

BOB

The Hospital Bot

Research Question:
How can a person gain trust through a warm or competent conversational style through the means of a chat bot?

Intro: You are waiting for the dental surgeon to remove your wisdom teeth. Bob the hospital bot could help you with providing information, but would you trust Bob as much as the surgeon? Here the results from our 10 week project, following the



Human Centered Design Process

Inspiration

Field Trip & Interviews



catharina
een saniteon ziekenhuis



meander
MEDISCH CENTRUM



UMC Utrecht

- Visited multiple hospitals to gain more understanding for the audience
- Half structured interviews found place with the patients and employees
- Clustered the insights to formulate topics for the Ideation Phase.

Results

- Patients see the purpose of the chatbot for last minute questions or stress reduction
- A clear conversational style is required for a connection of trust with the audience.
- Patients feel attracted towards the chatbot by gathering informing and getting distracted through gamification.
- These results are the foundation for the concept in the Ideation phase

Brainstorm

- Brainstorm session with stakeholders
- Applied several Ideation methods, such as Braindump, Customer Journey mapping, Pain and Gain Definition, Limit Extension, Rolestorm, and COCDBOX. This to create a valuable concept



Lo-Fi Concept Design

• Based on the results of the interviews and brainstorm session with the stakeholders, the first lo-fi concept was created. The purpose of the concept was to focus on a competent conversational style of conversation towards the patients. Furthermore, the gamification element has taken the form of a quiz.

Results

- We discovered 3 pillars to create trust (communication, distraction, support)
- The basis of the dialogue design should be competent, but warm elements will support to gain trust by the patients.
- The Implementation Phase should focus on researching the pros and cons of each conversational styles.

Ideation

Wizard of Oz Test

- 40 people participated in our research of both conversational styles.
- 6 participants trust the warm conversational style over the competent style
- 34 of the participants trust the competent conversation more than the warm style

Prototype Design and Usability Testing

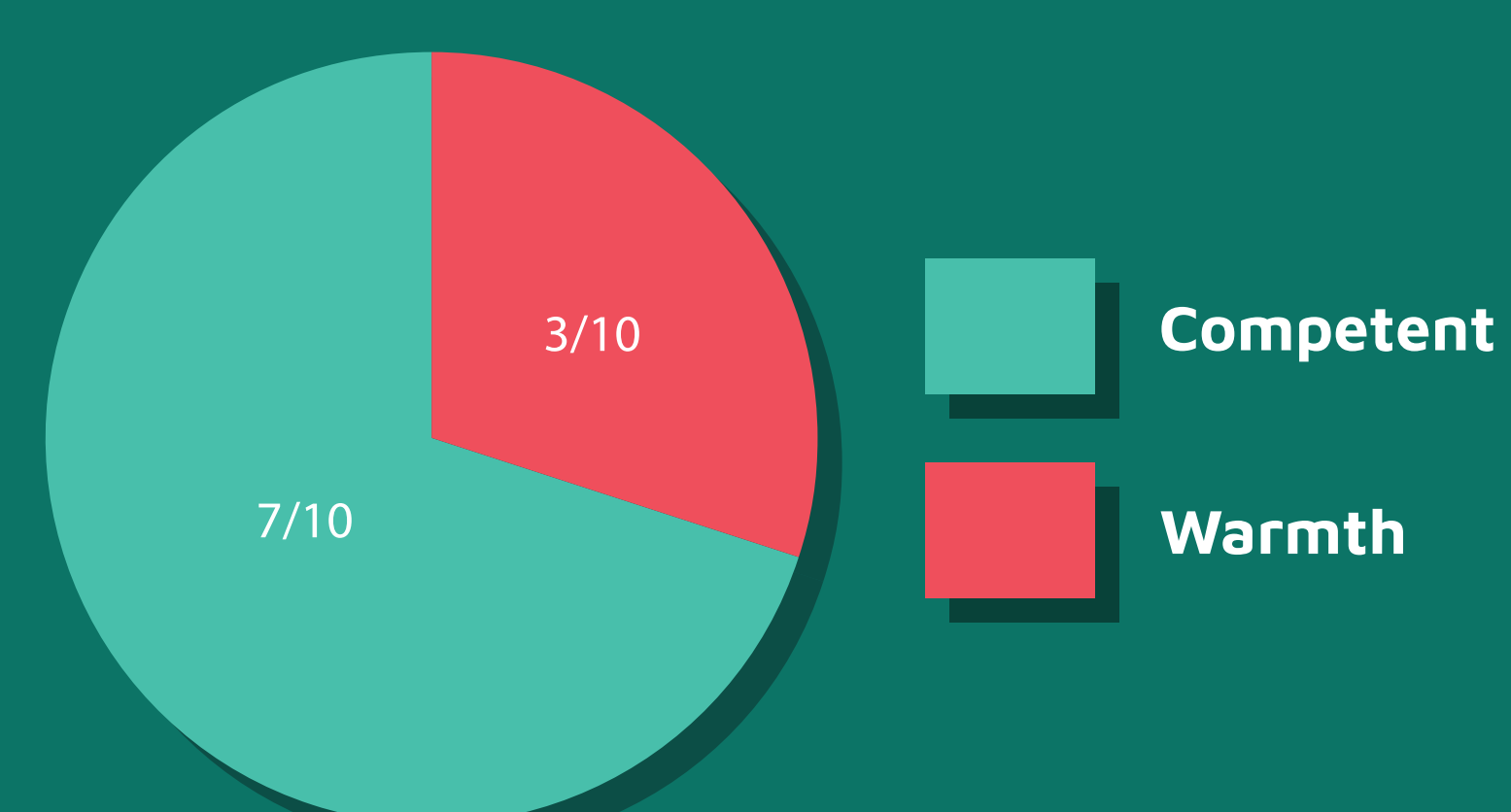
- Based on the conclusion of the Wizard of Oz testing method, we designed a prototype including the preferred mix of conversational styles
- Real life usability testing on an audience of 7 people, they completed the entire dialogue.
- Conclusions were summarized in a testresult matrix. The participants could rate the prototype based on nine topics, such as: Reliability, Confidence, Trust and Accessibility
- After each test we slightly modified the prototype, including the conversational style and iterated towards a final prototype.

Results and Recommendations

- Mix 7/10 competent and 3/10 warm
- Text based interface; provides privacy
- Give the chatbot an identity to make it more personal
- Provide relevant medical information patients might be curious about
- Use a play element to distract and reduce stress

Consider to make the chatbot accessible through multiple media

Give users the possibility to give their own input



Implementation