

SWARCO MYCITY

THE USER-CENTRIC PLATFORM BUILT FOR
PROACTIVE AND HOLISTIC TRAFFIC MANAGEMENT



The Better Way. Every Day.





MyCity is designed to ease the work of traffic engineers and cities to move **from an reactive approach** on traffic management **to a more proactive approach.**

This means that on one hand we created a more efficient and intuitive system for faster processing of traffic changes/problems. And on the other hand we optimized the software functionally to detect patterns more quickly and steer traffic in a more effective and sustainable manner.

THE PROCESS OF BUILDING MYCITY



LEAVING THE VETERAN ROLE & EMBRACING THE CHANGE IN OUR INDUSTRY

At SWARCO we believe in a trusted partnership approach towards our customers. This means **we believe in a true win-win two way relationship with our customers.** We believe in the importance to listen to our customers to understand their needs and challenges and we believe in **our role as a trusted advisor to bring the experience and technological developments of today to the table.**

This also means that we need to get over the arrogance of being veterans in our field and understand that we need to embrace change. That we need to learn every day, exploring new approaches, studying new technologies and listen carefully to our customers. I believe our approach to the design process of the MyCity platform exemplifies this approach.

WHY DO WE NEED A USER-CENTRIC PLATFORM?

If you look at the existing league of traffic management systems, regardless if they are from SWARCO or our competitors, they did not value an intuitive user experience and frankly they just do not look nice. We felt this is an area in which we can improve the value of our systems for our customers by exactly applying the approach described before. By listening to our customers and learning from the best practices around in the software industry.



OUR APPROACH

User-centered design means that we do not start with a product. We always start with the user and their needs. This means that we start with a sophisticated research phase before coming up with strategies and finally digital products. It also means a continuous learning process: Once we have a first prototype we test it with real users under real conditions to iterate and improve.

RESEARCH PHASE

Exceptional digital products start with research.

A deep understanding of traffic management and users are key to creating an interface that stands out. The biggest challenge in this project: Each customer has specific requirements (and needs a different set of functions).

WORKSHOPS AND TEAM INTERVIEWS

Empatic UX had the benefit of coming to traffic management with a clean slate but with the downside of not being traffic engineers. Requirements mapping started with understanding the world of traffic management. We talked to SWARCO's product teams all over the world to learn about their challenges and customer feedback they get every day. One often underestimated point of research is support staff that interacts with users regularly. We brought in SWARCO's competences from various existing products to learn from them and align product teams on one mission: Creating the the world's first fully integrated smart city application.

THE
PROCESS
BUILDING
MYCITY

“My work now is mainly reactive but I would like the system to help me to act proactive instead. So, we can **work on a better traffic flow and prevent congestion**, especially in the mornings.”

Aristotelis, Deployment of Intelligent Transport Systems Cyprus



FOCUS ON THE USER

USER RESEARCH

In the beginning of the project, the main goal was to find out what SWARCO customers really need. In 8 countries, spread over several continents, we conducted remote surveys and user tests to identify the real weaknesses of current systems and problems in traffic managers' daily work. The findings were surprising as they contradicted some of the most basic assumptions product managers had before. A big part of the success of the UX project were product managers who had no problem to throw out their old paradigms as soon as the research arrived.

UX AUDITS

A UX audit (User Experience Audit) is a method used to identify weaknesses in the usability of a digital product. The existing situation is analysed by usability experts and recommendations for improvements, in this case user-centric improvements, are identified.

For this project we conducted eight UX audits of eight different digital SWARCO products. After analyzing these products and their workflows we identified information architecture as the area with the greatest potential for improvement. By revising the structure of information and eliminating unnecessary steps the user's path through MyCity is significantly simplified. Even though traffic management often requires complicated workflows, the user should not bear that burden. Instead, the user interface needs to make each step easily actionable. The user should be able to single out the information relevant to him and overlook irrelevant information without cognitive effort. This is achieved through a logical hierarchy of information that is visualized using specific design elements.

COMPETITOR ANALYSIS

In order to get a better understanding of the competitive landscape, we examined a wide selection of competing products. The products have been analysed on their user interface and visual structure. One main target of this project was to not only learn from SWARCO's past problems, but also those of competitor products. In user experience much of the insight is already out there and improvements can just be collected from the experiences of users.

A mature UX strategy combines business objectives and user needs.

Based on the research results, we developed a tailored strategy that serves as a guide in the design process. With a clear structure and aesthetics we ensure minimal friction in the daily use of MyCity.

In a UX strategy workshop we developed Strategy Guidelines as follows:

Consistency & Integration
Consistent design is intuitive design.

Ergonomic Simplicity
One hundred clear screens are preferable to a single cluttered one.

Customization
Less choice yields higher user satisfaction.

These principles guided the rest of the development process and are MyCity's mantras until today.

STRATEGY
PHASE