Chapter 2
Interactive Technologies in Museums:
How Digital Installations and Media Are Enhancing the Visitors' Experience

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ABSTRACT

With the constant development of digital means of entertainment – that are easily made available to people and, in most cases, can be used anywhere – nowadays, a visit to a museum have to surround publics with unexpected and interactive experiences, in order to capture their attention and make them want to go to these places, in addition to continue to communicate their collections and promote society education. In this regard, it was discussed in this chapter the actual panorama of interactive technologies used in museums exhibitions worldwide, and there are discussed how these institutions are designing digital installations and utilizing virtual media to enhance the visitors' experience, promoting positive relations between them and their publics. The main conclusion and reflection of the chapter is based on how this new era of technology is allowing increasing physical, cognitive and sensory accessibility, and transforms this kind of experience for disabled publics.

INTRODUCTION

Because one lives in an era where people spend the most part of their time in front of screens and connected to the internet, museum professionals have to think about how to make collections and exhibitions still relevant nowadays, and how to compete with all the available entertainment ways and technological developments, in order to capture the visitor's attention and encourage their visit to these spaces.

Once this chapter focuses on exploiting digital ways of interactivity in museums, it is crucial, first of all, to understand their role in contemporary: "A Museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment" (Desvallées & Mairesse, 2010, p. 57). Based on this professional definition, widely recognized and disseminated by ICOM – International Council of Museums – since 2007, it is clear that museums must provide to society the access to education, offering moments of study and leisure, in order to cooperate for its development, committing itself to safeguard and communicate their collections to the public (Desvallées & Mairesse, 2010).

As institutions are increasingly interested in providing outstanding informal learning experiences, there has been an effort to meet the visitor's aspirations, through the adaptation of innovative technology to communicate and encourage the visit to these spaces (Chelini, 2012). As pointed out by Sree Sreenivasan – the Metropolitan Museum of Art's chief digital officer, until June of 2016 – on an interview to Gilbert (2016), museums no longer need to compete with each other, because they are losing their visitors to the omnipresent technologies, games and social media consumed by the modern society; instead, those institutions have to find out ways to embrace the fact that smartphones, tablets, smartwatches and other digital devices are everywhere, and take advantage of the fact that people use them no matter when or where: "People ask me what our biggest competition is (…) It's not the Guggenheim; it's not the Museum of Natural History. It's Netflix. It's Candy Crush" (p. 32) and most recently, Pokémon Go (McCluskey, 2016). Taking these facts into account, it is self-explained why museums are committed, more than ever, in providing new scenarios of interaction and contact with their exhibitions.

On the other hand, it is important to make clear that the use of digital resources would not even be an option to communicate and to interact with the exhibitions if their use offers no contribution to what is being presented: in some cases, technological solutions are seen as essential for facilitating the reproduction of stories and intangible processes, like sound recordings, music, videos and other non-physical heritage; in other instances, they contribute to expand information about what cannot be exposed, like no longer existing artefacts and places, giving access to reconstructions and digital replicas (Chanda, 2013).

About the exhibition of physical samples, the use of digital resources proves to be beneficial because it enables visitors to have a better understanding of objects and ideas – since it allows offering complementary information in a more attractive way for visitors, without overloading the exhibitions environment with excess of information – and allows to increase accessibility and enable opportunities for disabled persons (Freeman et al., 2016; Israel, 2011).

However, professionals should be aware that technology must be used as a medium and not as an end, according to Israel (2011), McMullan (2015) and Olesen (2016), where, ideally, the museum themes should be harmoniously combined with digital content to communicate effectively the exhibitions and, at the same time, provide an incredible experience to visitors while using them: "given the increased emphasis on user experience, it is no longer sufficient to ensure that a system is merely usable" (O'Brien & Toms, 2008, p. 939).

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