

# Digitisation in Museums in the Slovak Republic

Digitisation of museal artefacts cannot be performed without two important pieces of knowledge. First, it is necessary to know all about the physical attributes of the object as well as its social, historical and cultural value. With the arrival of the new millennium, a continuous process of creating the Knowledge System of Museums in the Slovak Republic began. A centralised information system is maintained by the Slovak National Museum, and free usage is guaranteed for all Slovak museums by the Ministry of Culture of the Slovak Republic. Not only does it serve as a base for the application of RFID technology in professional museal work, but also serves as a tool for the automated mass digitisation of museal artefacts.

In the past, the documentation visualisation of objects was done only for the purpose of evidence. These photographs were later transformed into digital form. At present, the documentation pictures are made by digital cameras. However, this is not the only way in which digitisation is carried out in museums.

In 2009 a number of 3D digitisation pilot projects began in several museums under the auspices of the Slovak National Museum. Their goals were to test the ability of modern technologies (such as a museum scanner, creating the object panoramas to serve as a tool for complex digital visualisation of the objects, etc.) for scientific and presentation purposes. The first project was carried out at the start of 2009 in the Museum of Jewish Culture.

The objectives were to:

- introduce and test technologies for digital visualisation;
- determine the parameters for scanning;
- introduce and practise methods and processes connected with digital visualisation;

- demonstrate the possibilities of realising a complex digitisation campaign.

Realisation took the form of the following steps:

- creating a harmonogram of digitisation;
- selection of museal objects;
- preparing selected museal objects for the digitisation process (RFID, physical cleaning, preparing of the objects...);
- constructing the digitisation workplace;
- the digital visualisation process;
- postprocessing.

The results are<sup>1</sup>:

- all selected museal objects use RFID technology;
- the majority of selected museal objects are digitally visualised in 3D object panoramas;
- several museal objects such as paintings are digitally visualised by the museum scanner;
- a number of mistakes and problems were identified so that guidelines can be created.

In 2010 the second project took place in the Museum of Doll Culture and Toys in Modrý Kameň. The objectives were to:

- introduce and test technologies for digital visualisation of problematic 3D objects such as dolls and toys (including clothes, moving parts etc.);
- determine the parameters for scanning;
- improve methods and processes connected to digital visualisation in general;
- test the possibilities of making a complex digitisation campaign based on the pilot project in Museum of Jewish Culture.

The realisation was basically the same as in the previous project, but the results were much better. Of course, all selected museal objects use RFID technology and the majority of selected museal objects are digitally visualised in



The Červený Kameň Museum in Častá has been a part of Slovak National Museum since 1979. Its collections are focused on the history of the Červený Kameň Castle and indoor culture of the Slovak aristocracy.



Martin van Meytens  
1750-1760

*Portrait*

*of Maria Theresa  
(Portrét Márie Terézie)*

Owner:

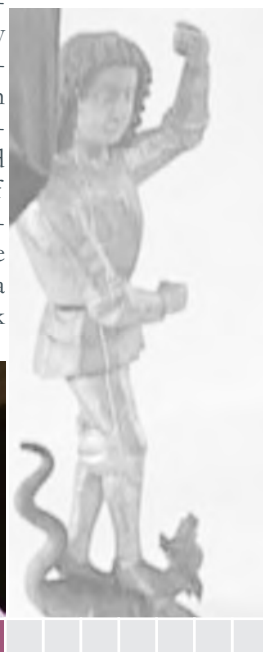
Múzeum Červený  
Kameň v Častej  
(The Červený Kameň  
Museum  
in Častá)



3D object panoramas, but the processes and results are on a higher level of quality due to experience acquired in the Museum of Jewish Culture<sup>2</sup>.

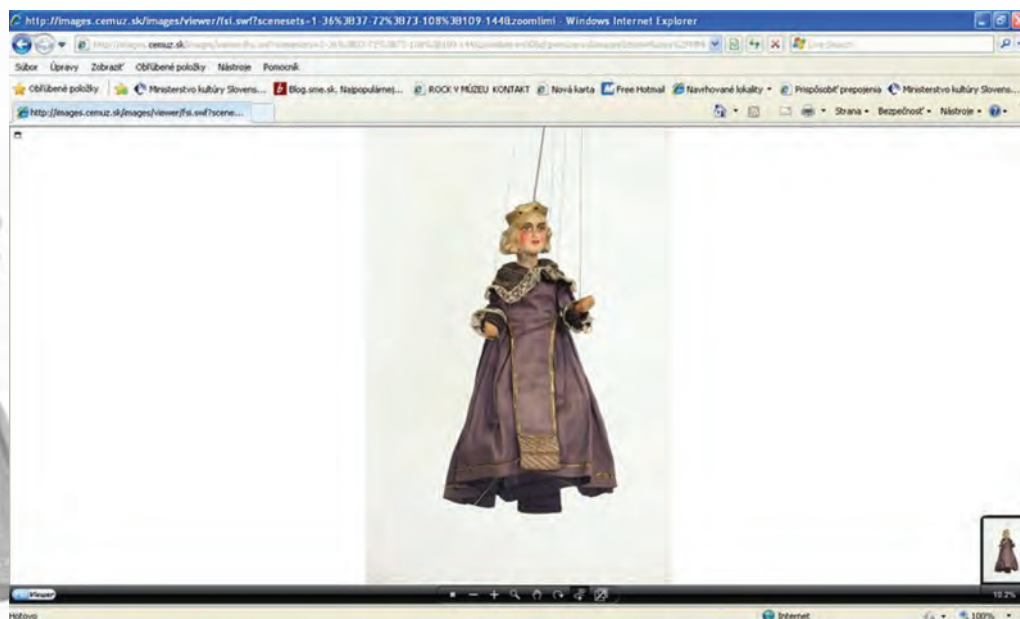
To increase professional awareness of digital visualisation, the group Visualisation of Collections was created on Facebook this year<sup>3</sup>. Its goal is to create a space for discussion about the visualisation of museum collections. To support the idea of on-line access to cultural heritage, the group is continuously publishing multimedia information about all aspects of digital visualisation including the processes mentioned in the descriptions of the pilot projects. For example, new information about the application of RFID is presented weekly from the Museum of Dolls and Toys in Modry Kameň.

All these initiatives are based on an idea of implementing a huge national project co-financed from Structural Funds. The Operation Programme Informatisation of Society is focused on the development and renewal of the national infrastructure of repository institutions. Its projects will focus on the digitisation and provision of access to the content of repository institutions. Interventions aimed at the development of repository institutions will be implemented in Convergence Objective regions in organisations such as archives, libraries, museums, galleries, heritage protection organisations, specialised institutes and organisations in the field of culture, etc., in particular those located in innovation and cohesion growth poles. The digitised content will be accessible via applications supported within the framework



of the development of eGovernment systems at the central and regional levels. The effects of the projects will be accessible under the same conditions to all citizens of municipalities in Convergence Objective regions with Internet access and gradually also in municipalities without access to broadband Internet today. More than 20 million Euros

have been allocated for museum collections. During the project 200.000 museal artefacts will be digitised and made available via the Internet. It is a perspective not only for Slovak museums but also for project ATHENA. The beginning of the project is planned for the end of 2010 and everybody hopes that it will change museums forever.



### Information Sources:

*Central Evidence of Museum Collections*. SNM : Bratislava, 2010. <http://www.cemuz.sk>  
*Digitisation of Museum Collections : Visions and Starting-points. Proceedings from the international symposium Banská Štiavnica, 20-21 October 2009*. Bratislava: SNM, 2009. 83 p.  
*Operational Programme Informatisation of Society*. Bratislava: UV SR, 2007. 120 p.  
<http://www.nsrr.sk/operacne-programy/informatizacia-spolocnosti/>  
*Visualisation of Collections*. [S.l.] : Facebook, 2010.  
<http://www.facebook.com/home.php?#!/pages/Vizualizacia-zbierok/359609134827?ref=mf>

1 Results can be seen at the following URL: [www.cemuz.sk](http://www.cemuz.sk)

2 An example of object panorama visible through an image server can be found here:  
<http://images.cemuz.sk/images/viewer/fsl.swf?scenesets=1-36%3B37-72%3B73-108%3B109-144&cfg=muzeum&images3durl=Muzea%2FMMK%2Fprinc-Babka&ZoomLimit=20>

3 <http://www.facebook.com/home.php?#!/pages/Vizualizacia-zbierok/359609134827?ref=mf>