#D2.4 Deployment Datasets (ESR5, OpenDott)

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| A Trutsmark for IoT (ESR 5) |

This is one of the topics under Open Design of Trusted Things (OpenDoTT, opendott.org), a joint PhD programme between Northumbria University and Mozilla. This folder contains data collected from the research phase 2 - Data Gates: Designing for Trust in the Internet of Things as part of WP2 - D2.4 Deployment Datasets

Aim

A Data Gate is a fictional technology that allows people to control information flows in the IoT. Data Gates are electronic tags that are imagined to come in numerous form factors such as badges, wall plaques, stickers, labels or any other compact form. These tags can be programmed to control the flow of information in IoT devices based on rules written into the tag. For example, from a Data Gate sticker placed on a doorway to a room might instruct all IoT devices entering the room to to turn off video recording functions. Parents might place such a sticker in a child's room or in a playground to prevent surreptitious surveillance of their child.

This project explores the trust in the IoT by allowing people to actively control privacy and consent in IoT devices using a prototype of the Data Gates concept. The aim of this study is to gather qualitative data from participants based on participant's experience of a working prototype of the Data Gates concept and scenarios that explore contexts of use of the Data Gates.

Sampling and Recruitment

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4 participants were recruited from diverse backgrounds. The participants represent three different age groups (20-35, 35-50 and 60+) age groups, reflecting diversity of generational and age-related contexts of technology use. The participants were chosen from three different countries to represent a diversity of cultural contexts in which to study use cases of the Data Gates technology. The sample group consisted of two female and two male participants. Participants were primarily an opportunity sample recruited by circulating a participant recruitment flyer to colleagues and friends via email and by approaching friends, family and acquaintances. Eight people expressed interest in the research of which six signed up for the research while four participants actively engaged with the probe and agreed to be interviewed.

#Research Methods

A trial run was conducted with two Doctoral Researchers from Northumbria University who gave feedback on the usability and engagement of the probe. After the trial run, the probe was improved based on the trial run feedback and prepared to be deployed with participants.

The research followed a mixed approach consisting of probes, interviews and co creation exercises. Participants were sent a cultural probe kit [1] consisting of an online interactive web application (technology probe) and a series of comic strips depicting Pastiche Scenarios [2]. The participants were asked to go through the probe and complete a small creative task. The task asked participants to write, draw or narrate a short scenario in which a fictional character of their choice uses the Data Gates. Participants were given one to two weeks to go through the probe kit. The participants were then contacted by the researcher and asked to do interviews. Semi-structured interviews (face-to-face, online) were conducted with the four participants. During the interviews, the researcher walked through the participant's use of the technology probe and had open-ended discussions about contexts of use for the Data Gates in the participant's daily lives and in the fictional scenarios written by the participants. Of the four participants who were interviewed, two were selected as key participants due to the richness and quality of the interview data coupled with the richness of the probe responses. The interviews of the two key participants were open coded to derive categories, themes, insights, analysis and synthesis of the research data into new knowledge and promising design and research opportunities,

[1] Gaver, W.W., Boucher, A., Pennington, S. and Walker, B., 2004. Cultural probes and the value of uncertainty. interactions, 11(5), pp.53-56.
[2] Blythe, M.A. and Wright, P.C., 2006. Pastiche scenarios: Fiction as a resource for user centred design. *Interacting with computers*, *18*(5), pp.1139-1164.

Dataset contains:
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[x] Ethics Forms - Participant Information Sheet and Consent Forms (.pdf)
[x] Participant Recruitment Flyer (.png)
[x] Documentation of Probes (.png, .pdf)
[x] Research Trial Notes (.pdf)
[x] Interview transcripts (.pdf)
[x] Coded Data(.pdf)
[x[Participant responses to probe (.xlsx)
[x] Images from research (.png)

Please note - Some sections of participant interviews have been eliminated due to the

sensitive nature of the conversation and to protect the identity of the participant and the researcher. For more information, contact the researcher.

Contact

The researcher Namrata Primlani can be contacted on namrata.primlani@northumbria.ac.uk

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