

Public Organizations Now Have a Better Way to Analyze Infrastructure Projects Thanks to DKC Kommunalberatung's Web Tool

The Challenge

DKC Kommunalberatung GmbH is a prominent consulting company that specializes in optimization and restructuring public sector construction across Germany. They work closely with municipalities, municipal institutions, local organizations, banks, and federal organizations.

Deviation in costs and deadlines is almost inevitable in public construction projects. On the other hand, government regulations and procedures are forcing municipalities to be strict when it comes to overall project costs and durations.

Their "Wirtschaftlichkeitsrechner", or "Economic Efficiency Calculator" tool aims to help public organizations make better decisions through a side-by-side comparison of how to best proceed with their public building projects. The calculator can give insight on if a public building should be modernized, rented, leased, or a new construction should be considered. In addition to estimating the construction, renovation, and modernization expenses, the calculator also allows capturing the operating costs (e.g. energy, finance, administration, depreciation expenses) for a period of up to 30 years.

Using the Economic Efficiency Calculator, municipalities and public organizations can analyze how the asset value of a building will change by the end of the review period, in respect to the planned expenses and alternative approaches like modernizing or reconstructing the building.

The calculations and data featured in the Efficiency Calculator tool is the result of years of experience in this field. Organizing and managing public infrastructure projects is a highly complex task as each project is unique.

"The service that we offer with this product in this field is unique. I believe no one had attempted to create such a

feasibility analysis that is purely online.." Says Firat Nizam, a Project Engineer at DKC Kommunalberatung.

The Solution

DKC Kommunalberatung GmbH already had the entire business logic in Excel, and was looking for a way to create a web interface where their customers could interact with the model, generate reports, and analyze their options.

Their team are experts in construction and renewable infrastructureenergyprojects, but they have no knowledge in coding. They would have to hire a team of developers and testers for developing this tool as a web application, and maintaining it in the long term. This would have proven to be a very costly and time-consuming endeavor. SpreadsheetWEB's modular, easy-to-build, and user-friendly platform ticked all the boxes.

"The whole project was undertaken by a handful of people who had no previous HTML expertise whatsoever. The early phases of the project were a bit challenging, but the learning curve was quite user-friendly. The support we received from the Pagos support team also helped out immensely." And he adds, *"The only part of the project that we required external expertise was the CCS Stylesheets. Apart from getting support from Pagos for a professional layout of the general design concept, we have done pretty much everything in-house. I think that is the strongest suit of SpreadsheetWEB - not having to rely on external sources to create complicated web-based products."*

The Economic Efficiency Calculator tool was transformed into a responsive web page that can also be accessed from mobile devices. The project was completed by DKC Kommunalberatung's team members, over the course of a few months, with very minimal outside support.

The Results

To summarize the outcome “I must say that, what we accomplished here with SpreadsheetWEB within 6 months is quite astonishing.” Says Nizam.

The Efficiency Calculator application is now running on the cloud, instead of the end user’s device. This way, DKC Kommunalberatung can now reach an even larger customer base, and monetize their tool much more

The resulting web application can capture the user data to be used in reports, and also present the key metrics on a separate dashboard application. According to Nizam, “An important point that delights us is the Database and Analytics features. We are able to see the application usage and user interaction, without having to resort to other third party programs. These sections seem to be an auxiliary, but in fact, when utilized correctly, the information that can be obtained thereof is paramount when it comes to fine-tuning the application based on user interaction.”

efficiently. By transforming this tool into a web application, the company can now ensure that their end users are interacting with the latest version of the tool at any time, while also making sure that their intellectual property is secure on a centralized location. You can find the calculator in German at www.wirtschaftlichkeitsrechner.de

Technical requirements and regulations are constantly changing in the world of public infrastructure projects. The Economic Efficiency Calculator is also inevitably going to go through revisions as the landscape evolves. Since the web application is based on the Excel model, DKC Kommunalberatung can make any changes to the application layout, formulas or data with ease.

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