

## BUILDING VISUALIZATION: 3D PRINTOUT ARCHITECTURAL MOCK-UP

### COMPANY

PANOVA operates in architectural design, urban planning and investment support in the field of design and construction.

### PROJECT

Execution of the building model based on archival materials from 1897 in 1:75 scale using 3D printing technology.

### GOALS

1

#### Shortening the production time of the model

Manually making mock-ups is very time-consuming and it requires tedious work of modelers when outlining elements, their precise cutting, gluing and painting.

The use of 3D printing in the company decreases the time needed to complete the mock-up of the building by 77%. Support of external companies was not necessary.

2

#### Showing multi-variant solutions

The concept phase is often associated with high dynamics of changes in the project, and the same visualizations do not always reflect the spatial nature of the object. The model makes it possible to present the investment in an understandable way.

3D printing enabled a quick response to changes made by the investor-the possibility of producing subsequent iterations of the project in various development options.

3

#### Presentation of the building's body with great detail

In the process of revitalization of objects, it is important to show their original appearance, which could be lost as a result of the reconstruction. The key is to get accurate details such as door ornaments.

Execution of precise elements, even those with advanced geometry, was possible to an accuracy of up to 0.1 mm.

### PROJECT DATA

<b>3D printing</b>	Architectural mockup	
<b>Project</b>	Presentation of the concept of building revitalization	
<b>Dimensions</b>	332 x 332 mm	
<b>Material</b>	PLA	
<b>3D printer</b>	3DGence DOUBLE P255, 3DGence ONE	

	Modeling	3D printing
<b>Time of completion</b>	60 days	14 days
<b>Costs</b>	8 000 PLN	800 PLN

PANOVA uses 3DGence printers to perform complex architectural mockups.



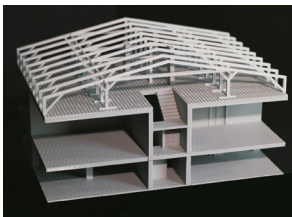
Administration building in Bytom-the PANOVA company presented the concept of revitalization of the building using a printed model.



3D printing of the architectural mock-up  
- a visual argument during conversations with the investor.

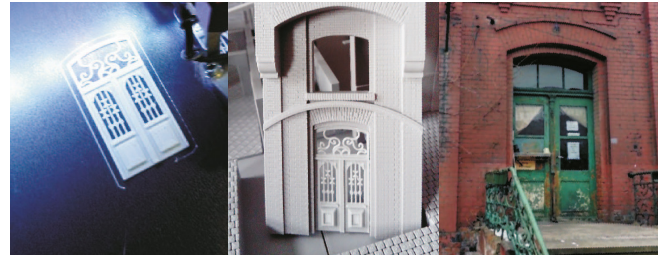


The mock-up model was printed from dozens of elements.



In the process of revitalization, it is important to present the building's body with a high detail referring to the original design. The use of 3D printers made it possible to create the model of the object, maintaining its original form and proportions, and allowed to compare the current state of the building with the design one.

On the left-the printed part of the building, a revitalization project.  
On the right-the current condition of the building.



Printed on 3DGence One.

3D printing allows you to get very accurate elements with advanced geometry.



*The 3D printing technology enables us to check the assumptions of the conceptual design of the object and the development around it.*

*Often, presenting a model in the form of a 3D printout is the first stage of planning this type of investment project. The number of different printout variants allowed to significantly accelerate the phase of talks with the investor.*

Bogusław Zbyszewski, Managing Director in CADVISION



### 3DGence

3DGence is a Polish manufacturer of 3D printers specializing in the development of new technological solutions and the implementation of 3D printing in industrial enterprises.

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