Technological Innovation and Management Skills: Case Study of the Museo Archeologico di Napoli

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Abstract

The aim of this article is to contribute to the debate on how management positions in museums can contribute in successfully implementing technological innovations within a museum. The results of a case study on the Museo Archeologico Nazionale di Napoli (MANN) – which covers the theme of transferrable skills of a museum director for the successful implementation of technological innovations to improve the service the museum offers to the benefit of the public.

Keywords: technological innovation, management skills, museums

1. Introduction

Starting from the nineties the museum sector has seen numerous changes that have made it considerably more complex. Think of the reduction in public financing that has forced museums to deal with the logic of the market or, better yet, the increase in competition due to alternative cultural programs.

In recent years, museums have tried to find new ways to provide a unique experience for tourists by implementing technological innovations to enhance their visits (Izzo, Mustilli, & Guida, 2015; Izzo, Mustilli, Sasso, & Solima, 2016; Solima, Della Peruta, & Del Giudice, 2015; Yovcheva, Buhalis, & Gatzidis, 2013). A recent survey on strategies implemented in major museums worldwide with regard to the digitization process, the use of these instruments and the reassessment of websites carried out by Axiell in 2016 for the Museums and the Web Conference shows that the use of integrated ICT applications had a significant impact on the public: 48% of the museums saw an increase in physical visits, 50% saw an increase in the number of visits to their websites, and 82.3% of the museums recorded an increase of social media visitors. Museums could increase their competitive advantage over their direct competitors by improving the quality of the visit experience. Moreover, this choice can be of strategic importance with respect to reputation in order to improve museum attractiveness and, more generally, its ability to relate to its stakeholders. Obviously, a satisfied visitor will share his or her experience with other users, thereby increasing the visibility of the museum and its ‘social’ rating, just as a dissatisfied visitor might. Additionally, a content visitor is more likely to establish a long-lasting relationship with the museum beyond the visit through a digital connection. In other words, the museum can activate loyalty with its audience – a prerequisite for the development of the museum’s marketing strategy. The importance of digital communication for cultural institutions is clear, but what are the factors that can contribute in successfully implementing technological innovations within a museum?

Most research assesses the determinants that lead to the choice of adopting Information Technology (IT) to include the factors that influence acceptance and use of such a system (Fuller, 1996; Thong, 1999; Bharadwaj & Soni, 2007; Irvine & Anderson, 2008). Other research focuses its attention on the company structure, or rather, whether the organization is ready and willing to accept the technological innovation (Davis, 1989; Tomatzky & Fleischer, 1990; Rogers, 1995; Oliveira & Martins, 2011; Cranmer, Jung, tom Dieck, & Miller, 2016; Jung, Chung, & Leue, 2015; Izzo, 2017).

Parallel to this process of organizational change, both in academia as with practitioners, more attention is placed on the importance of developing adequate management skills to better respond to the complex challenges in the sector. To achieve greater company performance, individuals in management positions must possess both technical skills linked to the management of complex organizations, as well as a portfolio of emotional, relational and cognitive skills (Hopkins & Bilimoria, 2008; Nolan, Conway, Farrell, & Monks, 2010; Wang,
The skills under exam refer to the capability to efficiently recognize, understand and manage one’s own emotions and those of others, and the ability to analyze information and situations (Boyatzis, 2009). The aim of this article is to contribute to the debate on how management positions in museums can contribute in successfully implementing technological innovations within a museum.

Focus is on a case-study of the Museo Archeologico Nazionale di Napoli (MANN), which analyzes the transferrable skills a museum director should possess for the successful implementation of technological innovations to improve the service that the museum makes available to the public.

We then present the theoretic framework, the project methodology, main project results and a discussion.

1.1 Theoretic Framework

Numerous studies show how people constitute the source of an organization’s competitive advantage. In other words, how the success of an organization is closely linked to the knowledge, abilities and skills of its human capital (Thompson, 1967; Becker, 1983; Pfeffer, 1994; Huselid, Jackson, & Schuler, 1997; Youndt, Snell, Dean, & Lepak, 1996; Castaner, 1997; Cappelli, 1999; Moretti, 1999).


In this viewpoint, many studies focused on the correlation between the leader and the development of business through the study of what he does (Verstraete, 1999, Schmitt 2003, Chandler & Jansen, 1992; Herron & Robinson, 1993). They demonstrate that the leader influences strongly the development and sustainability of the company by his personal traits but also by mobilizing his skills in the exercise of his functions. Moreover, Bayad, Arcand, and Arcand (2002), and Loué and Baronet (2008) verified that the leader skills are the best predictors of firms performance. In the same way, other researches on skills of the leader, point out that leader skills are more directly related to the performance of companies (Lorrain, Belley, & Dussault, 1998; Gartner, 1988). More in detail management skills, leader skills and entrepreneurial skills seem to be an important factor in the success of any business (Bayad et al., 2002; Jaoua & Radouche, 2014).

Then it is well-known that the leader skills prove predictors of performance (Bayad et al., 2002), and the performance differences between firms are due to the different skills of heads of business. Specifically, technical, managerial and entrepreneurial corporate chef is an important factor in the future success of the company (Lorrain et al., 1998).

Beginning with the assumption that individuals in the upper echelons in small businesses make decisions and executes orders that influence the entire organization, directly impacting the business’ outcome (Sadler-Smith, Hampson, Chaston, & Badger, 2003; Gerli, Tognazzo, & Gubitta, 2014). In analyzing the case study the goal was to contribute to the ongoing discussion on the skills required by museums, investigating which transferrable skills individuals in management positions must have.

2. Method

The museum director is a fundamental position as it not only is responsible for the business’ financial management but also represents the museum when interfacing with the various stakeholders (Bagdadli & Paolino, 2006; Montanari & Paolino, 2011). To answer the research question on identifying the transferrable skills of a museum manager, the research analyzed the skills of the director (Paolo Giulierini) of the Museo Archeologico Nazionale di Napoli at the time in reference (2015-2017).

Data on the skills were gathered using the Behavioral Event Interview (BEI) (Boyatzis, 1998; McClelland, 1998) approach, which represents an evolution of the Critical Incident Interview (Flanagan, 1954) technique. This enables the gathering of information on specific episodes where the interviewee felt to be particularly efficient or inefficient. This type of interview, like storytelling, (Boje, 1991), is a way to overcome the limits that are generally associated with techniques of self-evaluation regarding social and emotional skills and, in general, emotional intelligence tests (Boyatzis, 2009; Ryan, Emmerling, & Spencer, 2009).

The interview, which lasted about two hours, concerned the description of events that took place in the last year where the interviewee felt to be particularly efficient or inefficient. The analysis focused on the emotional, social and cognitive skills (Boyatzis, 1982; Boyatzis, Goleman, & Rhee, 2000; Boyatzis, Gask, & Wei, 2014; Gerli & Bonesso, 2011; Puccio, Mance, & Murdock, 2011; Dyer, Gregersen, & Christensen, 2008; Scapolan, Montanari, Bonesso, & Gerli, 2016). The following were analyzed:
• Thirteen Emotional Skills
  1. self-awareness
  2. observation
  3. experimentation/exploration
  4. optimism
  5. eye for detail
  6. source of change
  7. efficiency minded
  8. drive
  9. planning
  10. self-control
  11. flexible
  12. goal oriented
  13. emotional awareness

• Eleven Social Skills
  1. involving others
  2. interpersonal networking
  3. verbal communication
  4. ability to manage conflict
  5. service oriented
  6. organizational skills
  7. leadership
  8. team capabilities
  9. developing others
  10. persuasion
  11. empathy

• Seven Cognitive Skills
  1. vision
  2. strategy oriented
  3. team building
  4. quantitative analysis
  5. concept oriented
  6. aware of methods
  7. systemic mindset

The museum director has skills that have been encoded, starting with the story of different behavior on the part of the interviewee and, therefore, can be the list of skills the museum manager activates to execute a task. The interviewee focused on experience in planning, organization and implementation of a series of technological innovations for the benefit of the public.

3. Results

The MANN is among the oldest and most important museums in the world in wealth and uniqueness of its holdings and for its contribution to the European cultural outlook. The Museum’s goal is to develop and spread the knowledge of the history and culture of the people through the conservation, study, interpretation and appreciation of its exceptional collections. For this purpose, it addresses visitors of all ages, income, education and background, planning the experience of innovative access and approach that stimulate the understanding of
the roots of the population.

The Museum (that covers an area of approx. 18,500 sq.m) is not only a museum site, it has a Restoration Laboratory, a Library and the Historical Archives that represent, for their scientific contribution, works of excellence on an international scale.

The MANN is the first of the twenty independent state museums established thanks to the “Riforma Franceschini”, equipped with a long-term plan to identify its strategic goals for 2016-2019. The new director of the Museum, Paolo Giulierini, nominated on October 1, 2015 and in office until September 30, 2019, decided to take this path (the implementation of the Strategic Plan) and was very brave as none of the independent museums is obligated to produce and, even less, publicly share the document.

The Strategic Plan illustrates ex-ante the museum Director’s strategies and choices, determining the supporters’ responsibilities. Furthermore, since it has been made public (i.e., made available to download in pdf from the museum’s website), the monitoring of the Director’s work is not limited to the “political/administrative” arena, but takes on the connotation of real and true social control – every citizen will be able to ask the Director on a public platform for any clarification of any shortcomings of the Strategic Plan.

The Director is fully aware of the role of contemporary society with its access to knowledge in digital format, reason why he has provided for the implementation of a digital strategy to enhance the visitors’ experience. The Director identified some objectives specified as follows:

1. By 2016 - trial of an Augmented Reality app of the model of Pompei (http://www.museoarcheologiconapoli.it/en/mann-app/

2. By 2017 - re-design of the website and presence on Social Media. The new website will be the center for spreading the digital contents of the museum which will be conveyed and shared through Social Media (Facebook, YouTube, Twitter, Instagram, Pinterest, etc.).


4. By 2019 – launching of a digital campaign of the Museum’s permanent collections, both in 2D and 3D. Will be achieved also thanks to eventual support from external organizations such as Google Art Institute and Apple, to improve the digital accessibility of the most important exhibits of the MANN. The outcome of the digital campaign will be progressively spread through its website and other chosen channels.

The work teams in charge of the planning, organization and implementation of the various technological solutions were formed by the museum director, the internal staff and external experts. The museum director was involved in all the development phases of the various technological solutions implemented to date, as was the museum staff in the projects. Achievement of the specific goals of the Strategic Plan was made possible thanks to the determination of Director Giulierini, who personally monitored all the activities, showing great intellectual curiosity and as much determination to reach the goals defined in the design phase. The courage to adopt such a well-structured digital strategy in such a short time is to be noted; a unique experience on the national level.

Another interesting outcome was the involvement of the museum staff that showed great pride and sense of belonging to its own cultural institution, gaining a more dynamic, innovative and open image. This pride has reinforced the staff’s commitment which has transferred over to the willingness to fully contribute in the various projects.

The director’s interview produced two major results. The first relates to emotional, social and cognitive skills. Particularly important were the understanding and the managing others (persuasion, empathy and involving others) and the emotional skills which are performance anxiety, drive and planning. Highlighting, therefore, that it is mostly the social (i.e., relationships) and emotional skills that characterize the role of a museum director. Less important are the results of the cognitive skills which are team building and quantitative analysis.

Other skills that characterize the manager under exam are: goal oriented (referring to achieving standards of excellence), self-control (referring to the ability to control one’s own emotions in stressful situations and to show optimism) and source of change (referring to the ability to promote change within the organization). Highlighting, therefore, that the manager, in carrying-out his/her own work, resolves to continually reach goals of excellence and calmly perseveres in pursuing them, facing situations that could hinder achieving the goals.

A second group of distinctive management skills under exam for the successful implementation of technological innovations within the museum concerns the social or relational skills pertaining to managing others and, in
particular, the development of others and leadership.

The skill, development of others, refers to the ability to promote learning and long-term development of collaborators, playing the role of coach and mentor. Examples of behavior associated to this skill are giving feedback on work done to maintain and/or improve performance, supplying information, tools and other resources useful for carrying-out duties or for improving abilities, or clearly expressing goals to be reached giving encouragement and support (Boyatzis, 1982; Boyatzis, Gask, Wei, 2014).

Leadership, instead, concerns the ability to become the guide of a group. Leaders know exactly what their role is in a team, they know how to interpret situations and are able to create a positive work environment.

The interesting aspect concerns the fact that, according to the model of skills that inspired this research, leadership does not derive from the hierarchical position held, rather, it is a combination of the behavior activated by the person regardless of their official role within the organization. Notably, leaders are such because they conduct engaging activities or projects, inspire others by sharing a vision or assigning goals, and they know how to build-up pride and team spirit. Successful managers possess emotional intelligence, since in critical situations they are aware of their own strengths and weaknesses and know how to understand their own emotions.

4. Discussion

The research carried out has supplied a dual contribution. First of all, it highlights the centrality obtained from the transferrable skills in management positions in the museum sector. Secondly, it contributed in identifying the “distinctive skills” that distinguish the manager of a museum in the successful implementation of a technological innovation in a museum.

In the context under exam, it can be concluded that, to successfully implement a technological innovation, museum management must possess the ability to lead their own collaborators by activating an “inspiring” leadership. That is, a long-term leadership that “motivates” and does not simply “push” the organization. In other words, it regards managers that identify long-term goals for their museum and contemporaneously propose opportunities for development, giving the possibility for growth and promotion.

Highlighted in the results is the importance of the skill of involving others (referring to the ability to involve individuals), whether belonging to the business context or external to the museum business, in reaching individual goals.

The set of skills determined in this research (vision, developing others and leadership, source of change, self-control, goal oriented) show a strong internal cohesion. For example, the ability to lead collaborators, instilling a sense of pride for the organization expressed through leadership skills, is coherent with the cognitive capacity to know how to represent and share the museum’s future goals. Having the skill to motivate themselves to introduce innovations and having the capacity to support the growth of their collaborators so that they possess the necessary skills to efficiently carry-out their duties.

The main limit of the research is linked to its exploratory character. The results, in fact, cannot be generalized as the study is based on only one case study. However, it opens prospective future research to be conducted with a greater number of museum managers to be interviewed, but also addressing managers in different cultural sectors.

References


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