

## **AUTOMATED DATA ACQUISITION AND PROCESSING TOOLS**







### Q What is?

This set of technologies streamlines the collection and processing of building data for manufacturing and installing prefabricated renovation modules. It reduces preparation time compared to traditional methods while maintaining high accuracy through a step-by-step process.



# **Challenge**

It is necessary to visit the building to generate a building model definition of the renovation project. Gathering precise building data for renovations often requires extensive time and on-site effort.

Definition of the project and the prefabricated modules is often a manual process.



## **Solution**

Our tools combine online data acquisition, automated on-site measurements, and droneassisted targeting to deliver fast, accurate results with minimal site visits. A building model is generated online, which is automatically re-adjusted with the on-site measurements.

A layout of the prefabricated modules and the solar panels is generated automatically in each phase.

# Key Benefits



#### Reduce time

Reduces preparation time compared to current approaches



#### Online planning

Enables online planning



#### Measurement

Enhances measurement accuracy with automated tools and UAV support



using standard file formats

# **→** Target Users

- Construction companies
- Prefabrication specialists
- Renovation contractors
- Building owners
- ESCOs

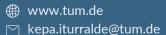
# Next Steps

- Further research.
- Integrate the building modelling in an online website tool by using .json files, avoiding the use of a BIM modelling software.



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