

PRIVACY AND PERSONALIZATION: THE STORY OF A CROSS-CULTURAL FIELD STUDY

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Insights

- → In collaborative field research, very different perspectives might meet and challenge each other.
- → It takes close listening, open-mindedness, good preparation, and improvisation to set up a field trip in an unfamiliar context. Close collaboration with locals is invaluable.
- → Despite all preparation, be ready for surprises and welcome them.

In September 2017, we had the chance to conduct a two-day field trip in Mumbai, India. This field trip provided us with a fresh perspective, inspiration, and great human encounters. With this article, we aim to provide insights and motivation, as well as details on planning and conducting an intercultural field trip for researchers considering a similar endeavor. We recount our experiences from the perspectives of both German and Indian participants, from the initial idea to planning and conducting the field trip in collaboration with locals. We also share our lessons and recommendations.

HOW IT ALL STARTED

December 2016, 10 months before the field trip Our identities are complemented by a virtual counterpart, consisting of diverse social network profiles and a data footprint most of us leave when we are online. This accumulation of personal information is used to tailor the content or functionality of Web pages to our preferences, interests, knowledge, and other personal traits. The concept behind this adaptation, or personalization, is simple: Messages, objects, and experiences that we attribute to our self affirm our identity and differentiate us from others. As a

consequence, they seem generally more appealing, more valuable [1], and more persuasive [2]. Personalization makes use of these effects by reinforcing a sense of uniqueness through the interface. This sense of "me-ness" is appreciated by users [3]; moreover, they may benefit from information that is more relevant to them or from functionality that better suits their needs. However, personalization is often done *implicitly* by algorithms. Therefore, users might not understand *why* and *how*—or even might not be consciously aware *that* something was adapted to them that may potentially infringe on their privacy.

To explore individual perceptions of privacy and personalization, we conducted interviews in Germany. Typical reactions to personalized content were Netflix recommendations rated positively and advertisements often seen negatively. The personalization of the Facebook news feed and Google search was met with both appreciation and skepticism. Even though most users enjoyed the benefits of personalization in certain contexts, they were left with some sense of unease. They also wondered where their identities were stored and traced on the Web when they could neither tell nor control what data was collected and how it was processed.

> —Hanna, Florian, Malin, Ceenu, Heinrich, and Andreas Researchers, Germany

Privacy concerns and the wish to control one's online identity came up in most of our interviews. It was the consistency of these findings that made me wonder about our German cultural perspective, as they did not match my experiences at home. Growing up in Europe with Indian parents means having two personas: The first one is studying, working, and socializing in an individualistic culture; the other one comes to life at home, where the Indian, interdependent culture is maintained. Simply said, at home everything has to be shared and all information is public, while at work I was part of a team that investigates the various facets of privacy in HCI. When we discussed this among our research team, we came to the understanding that in order to validate our research into privacy and personalization, we needed to review it in another culture. Around this time,



Team of field-trip participants and organizers discussing first interview results.

we came across the opportunity to conduct a field trip in the context of the INTERACT 2017 conference taking place in Mumbai.

> *—Ceenu* Researcher, Germany

DESK RESEARCH

June 2017,

four months before the field trip We began with a closer look at cultural theory. In HCI literature, crosscultural researchers commonly base their analyses on cultural dimensions. However, these cultural dimensions were defined before current digital technologies began to affect our lives as they do now. As a result, the perceptions of online privacy and personalization in different cultures are not yet represented in established cultural theory. Nevertheless, many well-researched dimensions are related to online privacy and personalization: For example, tolerance for uncertainty, equality of power distribution, and the individual or collectivist orientation of interpersonal relationships [4]; but also the physical distance that is perceived as comfortable [5], as well as the separation of private and public life [6]. Based on the study of these dimensions, one might, for example, hypothesize that individualistic cultures value personalized products or services more than collectivist cultures, or that online privacy concerns are higher in cultures that value offline privacy more as well. However, to truly understand how we can best encourage a culturally sensitive design process for personalized products or services, we would clearly

need a more in-depth understanding, as emphasized by researchers [4]. Research in cross-cultural settings, however, is a challenging endeavor. Physical distance hampers crosscultural studies in general, and the researchers' cultural biases can easily influence the interpretation of insights and results. The concept of a field trip allowed us not only to conduct research abroad under the guidance of local experts but also to jointly gather and interpret insights with researchers and practitioners from different cultures and backgrounds.

> —Hanna, Florian, Malin, Ceenu, Heinrich, and Andreas Researchers, Germany

SIGNING UP AND PREPARING THE TRIP

June 2017,

four months before the field trip I first read about privacy and personalization on the Internet when there were problems related to it in European countries. I was curious to explore this further and thus did more reading about the topic. I talked to my friends and relatives about personalization and, to my surprise, only a few people actually understood the term here in India. When I read about the related field trip on the INTERACT website, I thought it would be an interesting opportunity to delve deeper, and I was eager to be part of it.

> *—Purvish* Field-trip participant, Department of Design, IIT Guwahati

SPECIAL TOPIC

India has always been a culturally rich country. We have a plethora of diversity, yet that diversity is not celebrated. We have an inferiority complex, an undying thirst to copy Western culture. This, of course, is reflected in the products we create (both online and physical). Instead of inventing creative solutions to the local problems that our communities face, we are just trying to copy and paste solutions from across the world. At my organization, for example, a healthcare e-commerce firm, we wanted to create a personalized experience for our users. But personalization often comes at the cost of privacy. My purpose of attending the field trip was to get an understanding of how online privacy is being perceived in India; I felt that this field trip would give me a perfect start toward understanding this issue.

> *—Anjali Kukreja* Delhi, India

When we started planning a field trip on perceptions of privacy and personalization in Mumbai, our first approach was to conduct our studies just as we would have done in Germany, using semi-structured interviews, observation, and a drawing task. In the drawing task, study participants were asked to sketch how products or services (e.g., a social media app) could personalize their content. Our experience was that this set of methods would allow us to holistically tackle our research question.

However, we had read that ethnographic studies by nature are dependent on both contextual knowledge and a well-developed understanding of local peculiarities. We therefore decided to obtain feedback from the field-trip organizers, as we wanted to make sure that our study setting was not biased by our own culturally influenced assumptions. After several feedback loops with them, we realized that some of our questions had assumed a certain understanding of the concepts of privacy and personalization that should not be expected.

We hence adjusted our interview guidelines to the local context and revisited culturally sensitive ethical considerations, for example, the proper wording for our consent forms. The organizers supported us tremendously by recruiting suitable participants in Mumbai, something we would not have had a chance to do remotely. They further helped by planning and scheduling logistics to suitable study locations and contacting local NGOs that supported the field trip.

> —Hanna, Florian, Malin, Ceenu, Heinrich, and Andreas Researchers, Germany

HITTING THE ROAD

September 2017, field trip

Before we began our research, I already had an idea about the type of responses we would get. It was a great challenge for me to not let this bias the interview process. I was driven by a vision to address the issue and create awareness about personalization in India; this field trip was my first step. The day when we were introduced to our fellow participants, I realized I was the youngest of them all, with absolutely no experience. I became nervous, but at the same time I was excited to "interact" with and learn from the professionals from Facebook and Google. They not only played a mentoring role for me but also were open to ideas from my side. Being a local, I was an important link for smooth communication. In total, four among the field-trip participants were locals, so we were able to split up into several groups to conduct more interviews.

> *—Purvish* Field-trip participant, Department of Design, IIT Guwahati

Having arrived the day before, we had already realized that traffic works a bit differently from what we were used to, so we gladly agreed to take a shuttle from the conference hotel to the conference venue on the first day of the field trip. We quickly met the eight other researchers and practitioners (from India, the U.K., and the U.S.) in a special meeting area for all field-trip participants and organizers.

That first day, we interviewed people in Powai, one of the wealthier areas in Mumbai. At the beginning it was quite challenging to approach people on the street and ask if they were willing to take part in our study. Luckily, four local students joined our field trip and hence spoke the language. Additionally, as the field trip was hosted in the name of the INTERACT 2017 conference at IIT Bombay, we had implicit support from a trustworthy, well-known local institution. When it came to providing personal data, most of the eight study participants whom we interviewed that day showed fewer concerns than our earlier subjects in Germany. One example: their readiness to provide personal data for the Indian national ID, the Adahar Card, which stores fingerprints and includes an iris scan. A much bigger concern of our participants was attacks from scammers and hackers-which none of our German participants had mentioned.

On the second day, we traveled to the lower-income area of Dharavi. With the help of a local NGO, we had seven prescheduled interviews at a public building to avoid invading personal spaces in the dense urban area. We observed that social media apps were used extensively and, again, that the main source of concern was attacks from hackers and scammers. Especially for women, uploading pictures was considered unsafe, a statement that we received from both male and female participants. As devices and passcodes were often shared, some participants recounted deleting their chat histories regularly to prevent family members, friends, or hackers from reading along. Implicit data collection, for example through tracking browsing behavior, was not associated with personalized content and thus not among the participants' concerns, in contrast to our observations in Germany.

—Hanna, Florian, Malin, Ceenu, Heinrich, and Andreas German Researchers, now in Mumbai

When it came to providing personal data, most of the eight study participants whom we interviewed that day showed fewer concerns than our earlier subjects in Germany. An interesting belief we observed among the participants was that social media apps, on which they spend a major part of their time, were not hosted by companies that generate revenue from users' online activities. Participants did not have a very clear understanding of how data was being generated by their activities on social media. Sharing images, liking posts, or browsing particular websites was not data that was relevant enough to be misused. Unless the information was being asked for explicitly (like passwords or emails), no other data was considered as being recorded. One participant said, "All my data information is with Mark Zuckerberg, and the government is paying Facebook for each account a citizen created."

Another point that came across in the discussions with the participants was the fact that when the information sharing was explicit, participants felt reluctant to share even the basic details; however, when it was hidden and not perceptible on the surface, participants did not seem to mind sharing their details at all. This was a great takeaway for my project at my workplace: As personalization in the healthcare industry involves a lot of information from the participants, the mode in which the data is gathered should be educational as well as secure for users.

—Anjali Kukreja Delhi, India

REFLECTION

November 2017, two months after the field trip Even though—or maybe just because so many aspects of our field trip in Mumbai turned out differently from what we initially expected, it was a great experience and source of inspiration. We will try to repeat this form of research and to expand it to new contexts. Some lessons and best practices will guide us and hopefully others along the way:

• Seek close collaboration with locals or NGOs who have deeper insights into the culture and situational conditions; ideally get in touch with local participants or SVs as early as possible.

• Learn about technological products and services that potential participants might be able to relate to via desk research or discussions with locals.

• Discuss methods and questions with your local contacts; ideally pilot your



Participants expressing their perception of personalization through drawing and thinking aloud.

questions; prepare alternative or backup questions.

• Give up on the idea of getting everything right: Despite all preparations, you will likely discover that your questions are not understood as expected. This will be fine, however, as you are ultimately doing field trips because you want to be surprised.

We felt that the format and structure offered by INTERACT 2017 combined all the points mentioned here for conducting research in a sensitive, respectful way while providing the support needed. We highly recommend this format for inclusion in other conferences, and encourage other researchers to make use of any opportunity to conduct intercultural field research. From our experience, the step out of the comfort zone that is required to conduct research in different cultures more than pays off: We gained a different perspective on our research topic, feedback on the generalizability of design ideas and potential solutions, inspiration for new research directions, and, last but not least, we met great and inspiring people.

Of course, conducting research in a different culture also means overcoming hesitations and uncertainties and taking a more vulnerable role: During our field trip we depended on the expertise and willingness to help of local participants and fellow local researchers. Students knowing the local reality in our field trip contributed just as much or even more to its success as our own expertise and that of other experienced HCI researchers in our team. When you sign up for a field trip, the package includes surprises, misunderstandings, and unpredictable situations. But if you are willing to improvise and take the plunge, you will most likely have a great experience.

> *—Hanna, Florian, Malin, Ceenu, Heinrich, and Andreas* Researchers, Germany

ENDNOTES

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