

Virtual Museums in Poland

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Abstract – The objectives of the article are to present a definition and the examples of virtual museums in Poland. The author presents also the results of analysis of museum websites selected according to the data from łódzkie voivodeship on the popularity of cultural places in Łódź.

Keywords – digitalization, ICT, e-tourism, museum collection, virtual tour, virtual museum.

I. Introduction

ICT makes possible the access to the rich cultural and scientific resources. Digital sources cause that they are open and possible to access for more people. It is the way to know better national heritage and preserve it for next generations. Taking into account digital convergence, for European archives, libraries and museums digitalisation is more than a need, it is a necessity. The Ministry of Culture and National Heritage supports digitalization of libraries and museums in Poland by different projects.

II. Virtual museums

The consequence of the projects which lead to present the cultural heritage in digital way is increasing number of virtual museums. It is a proof of the changes in museums and gives a new dimension to exploring them. When you google “virtual museum” you receive over 1.910.000 links. There are collections of such famous world museums like the Prado Museum, the Louvre Museum, the Hermitage, and also Polish ones like the Warsaw Rising Museum or the Castle Museum in Łańcut. There are also collections which are presented only in on-line version (eg. Virtual Museum of Norblin Factory or Virtual Museum of Polish Nursing).

The idea of virtual museum was introduced in 1947 by Malraux and was a concept of museum “without walls”. He imagined it being an environment for the exhibition of mainly art and photography. Another early idea of the on-line museum was to create a copy of real museum including its architecture containing the 2D and 3D images of artifacts from museum’s collections. Later this idea evolved to museum’s web site where it is possible to find different types of media (often multimedia) to present information like text, sound (podcasts), images and films. Encyclopaedia Britannica defines virtual museum as “a collection of digitally recorded images, sound files, text documents, and other data of historical, scientific or cultural interests that are accessed through electronic media... In fact, most virtual museums are

sponsored by institutional museums and are directly dependent upon their existing collections” [12]. A lot of on-line museums have their roots in web sites maintained in internet by museums to disseminate information about them. By *virtual museum* we mean not only information on museum web site [2] (address, opening hours,...) but presentation of its collection items in high resolution, the use of 3D graphics, and what is more and more popular – virtual tour and virtual visit there. The Hermitage, the Central Museum of Textiles in Łódź, interior of Pszczyna Palace or the Louvre Museum can be examples. Most often, the virtual tours are done in gigapixel technology, which able to present an exhibit in details.

Virtual museum gives the visitor the control of the virtual tour. It often provides 3D views of the museum and a floor plan. Virtual visitors can orient themselves, following where they are (in which room), and to which group of exhibition the admired artifacts belong. The good examples are the Castle Museum in Pszczyna or The Film Museum in Łódź, where such virtual tours are offered. The communities target by virtual museums are the museums curators and end-users, which can be divided into three groups: specialists, students and tourists. Virtual museums contain a lot of in-depth information and encourage visitors to deeper understanding or provide the need to get sufficient information for each kind of visitors [3]. Information, shown after one click the item, let to know more about it eg. its author, history, colours or fibres. Virtual museums give the users the possibility to learn via educational games and they involve the interaction, expressing and learning at the same time. In on-line museum the visitor is not only an observer but also interact with learning object and get the knowledge. It is great tool for teachers.

The first virtual museum in Poland was created in 2008 and it was a virtual tour in the interactive the Warsaw Rising Museum, opened for tourists in 2004. The virtual platform was built using 3D technology. Flash technology, sound and video provide the visitor in the second war times. Thanks to interactive camera, the access to exhibition rooms is possible. The virtual visitor control the movement of camera and in this way choose which area would like to visit. The exhibits are presented in 3D resolution. Each of them can be seen from all angles. And most of them allow to get to know their history [11].

Nowadays, there are some projects on virtual museums in Poland. One of them concerns Virtual Museums of Podkarpacie, which has started in 2011 and will finish in 2013. As a result of the project there will be scanned 122 museum exhibits, from seven museums in Podkarpackie voivodeship (eg. the Regional Museum in Rzeszów, National Museum of Przemyski Region in Przemyśl, the Castel Museum in Łańcut, Museum of Maria Konopnicka in Żarnowiec...) or Virtual Museums of Malopolska (2007-2013) – a platform which will collect around 700 digitalized exhibits from 35 museums of this region. During the project, museums will select over 900 exhibits, and only

500 will be chosen. They will be digitalized in 3D technology that delivers realistic color and a sharper image, and 200 of them in 2D technology. Visitors will be able to find there not only exhibits, articles but also – what is quite new concerning Polish virtual museums – a game. To link the education with presentation of portal exhibits, the idea of gamification was used. To game you have to look carefully for information and get knowledge to solve tasks. So the main aim of the game is to know better the collections of the virtual museum [9], [10].

Google is also interested in promotion of art in internet and run Google Art Project. It lets for the access to collections of over 150 museums from 40 countries, including most known, like Metropolitan Museum of Art in New York or Musee d’Orsay in Paris, and see chosen paintings on photos of high resolution and at least some gigapixels. Two museums from Poland were invited to this project and present their exhibits there since April 2012. They are: Museum of Art in Łódź (80 artifacts of 44 artists) and Palace Museum in Wilanów (55 artifacts by 39 artists). When the museum would like to join the project, fullfield “the sign up form” is necessary. The project consists of three phases: photo session, session for virtual tour (very rare) and creating the metadata (descriptions of exhibits).

TABLE I
THE MOST OFTEN VISITED MUSEUMS (FIRST FIVE) IN ŁÓDŹ

Museum	Visits [2]	Website	Virtual museum	Remarks
Central Museum of Textiles [8]	24%	Yes	No	multimedia exhibitions
Museum of the City of Łódź [7]	16%	Yes	Yes	selected exhibiton (1)
Museum of Art [5]	13%	Yes	Yes	80 items (Google Art)
The Film Museum [6]	12%	Yes	Yes	virtual Tours (2)
Museum of Archeology and Ethnography [4]	9%	Yes	No	

Source: based on author original research

Let us consider the museums in Łódź. There are twenty-two museums. Some of them are unique (like – The Film Museum) and their collections are known (The Museum of Art). According to the report, prepared in 2012, on the most often visited cultural places [2], first five museums were selected

and their websites were analysed to state if there is a possibility of access to virtual exhibitions or to take virtual tour. Tabela 1 presents the results.

Conclusion

ICT lets museums change and be more attractive for visitors. Virtual museums are useful for elder, handicaps and foreigners. It helps also people who can not effort for personal visit in museum or would like to see the exhibit again and again. The virtual museum enrich the museum experience by allowing an intuitive interaction with the virtual museum artifacts. A comparison between real and virtual museum indicates that still there are important issues for virtual museums to solve. Good collaboration have to be keep between cultural heritage specialists (like museum curators, archeologists, artists) and ICT specalists. This can ensure the optimal results. Many museums have their own ICT departments responsible for projects on emerging technologies in museum. Virtual museums can not replace the real ones, but can be helpful in giving access to exhibits without limits. The access to digitalized collections became a world standard we should follow because it is added value for museums' websites. Concerning the web sites of museums in Łódź, most known and recognise places and at the same time most visited, let tourists for having virtual access to their exhibitions and for virtual tours, but places visited rarely do not have even web site.

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