organization’s Curatorial, Exhibitions, and Education departments through conducting interviews across these and other museum departments, with the goal of assembling scrum teams in the next phase of the role.

This second phase calls for assembling scrum teams in the departments of Exhibitions and Education. For example, it may be beneficial to have a staff member from Operations involved in the Exhibition Design process in order to provide insights into logistics, materials budgeting, and so on. For example, having someone from the Collections Department working with someone from the Education Department could better serve school group tours. An additional “audience advocate” agile team will be assembled to evaluate products and services developed across the various agile teams, similar to MoMA’s agile evaluation team. This second phase includes the Generalist Scrum Master setting up liftoff meeting for the three newly formed scrum teams, where initial goals, stakeholders, and challenges are discussed.

After the scrum teams outside of digital have been assembled and organized in the second phase, the third phase involves scrum teams becoming sustainable, self-organized, and developing products or services on a bi-weekly “sprint” cycle. The scrum teams would have deadlines of their respective products or services every two weeks, which is typical of Agile

teams in software development. The generalist scrum master would work across all teams by coaching the teams in scrum principles mentioned above.

In what follows, I have created an action plan that a newly hired Generalist Scrum Master in a museum could potentially follow in order to successfully implement Agile Project Management workflow across various museum departments for three years, or phases, upon commencement of this position, assuming approval of the new position by Human Resources and funding for the position by the Board of Trustees.

Action Plan: Generalist Scrum Master Overview - Year One - Implement Digital Scrum Team

		Quarter Q1			Quarter Q2			Quarter Q3			Quarter Q4				
Project Plan		MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	
Research and Discovery	Orientation to museum														
	Prepare interview template														
	Conduct one on one interviews with Digital and Design team members														
	Competitive analysis research of museum websites														
	Research Graphic Standards														
	Evaluate current museum web site														
	Evaluate contracts with external software engineers														
	Research Budget														
	Interviews with Editorial and Curatorial staff to determine content														
	Evaluate web prototypes														
	Kickoff Work Session: Generalist Scrum Master + Digital department														
	Bi-weekly digital scrum team meetings														
	Interview staff across depts. for audience advocate evaluation team														
	Send invitations for audience advocate team														
	Kickoff meeting for audience advocate scrum team														
	Bi-weekly audience advocate scrum team meetings														
	Initiate and continue research on Exhibition and Education depts.														
	Deliverables	Finalize web and mobile app budget													
First iteration of web design															
Digital team develops lo-fi prototypes															
Digital team develops design prototypes															
Finalize digital content strategy															
Digital team develops working prototypes															
Present digital content strategy at Q2 staff meeting															
Develop content with Editorial and Curatorial staff															
Finalize design															
Digital team develops working prototypes															
Audience advocate team tests initial beta app															
Audience advocate team tests initial beta website (desktop and mobile)															
Present working web prototypes at Q3 staff meeting															
Launch new website (desktop and mobile)															
Launch new museum app															
Present web traffic update at Q4 staff meeting															
Happenings		Quarter	Q1				Q2				Q3			Q4	
		Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	
	Exhibition openings														
	Generalist Scrum Master OOO/Travel														
	AAM Conference OOO/Travel														
	Events														

Generalist Scrum Master Overview - Year Two - Implement Exhibition Hybrid Scrum Team

Project Plan		Quarter											
		Q1			Q2			Q3			Q4		
MONTH		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Research and Discovery	Prepare interview templates for staff outside of Digital	■											
	Conduct interviews with Curatorial, Exhibitions, Collections, etc.	■	■										
	Send invitations for exhibition hybrid scrum team assembly			■									
	Kickoff working session for exhibition scrum team			■									
	Bi-weekly exhibition scrum team meetings			■	■	■	■	■	■	■	■	■	■
	Competitive analysis research on relevant museum exhibitions			■	■								
	Research exhibitions budget			■	■								
	Develop visitor-centered exhibition proposal				■	■							
	Determine exhibition cost					■	■						
	Determine loan arrangements					■	■	■					
	Develop exhibition checklist				■	■	■						
	Design elevation prototypes						■	■					
	Develop exhibition catalog materials							■	■	■			
	Exhibition scrum team works with digital scrum team on web content									■	■	■	■
	Bi-weekly audience digital scrum team meetings	■	■	■	■	■	■	■	■	■	■	■	■
Bi-weekly audience advocate scrum team meetings	■	■	■	■	■	■	■	■	■	■	■	■	
Deliverables	Announce formation of new Exhibition Hybrid team at Q1 meeting			■									
	Finalize budget					■							
	Finalize visitor-centered exhibition proposal						■						
	Finalize elevation designs						■	■					
	Announce exhibition team members at Q2 staff meeting						■	■					
	Present new exhibition to Board members for approval							■					
	Present elevation designs at Q3 staff meeting								■				
	Submit press materials to Editorial and Marketing depts.									■			
	Initial draft of exhibition catalog content and design										■		
	Digital scrum team finalizes digital content on new exhibition											■	■
	Finalize operations requests											■	■
	Finalize exhibition loan agreements and insurance											■	■
	Send final draft of catalog to publisher											■	■
	Finalize exhibition checklist												■
	Exhibition team presents preview at Q4 staff meeting												■
Happenings	Quarter	Q1			Q2			Q3			Q4		
	Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	Exhibition openings (exhibition calendar continues as scheduled)		■			■			■			■	
	Generalist Scrum Master OOO/Travel							■					
	AAM Conference OOO/Travel					May 19-22							
	Events												

Generalist Scrum Master Overview - Year Three - Implement Education Scrum Team

		Quarter Q1			Quarter Q2			Quarter Q3			Quarter Q4			
Project Plan		MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Research and Discovery	Prepare interview templates for education team													
	One on one interviews with Education & Public Programs													
	Kickoff work session for education scrum team													
	Bi-weekly education scrum team meetings													
	Competitive analysis research for relevant education programming													
	Research Education & Public Programs dept. budget													
	Develop visitor-centered education strategy and programming													
	Education scrum team develops prototypes													
	Audience advocate scrum team tests prototypes													
	Education scrum team & exhibition scrum team share notes on projects													
	Develop design for education programming													
	Bi-weekly audience digital scrum team meetings													
	Bi-weekly audience advocate scrum team meetings													
	Bi-weekly exhibition hybrid scrum team meetings													
Deliverables	Preparators install exhibition developed by exhibition hybrid team													
	Press preview													
	Opening for exhibition hybrid scrum team													
	Announce formation of Education scrum team at Q1 staff meeting													
	Finalize budget for education programming													
	Finalize proposal for new education programming													
	Announce education scrum team members at Q2 staff meeting													
	Present new education strategy and programming to Board for approval													
	Finalize redesign of education space													
	Submit press materials to Editorial and Marketing depts.													
	Present preview of new education programming at Q3 staff meeting													
	Order materials to install newly developed education programming													
	Installation of education programming													
	Train Education dept. interns and volunteers on new material and tours													
	Arrange for photography of newly installed space													
	New education programming opens													
	Present feedback of visitor-centered education programming at Q4													
Happenings	Quarter	Q1				Q2				Q3			Q4	
	Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	
	Exhibition openings (exhibition calendar continues as scheduled)													
	Generalist Scrum Master OOO/Travel													
	AAM Conference OOO/Travel													
	Events													

Conclusion

The hypothetical three-year strategy presented in the previous chapter presents opportunities to inform museum wide staff members of the Generalist Scrum Master's progress and completed deliverables during quarterly all-staff meetings and individual/team meetings over the course of the three-year project plan. Products and Services that emerge from scrum teams should be presented at museum conferences, such as American Alliance of Museums, in order to present results to the greater museum community. The three-year strategy aims to provide a framework and timetable for implementing what may be described as radical organization change in the museum field. However, without radical thinking, prominent museum change advocates and leaders like Nina Simon, Robert Janes, and Charles Esche would not have been able to impact the communities of the respective museums they led.

Possible measures of success of this hypothetical model involve performing competitive analysis with the product and service offerings of other equivalent art museums. A survey featuring a mixture of quantitative and qualitative questions should be presented to museum visitors to incorporate feedback to the museum. Traditional measures of museum success observe attendance levels, which correlate to increased or decreased revenue, while more current measures of museum success may be to observe social media interaction. As mentioned in the introduction to this capstone, this is the era of "Art in the Age of Instagram." The measure of success from an Agile point of view would ask the question: did the products or services developed through the Agile process add value to museum visitors, as described by Jim Highsmith's Agile Triangle model?

One challenge to applying Agile Project Management to departments in art museums like Exhibitions and Education is the reluctance from head curators and educators to accept this new model, as it may threaten the expertise of curators and educators because it opens their departments up to input from others. Another potential challenge of presenting a model focused on audience is the negative implication of removing the scholarly complexity of exhibitions since a curator or expert will not lead the process.

As time passes, the case studies of MoMA and the Met will have developed new digital products through the Agile/scrum process, which will make a strong case for other art museums to adopt agile work methods. Currently the only way to measure any progress from the Met or MoMA would be to compare digital products of both institutions before and after implement Agile. In the case of MoMA, its mobile app has recently changed to audio guide only. It previously had served several functions, including exhibition information and film screenings. The change may have been a result from overcomplicated functions of the previous MoMA mobile app. Time permitting, I would have liked to interview individuals from these teams to gain greater insights to into their team dynamics and workflow within their departments and within their organizations. Additionally, it would be interesting to inquire about the long-term goals of these digital teams and the nature of any other cross-departmental collaborations.

In 1990, Elaine Gurian listed a change in demographics as one of many reasons a museum might implement change. Today, the potential implementation of Agile Project Management through a Generalist Scrum Master and the ensuing Audience Advocate scrum team addresses the need for adapting to the changing demographics and sensibilities of the marketplace. The goal of proposing this new Generalist Scrum Master position and job

description is to address necessary organization change in art museums, and recognize what is happening in the market outside of traditional art museums. I believe that applying Agile Project Management to art museums is a viable solution to providing better museum offerings to reflect the changes in the marketplace of today and tomorrow.

Appendix A: Annotated Bibliography

Armstrong, J. (2017). Agile Evaluation: User Testing and the Feedback Loop for the Redesign of MoMA.org. In *The Museum Blog Book* (pp. 392-395). Edinburgh, UK: MuseumsEtc.

This diverse collection of blog posts by museum professionals provides insights into topics currently concerning the museum field. Jackie Armstrong, Associate Educator, describes how MoMA is utilizing Agile Evaluation as part of the museum's process in the redesign efforts for its website. A cross-department team of "audience advocates" evaluates iterations/prototypes of MoMA's redesigned website every two weeks, being inclusive of these audience advocates during each step of process. While this case study is specific to Agile as a method of evaluation, it illustrates a major modern and contemporary art museum implementing an aspect of Agile into its normal organizational operations.

Carnall, C., & Todnem, R. (2014). *Managing Change in Organizations* (6th ed.). Harlow, UK: Pearson.

Carnall illustrates "change architecture" by way of benchmarking, discovery, and action plans. Case studies of organization change range from Nordic Insurance to Ford Motors. Nordic Insurance drastically altered its organizational model for handling claims by increasing call center staff, while completely eliminating back office "experts." During the mid-1990s, in an effort to become a global automotive competitor, Ford Motors embraced a horizontal structure of operations. As a result, Ford's operations became more streamlined. It previously had various regional departments in Europe and North America. Carnall discusses ways to add value to organizations. I will explore what ways implementing Agile Project Management, which is a way of streamlining processes, can add value to museums.

Collins, J. (2001). *Good to Great, Why Some Companies Make the Leap and Others Don't*. New York, NY: Harper Business.

Collins and his research team followed "good to great" companies over 15-year time-frames during various eras and compared these companies to less successful "comparison companies." Collins' research of good to great companies provides historical context for what defines breakout success for these companies. Collins' case study of grocery chain, Kroger, illustrates how Kroger needed to change its outdated business model to become a great company. This leads me to ask the question: should museums adapt their business models to mirror successful companies in the private sector?

Graham, B., & Cook, S. (2010). *Rethinking Curating, Art After New Media*. Cambridge, MA: MIT Press.

Graham cites the case study of a 2001 new media exhibition at SFMOMA entitled: *010101*. This exhibition was collaboratively curated by four different curatorial departments, without a “lead curator.” The organization appeared to be in confusion over roles within the departments of curatorial, exhibition design, and web design. This case study provides the framework of how Agile Project Management can be applied to interdisciplinary curatorial teams, through the implementation of a scrum master, to avoid the “blurring” of individual roles.

Gurian, E. H. (2006). Let’s Empower All Those Who Have a Stake in Exhibitions, About the uses, meaning, and failings of the team approach, 1990. In *Civilizing the Museum, the Collected Works of Elaine Heumann Gurian* (pp. 162- 166). New York, NY: Routledge.

Gurian discusses the exhibition team approach consisting of advocacy positions for content, design, and audience. Sometimes teams have conflict when including an external contractor. These cross-departmental exhibition teams with a project manager draw similarities to agile teams with a scrum master. However, Gurian lists the product owner of the exhibition as the Executive Director. This is usually not the case with agile teams. Outside of exhibitions and curating, I will explore other museum departments that may benefit from Agile Project Management.

Hendrick, C. (2015). *The Agile Museum: Organisational Change Through Collecting ‘New Media Art.’* Retrieved from University of Leicester Research Archive. <https://lra.le.ac.uk/handle/2381/36093>.

Hendrick’s dissertation researches two case studies in Europe, the Harris Museum and Art Gallery and the Van Abbe Museum, to determine if correlations between museums collecting new media art and changes to their organizational structures exist. Hendrick concludes that her case studies provide evidence institutions collecting new media have adopted practices of agility of organization, curation, and culture. Hendrick’s research provides support for my argument to implement Agile, in the shift from traditional business models to project management methods of operation.

Highsmith, J. (2010). *Agile Project Management, Creating Innovative Products* (2nd ed.). K. Gettman (Ed.). Upper Saddle River, NJ: Addison-Wesley.

Highsmith, co-author of early Agile doctrines: *Manifesto for Agile Software Development* and the *Declaration of Interdependence*, provides comprehensive descriptions of the Agile Project Management process through the context of “opportunities, values, frameworks, and practices.” Highsmith emphasizes replacing the outdated “Iron Triangle” approach to performance measurement, which focuses primarily on scope, then cost and schedule, with the “Agile Triangle,” which focuses primarily on value, then quality and constraints. Highsmith places value/customers before the constraints of “scope, schedule, and cost.” Aspects of adapting, product releases, and scaling up are also mentioned. In proposing Agile Project Management in the museum setting, it is

important to identify the opportunities of innovating products and services with relation to the museum. Agile is an iterative process. Curating is an iterative process. Will implementing Agile into Curatorial practice result in more visitor-centered exhibitions?

Janes, R. R., (2013). *Museums and the Paradox of Change* (3rd ed.). New York, NY: Routledge.

Janes, former President and CEO of the Glenbow Museum in Calgary, Alberta, draws upon his experiences attempting to turn around a museum in financial turmoil after drastic cuts to funding. This work explains the challenges of implementing change in museums and non-profit organizations from a management perspective. Glenbow's primary challenges were its dependence on government funding. However, other issues that plagued the museum included layoffs, restructuring costs, and rigid senior staff. Implementing major organizational change, such as a shift from a vertical hierarchy to a more horizontal project management approach may be difficult. These challenges facing museums may be a deterrent to organizational change and implementation of Agile Project Management that should be addressed.

Larsen, D., & Nies, A. (2016). *Liftoff, Start and Sustain Successful Agile Teams* (2nd ed.). K. Dvorak (Ed.). Raleigh, NC: Pragmatic Bookshelf.

Larsen and Nies provide strategies for launching successful agile teams from the initial meeting, also referred to as a "liftoff." One such strategy includes Agile Chartering, in which expectations, roles, and stakeholders are identified amongst team members prior to and during a liftoff. The strategies described here provide step-by-step guidelines for implementing an agile team from its liftoff, which provides the basis of my proposal for initial implementation of agile in a museum setting. My proposal will define roles of a scrum master, team members, and stakeholders to a hypothetical museum agile team scenario, loosely-based on the liftoff guidelines listed by Larsen and Nies.

Mitroff Silvers, D. (2017). Five Steps for Embedding Design Thinking in a Museum. In *The Museum Blog Book* (pp. 154-163). Edinburgh, UK: MuseumsEtc.

Mitroff Silvers examines the case-study of trainings she delivered at the Denver Museum of Nature & Sciences to describe how the museum embedded Design Thinking in order to become more relevant to the DMNS community. Design Thinking facilitates design process that has been around for decades, but has only recently been adopted by the museum field. I will describe the differences between Design Thinking and Agile for applications in museums.

Paulini, P., Mitroff Silvers, D., & Proctor, N. (2015). Technologies for cultural heritage. In Rizzo, I., & Mignosa, A. (Eds.). *Handbook on the Economics of Cultural Heritage* (pp. 272-289). Camberley, UK: Edward Elgar.

Mitroff Silvers describes SFMOMA's website and digital operations in detail. Certain aspects of the website suffered from lack of funding, such as the teachers' curriculum portal. Participation from departments outside of the museum's web team in content production included staff from Education, Marketing, Membership, and Collections Information Access. The museum outsourced several aspects of web production, including user experience design. How would SFMOMA have benefitted from an in-house user experience designer with experience in agile or other contemporary design approach? Would an agile team developing SFMOMA's website have an influence on the organization outside of digital?

Ries, E. (2011). *The Lean Startup, How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. New York, NY: Crown Business.

According to Ries (2011), Lean Startup "builds upon many previous management and product development ideas, including lean manufacturing, design thinking, customer development, and agile development." (p. 4) Ries describes measures of success in lean thinking, such as value that renders all else as waste, as inadequate for measuring success in startups. Ries emphasizes "validated learning" through data collection from customers. Lean Startup's Build-Measure-Learn feedback loop draws similarities to Agile's process of development through two-week iterative sprints. Comparing Lean, Agile, and Design Thinking will provide for an overview of product and service development methods that museums can use to determine if either will help the field in creating innovative museum experiences.

Samis, P., & Michaelson, M. (2017). *Creating the Visitor-Centered Museum*. New York, NY: Routledge.

This collection of case studies surrounding the topic of change through "visitor-centered approach" in exhibitions, in order to reach wider audiences, and "structural change," where organizations steer away from vertical structures to facilitate better collaboration. The Van Abbe Museum, also a case study of Catharina Hendrick (see above), has implemented "radical hospitality" to its ethos. Samis provides other examples of the Van Abbe efforts of becoming visitor-centered, such as hiring an experience designer, creating an immersive El Lissitzky exhibition, and providing space for audience/visitor comments on wall labels. It would be interesting to see if there is a correlation of institutions practicing Agile Project Management and visitor-centered initiatives.

Simon, N. (2016). *The Art of Relevance*. Santa Cruz, CA: Museum 2.0.

Simon shares personal stories and anecdotes to deliver her thoughts on relevance. Simon quotes cognitive scientists, Deirdre Wilson and Dan Sperber, as defining relevance to "yield positive cognitive effect." With regards to this quote, Simon states that for something to be relevant, it has to offer something new, and it has to matter.

Simon describes the “paradox of relevance” through the anecdote of having the right key to the right door. It’s simply not enough to have community involvement with the museum, but the museum’s content must also offer something new and matter to that community. Since Agile Project Management places a focus on value (customers), would adopting this work methodology rooted in software and product development render a museum more relevant to its patrons? Can museum experiences be designed from similar methodologies utilized in software development to become more relevant to a museum’s community?

Verzuh, E. (2016). *The Fast Forward MBA in Project Management* (5th ed.). Hoboken, NJ: Wiley.

Verzuh provides an overview of base-level project management, while introducing project management methods like Lean Startup and Agile. Topics covered include risk management, scheduling, stakeholder roles, team assembly, etc. Before presenting or discussing Agile Project Management, it is imperative to mention project management in a broader context. This text will allow me to introduce the fundamentals of project management before diving heavily into Agile Project Management methods and terminology.

Appendix B: Project Stakeholders

Audience Advocates: These stakeholders consist of an amalgamation of departments that is representative of the museum's audience. This team includes staff from Membership, Education, Marketing, etc.

Board of Trustees: Project requires Board approval to implement new position.

Curators: Curators may or may not favor initiating a new exhibitions hybrid team. Depending on the personal views of the curator, they may be reluctant to welcome a team that designs exhibitions in which the curator is not the central authority.

Design Team: Designers will be embedded in scrum teams to develop graphic and/or visual design for products and services.

Education and Public Programs Department: This department will work in an Agile method of product and service development. Additional training will be required of this staff.

Executive Director: The institution's leader needs to be in compliance with the goals of this new position in order to the 3-year strategy to be successful.

External Vendors: To develop digital products, a museum contracts software engineers. The accelerated digital (website/mobile app) updates will require flexibility with software engineers. Current vendor will need to be re-evaluated.

Exhibitions Team: Staff from the current Exhibitions Team will be asked to participate and contribute to the Exhibitions Hybrid Team, organized by the Generalist Scrum Master.

Generalist Scrum Master: This individual is at the focal point of implementing organizational change towards an Agile process.

Head of Digital: The Generalist Scrum Master reports to the Head of Digital. The Head of Digital will ensure the Generalist Scrum Master's projects remain in line with the museum's mission statement. The Head of Digital is responsible for submitting the job proposal and attributes are sent to Human Resources.

Human Resources: Human Resources will screen and vet candidates for the role of Generalist Scrum Master. Human Resources will determine the salary of this role based on comparable wages and candidate's experience.

Marketing: The Generalist Scrum Master position demonstrates a shift at the institution's direction. This presents an opportunity for the museum to rebrand itself in print/online publications and museum conferences.

Operations: Staff from Operations will contribute to the Exhibitions Hybrid Team to offer insights on budgeting, installation, fabrication, etc.

Visitors: Visitors are the main project beneficiaries. The scrum teams aim to provide impactful visitor-centered experiences.

Appendix C: Glossary of Terms

Agile Coach: An individual trained in Agile methods, but not necessarily certified.

Agile Project Management: Advanced project management method that covers “opportunity, values, frameworks, and practices” (Highsmith, p. xxix).

Certified Scrum Master: A scrum master that completed an official Certified Scrum Master certification. These certification courses are available through university extension programs from the University of California, Berkeley and San Francisco State University. An introductory project management course is a prerequisite to take Agile courses.

Change Architecture: The examination of “how change programmes are constructed” (Carnall, p. 10).

Design Thinking: A 5-step design process: “empathize, define, ideate, prototype, and test” (Jen, np).

Disruption: The use of disruptive technology to supplant competitors (Christensen, p. xi).

Empathy: Understanding how someone else thinks (Young, p. vii).

Empathy-based process: A process rooted in how others think, in relation to your product or service.

Liftoff: Similar to a “kickoff” meeting, where individuals come together initially to collaborate on “initial intentions, approach, and plans” (Larsen and Nies, p. xi).

Servant Leadership Style: In the LinkedIn.com article, “Servant Leadership in Project Management,” by Tanvir Ahmed: “project managers put the team first and strike a balance between project parameters, business objectives and interest of the team.”

Sharing Economy: Synonym for a “Collaborative Consumption” economy (Botsman and Roo, p. xv).

Sprints: A design sprint where ideas are “tested, built, and launched...” in a highly accelerated environment (Knapp, p. 6).

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