

Stadtwerke München - Being smart: How Smart Meter can be integrated in everyday life

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Working International & Innovative

As part of the Co-Innovation Lab at Munich University of Applied Sciences in the winter semester of 2021/2022, eight international Master's and Bachelor's students from the department of Business Administration at Munich University of Applied Sciences and IT at Tampere University of Applied Sciences had the task of developing a forward-looking solution in collaboration with the public institution Stadtwerke München (SWM). Their challenge was to develop a value-added service for the SWM Smart Meter based on the existing Smart Grid infrastructure.

Acting Smart

To face this challenge, SWM represented by Dr. Maximilian Pohl (New Technologies and Cloud Platforms at Stadtwerke München), contacted the Co-Innovation Lab of the Munich University of Applied Sciences. The team was primarily supported by Prof. Dr. Lars Brehm and Prof. Dr.-Ing. Holger Günzel (both MUAS - Lecturer), as well as the coaches Hans-Jürgen Haak (MUAS - Coach) and Lars Schmitz (Amazon AWS - Coach).

The project team has developed a program that helps health insurers promote the health of older people and encourage and reward them for health-promoting activities by integrating the program into their own digital offerings. The My Health Tracker app acts as a link between the customer and their SWM Smart Meter Gateway and health insurance company. When the customer performs a health-promoting activity with a smart home device connected to the app, the data is recorded via the gateway and then registered in the app. Through the various activities, the customer can collect points in different amounts and exchange them directly in the app for defined rewards.



Figure 1: My Health Tracker App Logo

Exploiting the Opportunities

The project team developed a solution that offers even greater added value for users of the Smart Meter Gateway. As a result, users can not only gain more visibility into their electricity consumption and manage their consumption behavior more consciously as before, but now also monitor and promote their health by recording activities while being motivated and incentivized through material and financial rewards. The solution exploits the potential of the Smart

Meter Gateway, using its unique ability to integrate technical devices into a communications network and to collect, securely encrypt and transmit data to provide a socially relevant service. While the project team worked on the elaboration and development of a valuable benefit of the gateway, SWM had the opportunity to continue to focus on the expansion and deployment of the infrastructure, allowing new ideas and innovations to be advanced on both sides.

Together for More Added Value

Dr. Maximilian Pohl states that for the openly formulated challenge of generating greater added value by using the infrastructure of the Smart Meter Gateway, My Health Trackers has in his opinion extensive advantages for all stakeholders involved: SWM, health insurance companies and users. He finds it very beneficial that the infrastructure and features of the gateway were used within the project to address social and especially health aspects. He comments that "everyone automatically thinks of home automation or electric car charging, but thinking beyond that - ok, it could also have a social impact and benefit" - has opened his eyes to how the existing can be used to add more value.

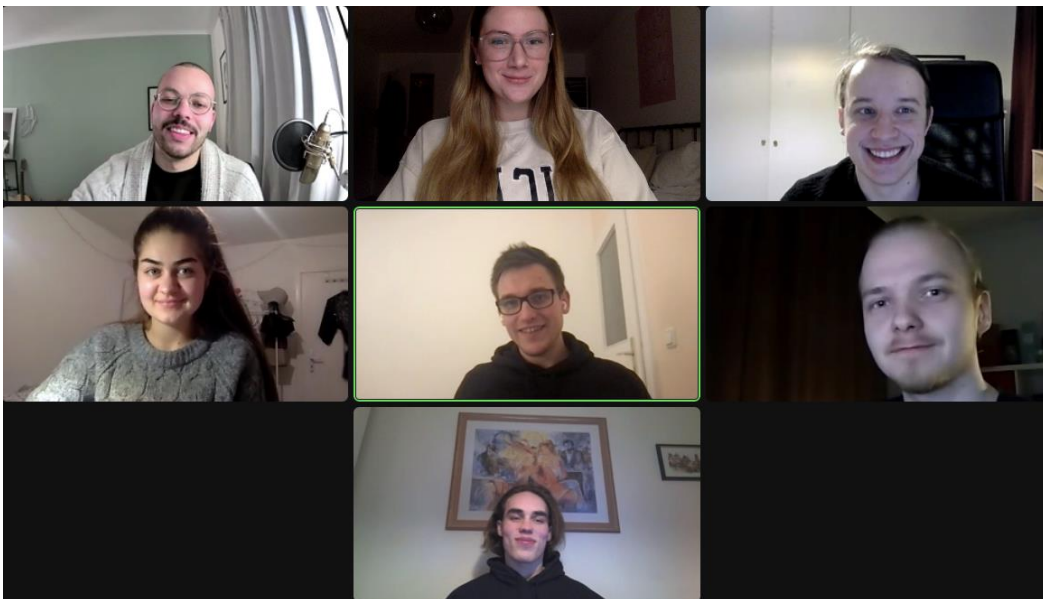


Figure 2: Members of the Project Team (starting top left: Eslam Hasaneen, Samira Hackl, Teemu Viikeri, Annika Lurz, Constantin Goetsch, Aleksu Muikku, Florian Spindler; missing: Silvia Niinimiäki)

Are you and your company also facing a challenge and want a hands-on solution?

Then contact the responsible lecturers Lars Brehm (Lars.Brehm@hm.edu) and Holger Günzel (Holger.Guenzel@hm.edu)!

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