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# The Role of Digital Fixation of Monuments in the Management of Museum Documentation

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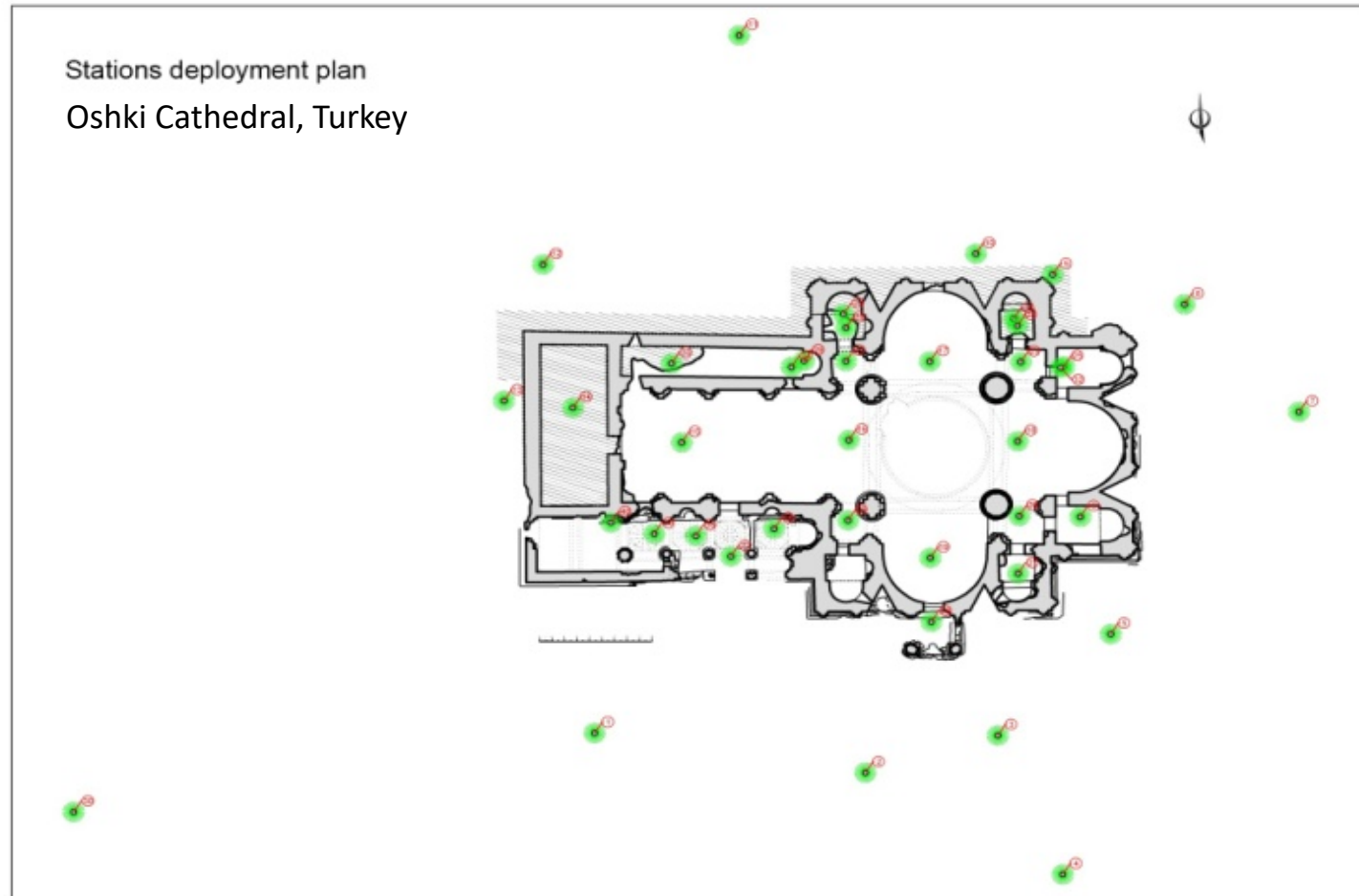
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# Aims and Objectives

- Documentation Development
- Navigation improvement
- Selection of Information
- Presentation of Information
- Transportation of Information
- Transformation of information
- Socialization of Information

Process of scanning - components :  
a 3D laser scanner, a high resolution digital camera, a  
monument, a station of copying, environment, etc

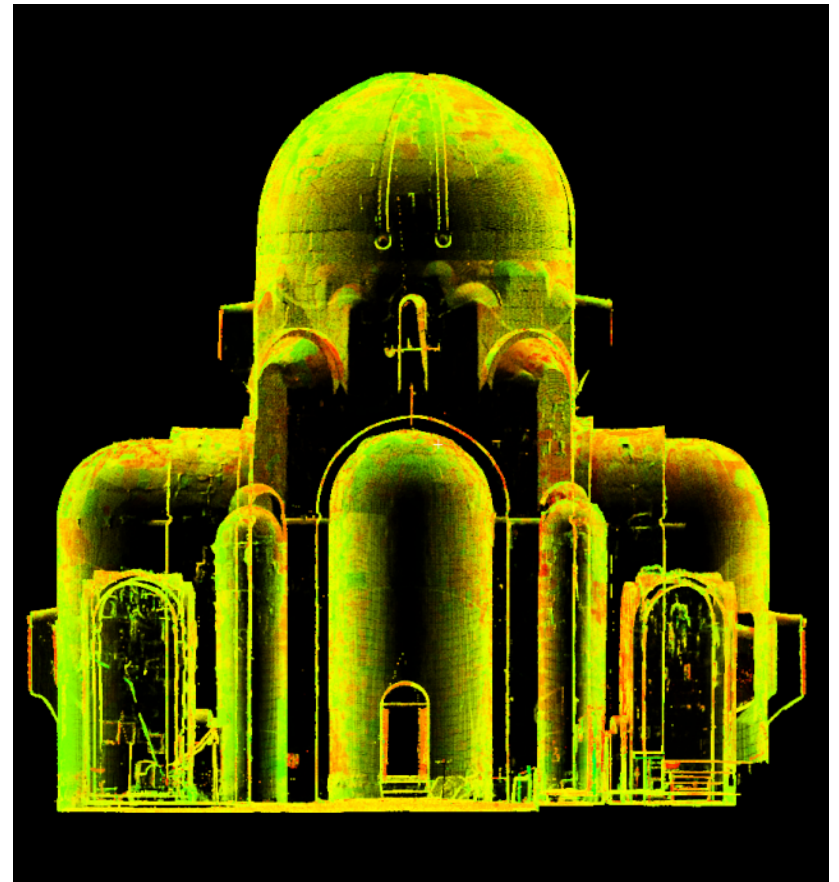
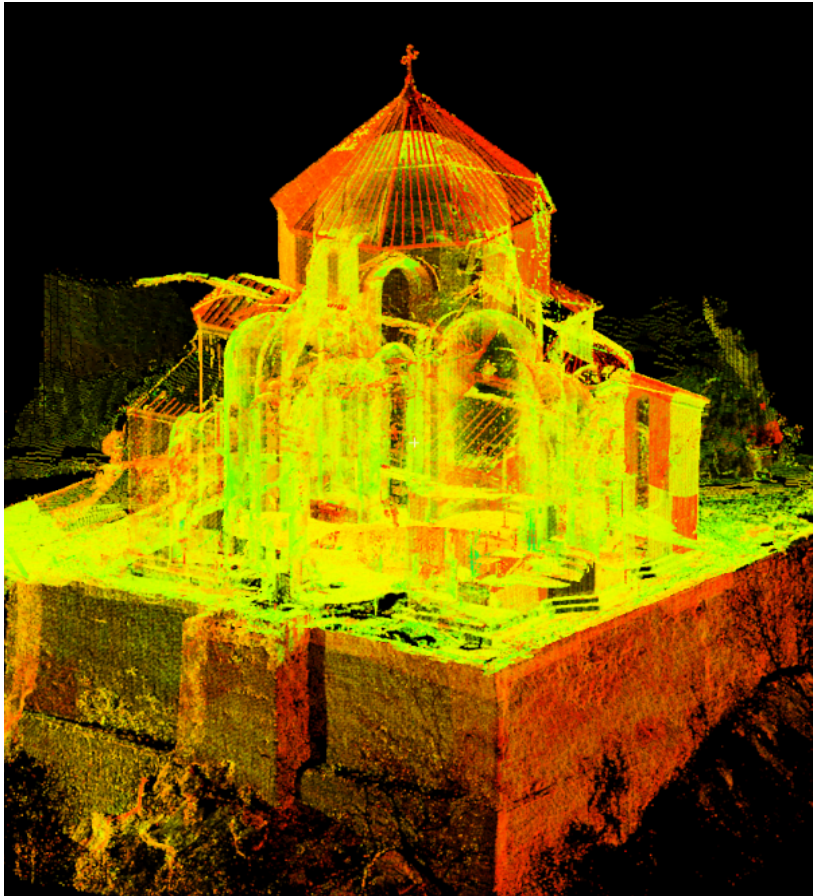


# Process of Scanning

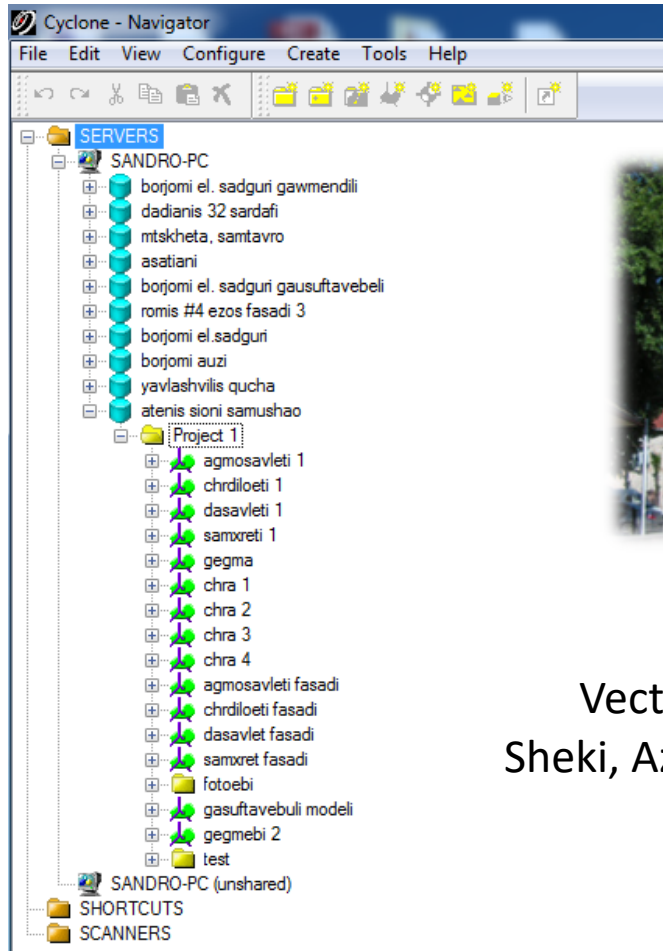
Oshki Cathedral, Turkey



# Point Cloud. Registration. Ateni Sioni, Georgia



# Database of Point Cloud Information, Cyclone application.

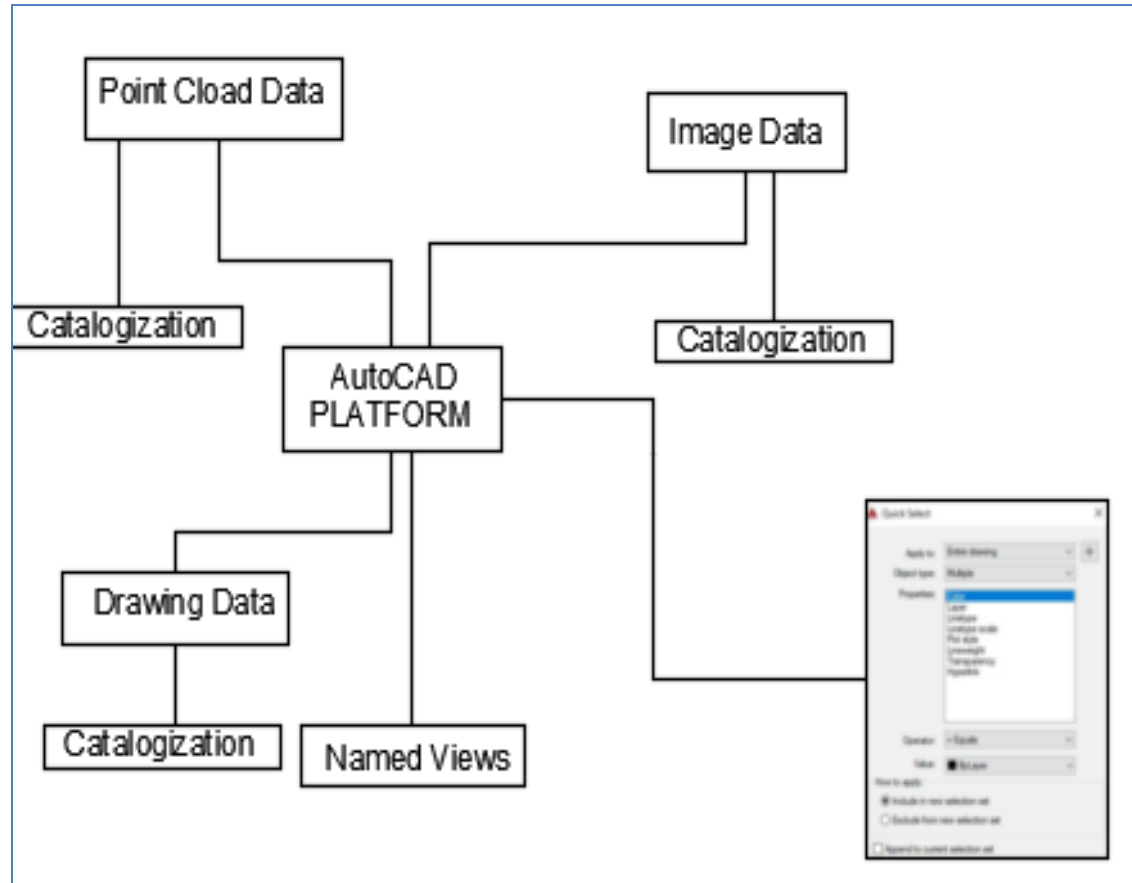


Raster Image  
Sheki, Azerbaijan

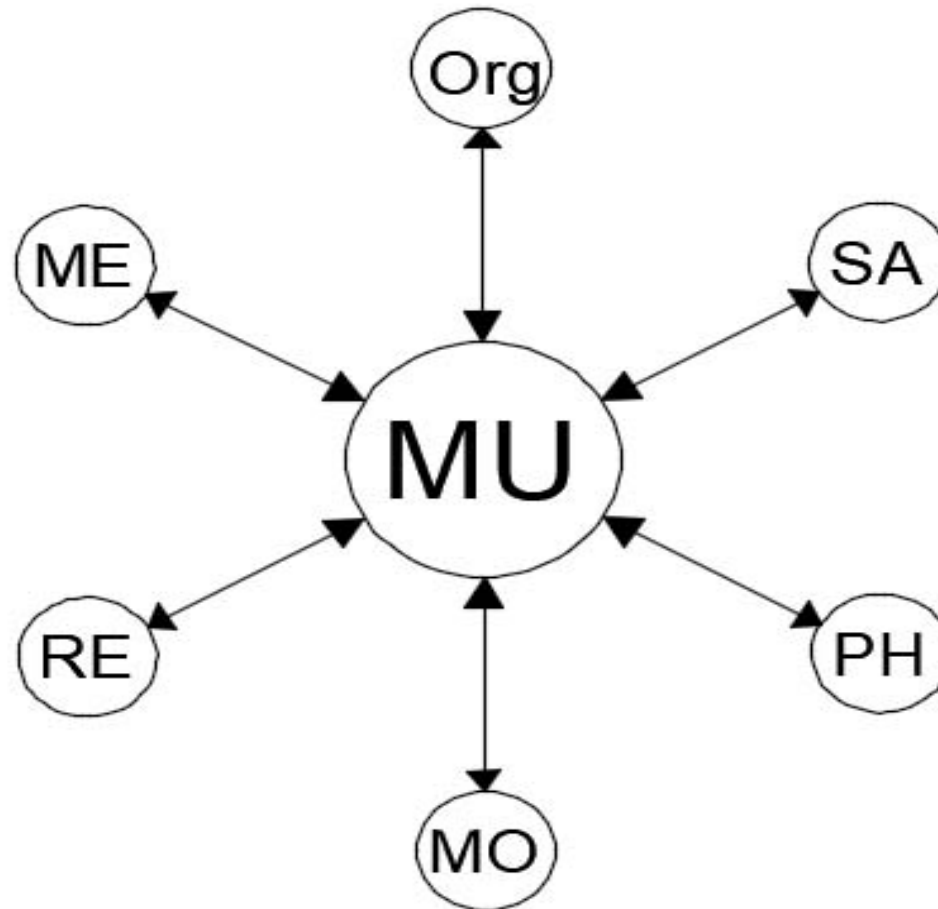
Vector Image  
Sheki, Azerbaijan



# AutoCAD Platform for metadata organization



# The Scheme of Possible Interactive Collaboration.





MU – Museums

Org – Organizations collecting the Information about the Monuments

SA – Scientific-Educational Institutions

PH – Photo labs

MO –Monuments protection Governmental Organizations

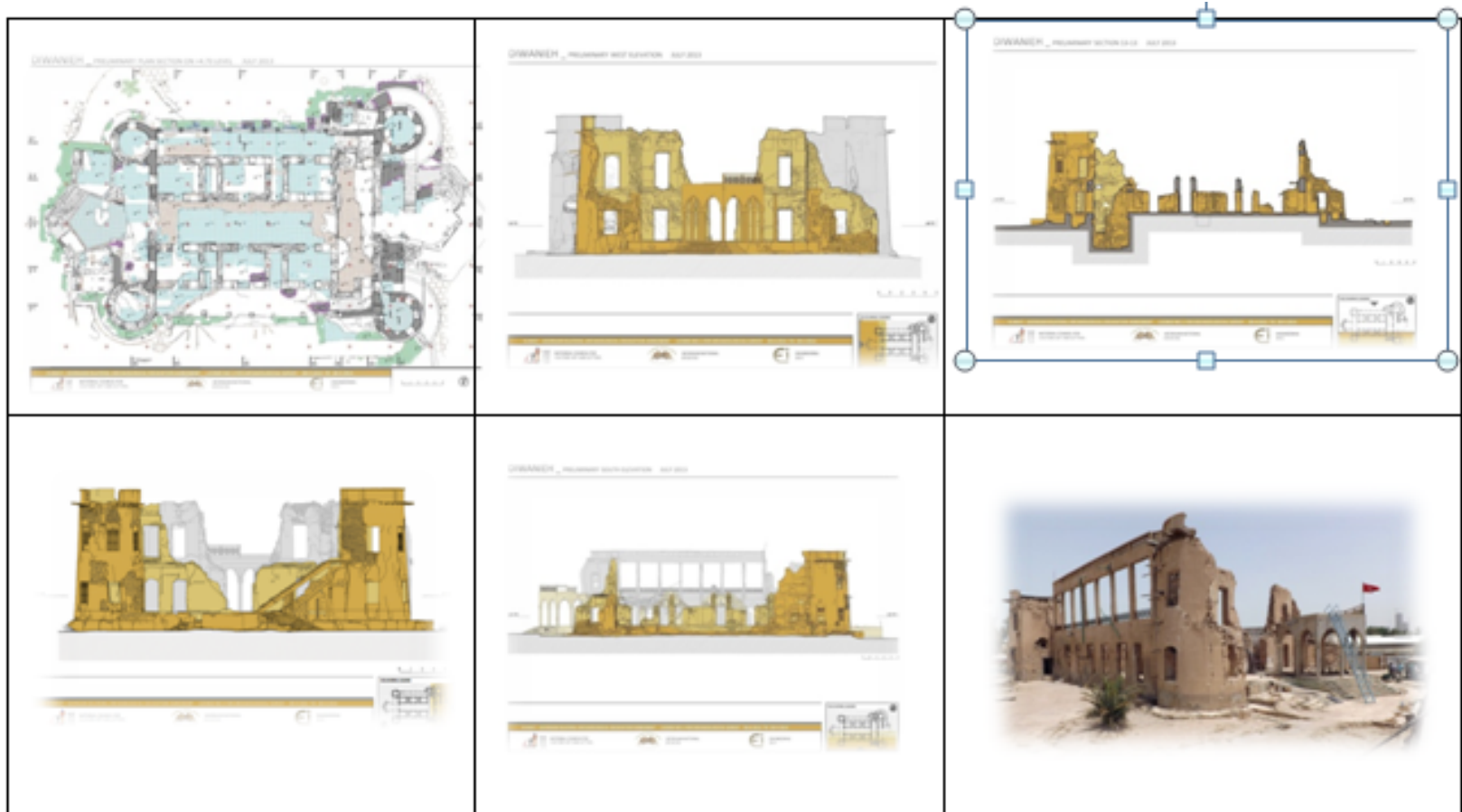
RE – Organizations working in Reconstruction, Rehabilitation and Restoration Field

ME – Media Sources, TV

It is to be noted, that previously it posed a great difficulty (or was impossible) to transfer information acquired by various organizations to museums. As a result of development of digital technologies, it became possible and became easier to share and transform information within museum space and archives.

# Recurrent use of docs for museum archives

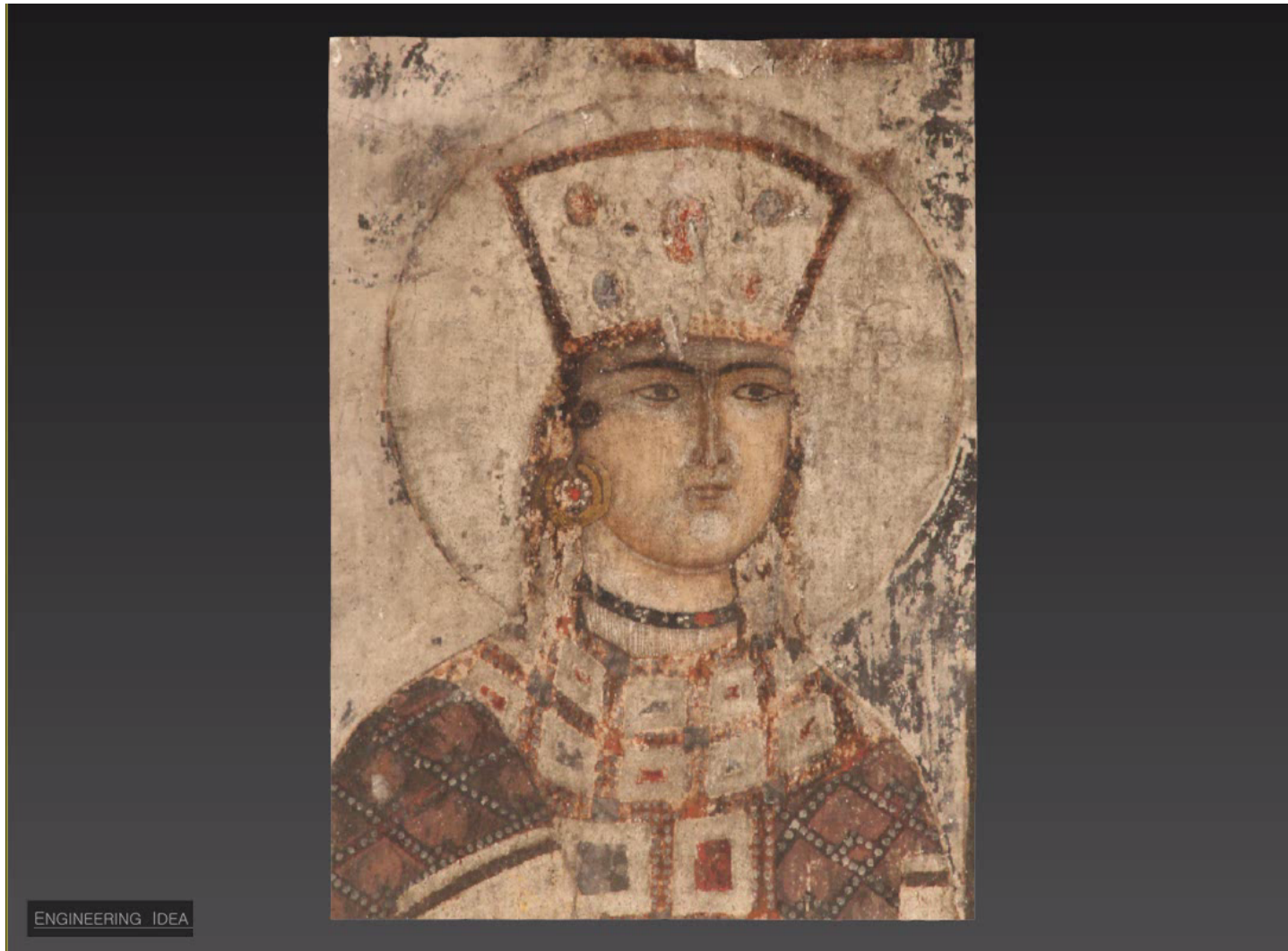
## Diwanie. El Kuwait.



# Virtual, digital copy of Mural Painting. Point Cloud. Vardzia, Georgia



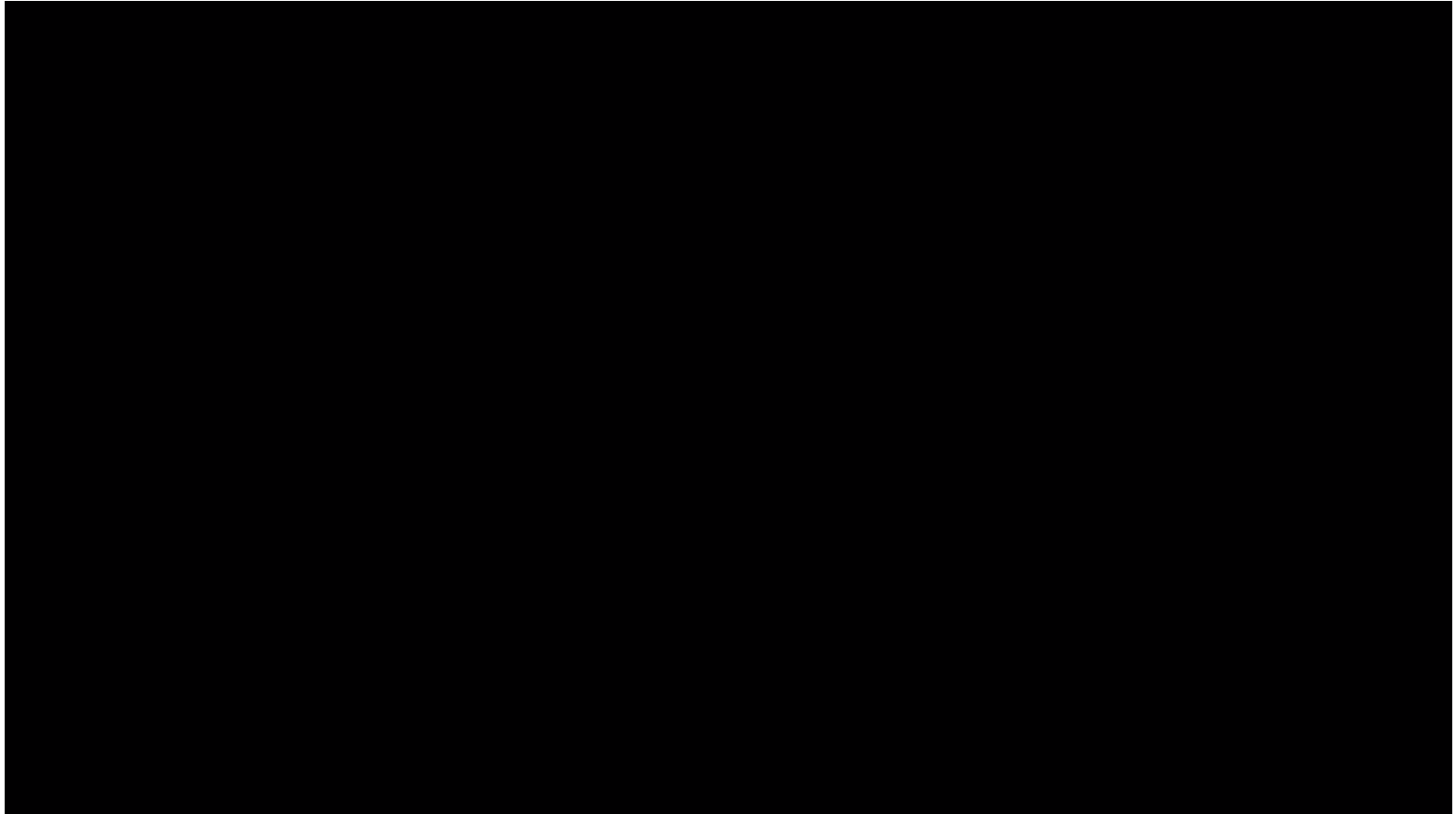
# Virtual, digital copy. Fragment. Point Cloud



# Point cloud. Elevation of the Drum Surface. Patara Sameba. Tbilisi.



Digital information can be used for structuring and expanding digital archive in storing of initial digital Data



The Processed digital documentation can be used in structuring and expanding digital archive as a systematized information



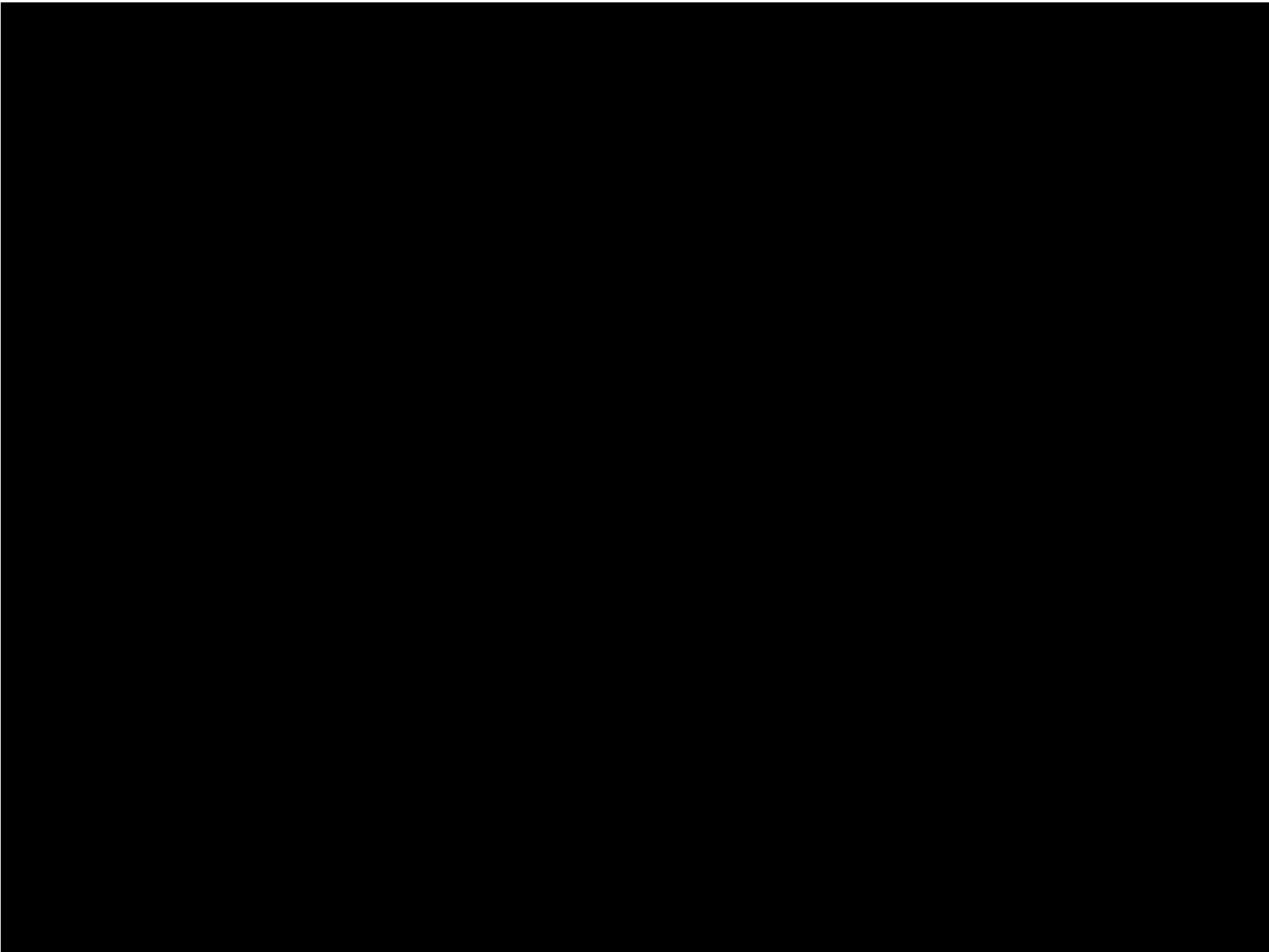
The Processed digital documentation can be used in structuring and expanding digital archive as a photo-realistic information



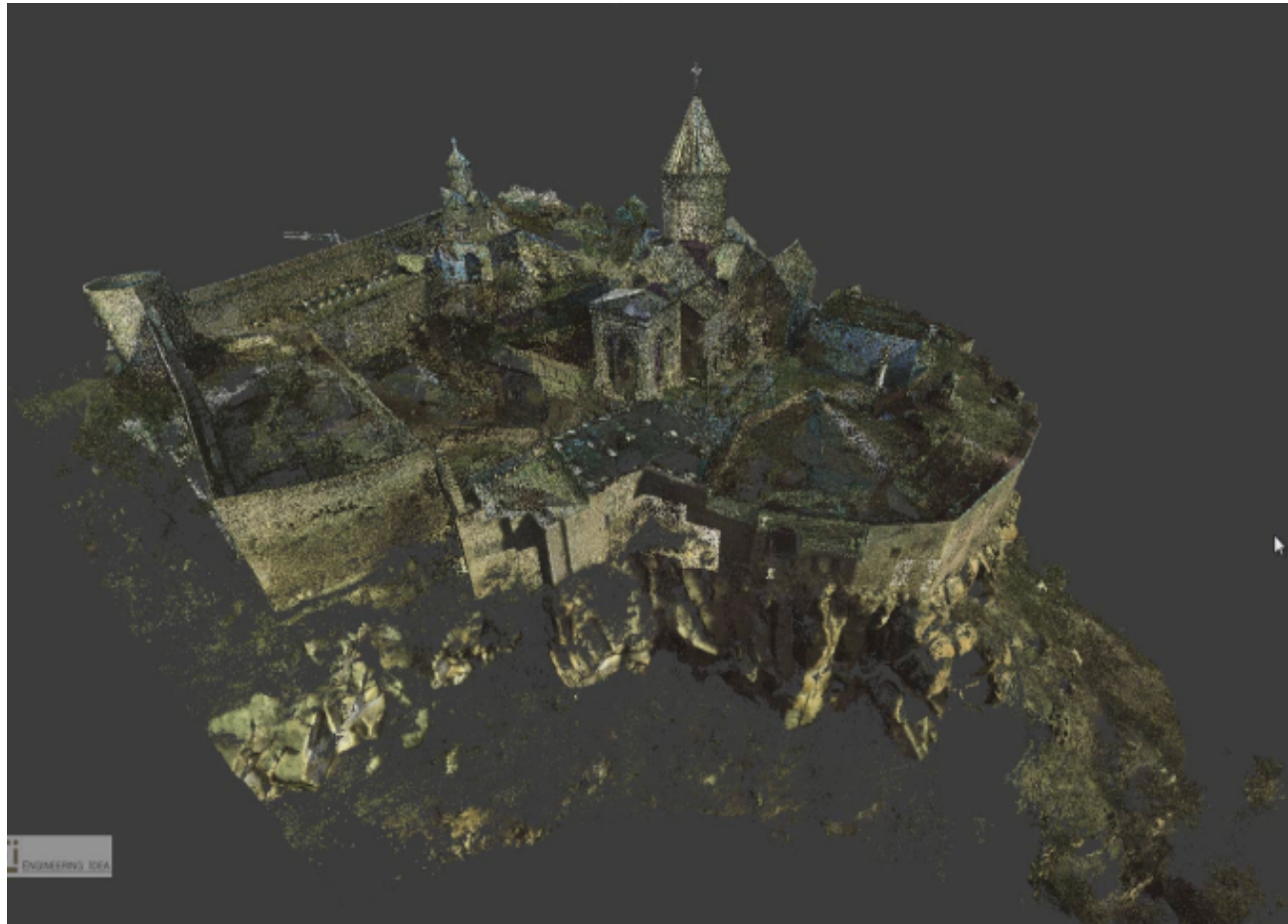


# Photorealistic image,. Holy Mother Georgian Monastery. Cyprus.





Monuments virtual placement to their native location  
3D Vector Image. Point Cloud. Model of Mobile Museum.  
Tatev Monastery, Armenia.





# Results

The digital documentation can be used in other directions of museum work:

- Scientific work
- Educational work
- Advertising, commercial work
- Monument catalogue-making and works on their improvement
- Management of restoration works
- Mobility of museum

Complex usage by museums of the archives of presented organizations and co-sharing strategy will take museum work on a new level of development, will increase its potential, will support expansion of museum space, as well as information exchange and collaboration, expansion of target groups, work planning and management

# The End

## Thank You for Attention