

Summary of Qualitative User Research

The primary objective of this research was to identify the characteristics and needs of cafeteria guests in Garching and derive potential app functionalities. To gather the necessary data, interviews were conducted amongst students and postgraduates. The interview questions were defined ahead of time. Users were interviewed via zoom in a quiet environment to minimize potential distractions and their answers recorded. In the name of data privacy, all recordings were deleted after the interviews had been transcribed.

A total of six potential app users were interviewed, of which four were female and two were male, all of them singles. The average age of the interviewees was 25.2 years with a standard deviation of 1.2 years. In addition to demographic data, the interests of the participants were recorded. These varied wildly from singing or mountain climbing. A review of their food preferences revealed that a third of interviewees preferred little to no meat in their diets, whilst the rest of them declared themselves omnivores.

The analysis of the interviews revealed that the majority of the respondents (83%) are interested in an app to improve their cafeteria experience in Garching. Finding out what the food looks like and deciding what to eat was often listed as a challenge. In addition, many interviewees struggle to gain an overview of the food service, specifically what food is served at which stations. Furthermore the unclear pricing and quality of some dishes were criticized. 50% of interviewees narrated their frustration upon discovering that their desired dish was sold out and lamented the crowding and long queues within the cafeteria. Additionally, the payment system and the high prices were criticized.

The participants were also asked whether they would find a set of proposed functions useful. All interviewees stated that they would like to select dishes in advance and receive a discount upon purchasing them. 83% of interviewees were interested in receiving information about occupancy levels and 67% would like to rate dishes. Additionally, half of the participants wanted to receive further information about the dishes and their ingredients.

The interviewees also made suggestions for additional app features. These included preordering food for pick-up (a take-away system), paying via app to eliminate having to charge their student card, reserving tables and an overview of all of TUM's cafeterias. From the gathered data, the following app functions were decided upon for implementation:

- Select meals a week in advance and get a discount upon purchasing them
 - → reduce waste, save money
- Rate dishes and view other users' ratings
 - → improve satisfaction through informed choice, eliminate poorly rated dishes
- Transparent information about dishes' ingredients, price, pictures, allergens
 - → improve satisfaction through informed choice, reduce risk of health issues
- View the current and estimated occupancy of the cafeteria
 - → reduce queues
- Clear overview what food is served where
 - → reduce crowding
- Display when a dish has sold out
 - → avoid disappointment, improve plannability