

## Public summary

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# A redesign of the Spiegel banner

An assignment of the Campus & Facility Management of the University of Twente

With the global rising problem of climate change, there is more and more need for sustainable improvements and developments. The University of Twente (UT) has a mission to become a sustainable organization by 2030 and eventually have a completely circular campus by 2050. A *Waste Plan* has been set up by the Campus & Facility management department of the UT (CFM) that will contribute to reaching these goals.

Promotional banners, like the banner on the Spiegel building, play a role in the created waste on the campus by their relatively short lifetime. In this bachelor assignment research has been done to answer the main research question:

*“How can the current banner on the Spiegel be (re)designed in such a way that it will fit and contribute to the set waste management plan of the UT?”*

Literature research as well as interviews were conducted to get to know the current situation. Out of one of the interviews it appeared that the façade of the Spiegel building is damaged by the banner and unable to carry the banner since. This gave the assignment a turn, as the question popped up what the actual function of this banner is, how effective it is and whether there was need for it to be replaced. By performing more literature research, conducting an interview with the Marketing & Communication department (MC) and a

conducted survey, it appeared that the UT needs communication channels and that there was still room for improvement. This analysis phase led to a list of requirements that functioned as a basis for the design phase that started with ideation.

Out of the ideation phase a concept of an interactive path was chosen. This path asked for interaction with the user so that the user would be provided by feedback that consists of advertisement. This interaction would help to improve the effectiveness of people taking in information that is being given to them. During the concept development, various aspects were defined on a more detailed level. Out of the technical analysis it appeared that as for now the use of the already existing LED screens on campus would help the most to helping the goals as stated in the *Waste plan*. An analysis showed that the use of solar tiles would be the best fitting, especially with the path in mind. The path was made to help people lead to the interaction of the LED screens that consists of three interactive tiles. The user can stand on an interactive tile by which they activate the LED screen, the screen gives feedback to the user but only partially. After the first interaction the second tile will light up, the user can step onto this tile and the LED screen will continue to give its feedback. When the second interaction is finished, there is a third tile to finish the complete feedback of the LED screen. By letting the user interact by stepping, they are

more likely to take in information so that the advertisement will become more effective.

The functionality of the final design had been assessed by means of two different prototypes. Out of the prototype that concerned the interactive tile it was shown that the affordance of the tile was not clear enough yet to the user. This could easily be improved by adding small texts, icons and/or

lights. Out of the second prototype no real conclusions could be drawn as it was performed on a too small scale. In further research it is recommended that this would still be investigated as well as a deeper analysis of energy and production aspects of the solar tiles.