



__Customer__



The customer is İZODER (Heat, Sound, Water and Fire Insulation Manufacturers' Association). It is built in

1993 with the aim to promote nationwide awareness

of insulation. It concatenates all heat, water, sound and fire insulation material manufacturers, vendors and practitioners under one roof.

In 2008, İZODER hired a software company to write the software for making calculations defined in TS825 (Turkish Standard 825 according to the heat losses of buildings). This software became popular among all designers which makes insulation projects for new and old buildings. In time, its reputation has increased and many governmental authorities start to accept the reports from this software.

İZODER has prepared a project about the revision of this software according the feedback from the market and the change on the TS825 standard. (İSTKA) Development Agency of Istanbul has supported this project.

They chose May Sistem as a partner for this desktop application because of its expertise on similar calculation software like BEP-TR (National Building Energy Performance Certification Software of Türkiye).

__Project__



According the changes in TS825 standard, calculation methods and tables were changed. The new software had to do all calculations according to the new tables and formulas.

İZODER was looking just for the same software to work with the new version of Windows®. After analyzing the growing needs of the market, it was inevitable to improve the ability of the application.

The precedent software was just calculating TS825 heat loss results. İZODER wanted to improve the capacity of the software by adding some extra features. With this improved features, the new software would not just analyses building performance by calculating heat loss but also cooling and hot water energy needs with mechanical and distribution systems losses. Software could also calculate energy results if renewable energy sources were added to the project.

After commissioned, the software would help Türkiye and national designers to:

- Save energy by limiting the amount of significantly high energy loss of buildings
- Provide statistical data for improvement on future threshold values and calculation methods
- Create energy effective and comfortable buildings
- Estimate the diminution of CO₂ emissions after energy efficiency precautions

Solution



The project has started at September 2013. The new software's kernel functions were designed according to new TS825 standard. The project had to be a renewal of the old software.

But there were 2 problems:

1 - After the end-user surveys, it seemed that the customers was not happy with the old user interface

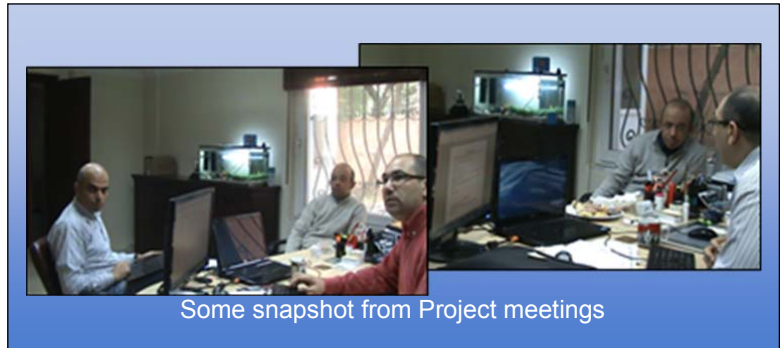
2 - The methodology for the rest of the calculation was not present in the TS825.

IZODER created the methodology with internal engineers' help. After the methodology was prepared, we worked on the user-interface which was similar for

all kind of input. We designed a brand-new interface to facilitate inputs and to increase input speed. The user could have detailed reports after the calculations were finished. We armed the software with data input consistency check ability to minimize input errors.

To update the software remotely, we added auto Update feature for the software and databases.

We worked 9 months on the project and the final software was tested by IZODER, some prequalified companies and some civil society associations.



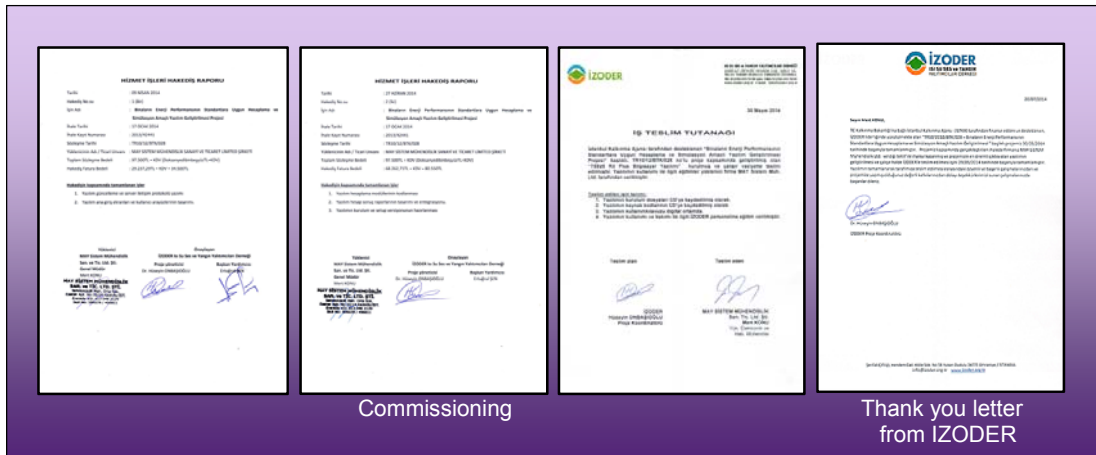
Conclusion



All customers were happy with the final product. With the update ability, IZODER could change the tables and software remotely. Approximately 40.000 users were using the software across Turkiye. This software was also used in municipalities to check and give permission accordingly to new buildings.

Ministry of Public Works was interested with the software and they asked for a demonstration. After the demonstration, they asked for the setup of the software to test it by themselves. If the results would be satisfactory for them, they would exclude certification calculations for homes, apartments and residences from the government procurement of BEPTR R2 and they would use TS825R3 for these certifications.

Result



Commissioning

Thank you letter
from IZODER

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