Case Study

OSCAR energy efficiency web portal

S3C related keywords:

- Gamification
- Neighbourhood competition
- Social norms

SMART CONSUMER
SMART CUSTOMER
SMART CITIZEN

"Today, the OSCAR portal has 24.000 users"

Project Summary

The OSCAR project offers a customer portal called "OSCAR'S world for saving energy" to residential customers of the energy supply company **BKW Energie AG** in Switzerland. The concept of the portal was developed by **BEN Energy AG**. Customers are invited to enter their metering data manually into an online platform on a weekly basis and learn something about their own consumption and conservation possibilities in a behavioural manner. Overall, the project has a strong focus on end-user motivation as opposed to incentivation.

The OSCAR portal is based on extensive research on consumer behaviour (motivation, social norms, incentives) and green information systems.

OSCAR was designed as a motivation tool for end-users to conserve electricity and to increase the awareness of end-user in energy topics. The project had a top-down approach as the involvement of the end-users started only after the start of the implementation of the project. Although users were invited to register for OSCAR when the development of the platform was already completed, the platform itself was designed and developed based on extensive user feedback from a prior research platform. The project did intentionally not apply any target groups, but addressed the whole client base (residential end-customers) of the utility.

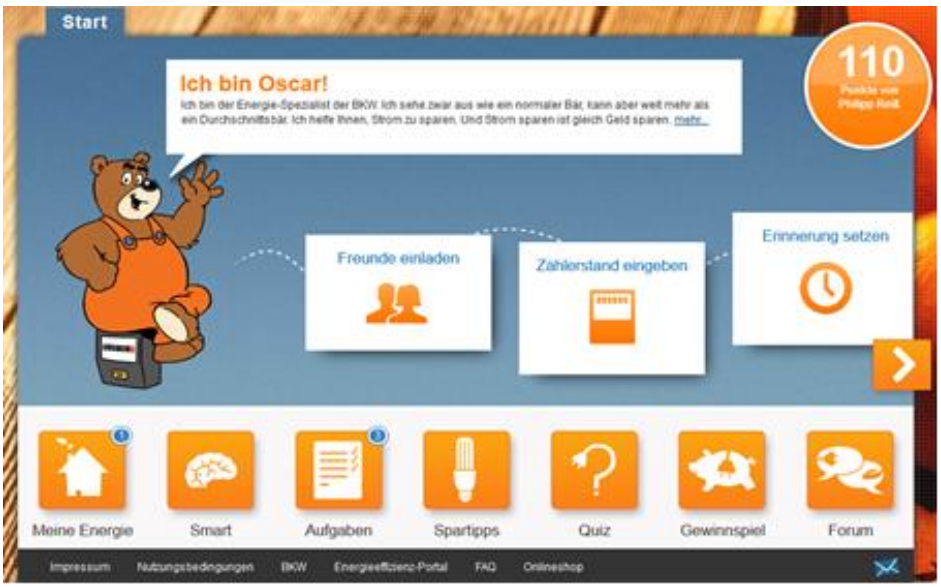

Figure 1: Visual of the OSCAR platform starting page; the dashboard features the three centrally placed sections 'Invite friends', 'Enter your meter reading' and 'Set a reminder' and below the sections 'My Energy', 'Smart', 'Assignments', 'Conservation tips', 'Quiz', 'Lottery' and 'Forum'.

What sets this project apart from other Smart Grid projects?

Switching to renewable energy sources is not solely a political venture. It has to be supported by the population, so change has to happen on a social and behavioural scale. With the involvement of the population in the process, a need for education and increasing their awareness for energy topics and their own consumption becomes apparent. Electricity is not a “sexy” product. Thus, it is a topic that needs a lot of motivation stay afloat. OSCAR and its related projects (VELIX, MAX, MUNX, etc) set themselves apart by relying strongly on social norms and behavioural psychology in developing the concept. Further, in order to implement a behavioural approach, all projects rely heavily on data analysis to motivate, determine needs and capabilities, and to accompany each user individually.

The OSCAR project applied a very successful marketing and advertisement strategy that resulted in a current registered user count of more than 24.000 customers of the BKW (almost 10% of all customers of the BKW). The acquisition of end-users for the OSCAR project started with a mailing campaign, an outreach via the BKW customer magazine and through the local newspaper and online ads. The campaign was designed to provoke with one of the slogans being: “You consume…kWh! - Your neighbour consumes…kWh!“. Additionally, a billboard campaign was launched in the Bern canton depicting the bear OSCAR and slogans like “I am saving energy while sleeping”. The bear mascot was chosen deliberately because of the connection to the city of Bern, which features a bear in their emblem. The OSCAR mascot was designed by in-house designers of the BKW to fit the utility's corporate design.

What happened?

The participants of OSCAR decreased their power consumption by a mean of 2.4 %, with highly active users saving up to 4.1%. In general, participation on the OSCAR portal did affect the behaviour of the registered end-users. End-users that were very active at the portal managed to save more energy than their peers that were not as active. Active users dealt with the issues of energy conservation and energy efficiency on a deeper level.

The OSCAR study and several other studies conducted by the ETH Zurich showed that normative feedback is a successful tool. However, in some cases a combination of feedback systems has to be used to counteract negative consequences; e.g. neighbourhood comparison of consumption (descriptive normative feedback) has a positive effect on those end-users that have a higher consumption than their neighbours, but can cause end-users who consume less than their neighbours to increase their consumption. Therefore, it is imperative to combine the descriptive normative feedback with a feedback tool on their behaviour (injunctive normative feedback, e.g. “You are better ... and that’s great!”). In OSCAR, this injunctive feedback was offered as a ranking of the end-users behaviour on the energy efficiency scale.

Further information / Contact

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References:

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Beariswyl et al. (2013) Segment specific consumption information for energy conservation and demand shifting

BEN Energy (German/ French); http://www.ben-energy.com