



HAL
open science

Investigating Perceptions of Personalization and Privacy in India

Hanna Schneider, Ceenu George, Malin Eiband, Florian Lachner

► **To cite this version:**

Hanna Schneider, Ceenu George, Malin Eiband, Florian Lachner. Investigating Perceptions of Personalization and Privacy in India. 16th IFIP Conference on Human-Computer Interaction (INTERACT), Sep 2017, Bombay, India. pp.488-491, 10.1007/978-3-319-68059-0_57. hal-01679806

HAL Id: hal-01679806

<https://inria.hal.science/hal-01679806>

Submitted on 10 Jan 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

Investigating Perceptions of Personalization and Privacy in India

Hanna Schneider, Ceenu George, Malin Eiband, and Florian Lachner

LMU Munich

Abstract. Technological products are increasingly equipped with data collection and personalization mechanisms that allow them to adapt to an individual user's needs [4]. However, the value and perception of these practices for users is still unclear. This field trip proposal investigates users' mental models of personalization as well as perceived benefits and drawbacks using semi-structured interviews. The interviews make use of the critical incident technique and drawing tasks. We expect that findings from the field trip will result in rich understanding of the perspective of a collectivist society on personalization and privacy. Results of the field trip can, hence, be contrasted to the results of an equivalent study conducted in Germany, an individualistic society. The overall goal of our studies is to highlight differences in user needs of collectivist and individualistic societies for researchers and practitioners who develop highly personalized systems.

Keywords: Privacy · Personalization · Value-Driven Design.

1 Introduction

As data collection and processing techniques improve, technological products are increasingly equipped with personalization mechanisms that allow them to adapt to an individual user's needs [4]. One of the main purposes of personalization and customization is to evoke or foster a feeling of individuality or "me-ness", which is especially important in individualistic and particularly Western societies [4, 8]. However, the notions of individuality and privacy are perceived very differently, and often in a negative light, in societies with a collectivist world view [7], e.g. in the Arab Gulf [1], in Africa [3], or in India [2]. The goal of this fieldtrip is to investigate users' perceptions of benefits and drawbacks of personalization in India. Currently, we are conducting an equivalent study in Germany. The pre-study in Germany indicated differing mental models of personalization and varying privacy sensibility when using personalized products or services. We, therefore, want to further investigate this relation. However, to objectively address this research question, we want to understand privacy concerns of personalization in both individualistic and collectivist countries. Both studies will be conducted in similar settings hence we expect that findings from the field trip in India (a more collectivist country in contrast to Germany, an individualistic country [7])

will enrich our study with an alternative perspective to personalization and privacy and enable us to critically reflect on values and assumptions that underlie the design of personalized technologies. We hope that our findings will inform researchers and practitioners who develop personalized systems of similarities and differences in user needs between these two societies.

2 Project Plan

2.1 Goals

- Defining the necessity of personalization in a collectivist country
- Understanding needs for personalization and privacy in different contexts
- Analyzing culturally sensitive aspects of personalization and privacy

2.2 Locations

For this study, we propose two different contexts, namely (1) urban and (2) rural areas. We believe that this would provide an interesting setting to study the perception of personalization and privacy, as we believe that the perception will vary based on distance to the city. Participants should also be from a broad age group and gender should be equally distributed. We will split up into teams, each team targeting a different context. However, to select specific locations around Mumbai, we would appreciate advice from the organisational team of the conference or local universities. We are flexible on the exact locations as long as we can target the proposed geographical group of people.

2.3 Method

Our study plan is focused on qualitative data collection techniques. We combine semi-structured interviews, based on the critical incident technique [5], and drawing tasks to elicit users' mental models of personalization [9]. The interview script consists of questions about demographic data as well as users' technology use, their mental model of personalization and their perception of benefits and drawbacks. The ten main questions of the semi-structured interviews are:

1. Which specific websites did you visit last week?
2. What was your goal when you visited the websites?
3. Did you use different devices?
4. Did you notice that either the content or the interface of the webpage were tailored to you in any way?
5. Did you find this tailoring to you good/bad/helpful/useful? How did you like it?
6. Do you have any concerns about this tailoring?
7. Can you give us an example of a website you visited and you were concerned about the tailored website.
8. Do you think the page knows something about you, and if so, what?

9. How do you think this tailoring was done? Could you please draw and explain your thoughts?
10. Is there anything that you would have (not) liked to be tailored to you?

To better understand the context of use, interviewers may ask additional questions and note down observational data as needed. Moreover, as we assume that individual attitudes towards individualism and collectivism will be of importance for the analysis of the qualitative data, we will use standardized quantitative scales such as INDCOL [10] or the Culture Orientation Scale [6] to better understand our participant sample.

2.4 Participants, Recruiting and Ethical Considerations

All interview questions were designed according to ethical guidelines and all data will be stored and analysed anonymously. Participants will be informed about the goals of our study and asked for their consent before the interview. They will be paid Rs.200 as a token of compensation.

2.5 Schedule

Day 1

- 9:00 - 10:00: Team meeting, briefing, splitting up in smaller groups
- 10:00 - 17:00: Groups go out to their locations and conduct interviews and observations

Day 2

- 9:00 - 11:00: Groups share their findings + insights
- 9:30 - 12:00: Clustering of insights + definition of focus group topics
- 12:00 - 13:00: Lunch
- 13:00 - 14:00: Focus groups and scenario sketching
- 14:00 - 15:00: Summary of results + extracting of recommendations
- 15:00 - 15:30: Wrap-up + definition of next steps

3 Expected Outcome

Findings will help to contrast the views of personalization and privacy as prevalent in Western societies. The findings will further be used to create recommendations and guidelines for personalization and privacy for technological products targeting the Indian market.

4 Field Trip Participants

The field trip will be carried out by researchers from various disciplines and both academia and industry:

Hanna Schneider (Organizer, LMU Munich)
 Florian Lachner (Organizer, CDTM Munich)
 Elaine Brechin Montgomery (Facebook)
 Alfred Kobsa (University of California, Irvine)
 Panayiotis Zaphiris (Cyprus University of Technology)
 Corinne Longman (Google)
 Beth Bergen (Google)
 Anjali Kukreja (HealthKart Gurgaon, India)
 Pratiksha Dixit (Srishti Institute of Art, Design and Technology)

References

1. Abokhodair, N., Vieweg, S.: Privacy & social media in the context of the arab gulf. In: Proceedings of the 2016 ACM Conference on Designing Interactive Systems. pp. 672–683. DIS '16, ACM, New York, NY, USA (2016), <http://doi.acm.org/10.1145/2901790.2901873>
2. Asokan, A.: The space between mine and ours: Exploring the subtle spaces between the private and the shared in india. In: Ethnographic Praxis in Industry Conference Proceedings. vol. 2008, pp. 175–191. Wiley Online Library (2008)
3. Bidwell, N.: Ubuntu in the network: humanness in social capital in rural africa. *Interactions* 17(2), 68–71 (2010)
4. Blom, J.: Personalization: a taxonomy. In: CHI'00 extended abstracts on Human factors in computing systems. pp. 313–314. ACM (2000)
5. Flanagan, J.C.: The critical incident technique. *Psychological bulletin* 51(4), 327 (1954)
6. Gudykunst, B., Singelis, T., Trafimow, D., Realo, A., Triandis, C., Street, E.D.: Converging measurement of horizontal and vertical individualism and collectivism. *Journal of personality and social psychology* 74(1), 118–128 (1998)
7. Hofstede, G., Hofstede, G.J., Minkov, M.: *Cultures and Organizations. Software of the Mind*. McGraw-Hill (2010)
8. Kalyanaraman, S., Sundar, S.S.: The psychological appeal of personalized content in web portals: does customization affect attitudes and behavior? *Journal of Communication* 56(1), 110–132 (2006)
9. Kang, R., Dabbish, L., Fruchter, N., Kiesler, S.: “my data just goes everywhere:” user mental models of the internet and implications for privacy and security. In: Eleventh Symposium On Usable Privacy and Security (SOUPS 2015). pp. 39–52. <https://www.usenix.org/conference/soups2015/proceedings/presentation/kang>
10. Singelis, T.M., Triandis, H.C., Bhawuk, D.P., Gelfand, M.J.: Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-cultural research* 29(3), 240–275 (1995)