File number Cyber.PRI.005/#1640640

Grant Privacy Research in Cyber Environment

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## Title

Mapping Privacy and Surveillance Dynamics in Emerging Mobile Ecosystems: Practices and Contexts in the Netherlands and US

## Abstract

The development of mobile and interconnected computing has, in many ways, positively affected the efficiency, convenience, and enjoyment of people's everyday lives. At the same time, however, these connections and devices increase the potential for more pervasive forms of digitally mediated surveillance by media companies, marketers, governments, employers, and ISPs. This project evaluates mobile users' mental models of privacy alongside perceived social costs (e.g., interpersonal and institutional surveillance), affordances (e.g., ubiquitous communication, facilitated social coordination), and (un)anticipated byproducts (e.g., routine upkeep of profiles and configuring settings) associated with the pervasive use of mobile technologies. This will be accomplished through a collaborative, multidisciplinary investigation of three cross-cutting ecosystems of mobile data sharing that highlight both emergent and longstanding privacy challenges associated with data surveillance: (1) health and fitness tracking, (2) mobile messaging, and (3) intelligent personal assistants.

The proposed research begins with a preliminary understanding of privacy awareness and practices in these ecosystems which will build into the development and implementation of a cross-cultural survey featuring a series of "privacy vignettes." This will serve to evaluate the nuances in privacy concerns across individual characteristics and allow for a dissemination of findings to key stakeholders and policymakers. The research will assist in creating an international working group of researchers in this space and provide new insights into how people develop mental models of privacy and how mobile technologies are changing how people think about privacy and information disclosure.

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## English Summary:

The development of mobile and interconnected technologies has, in many ways, positively affected the efficiency, convenience, and enjoyment of people's everyday lives. At the same time, however, mobile technologies create global privacy and surveillance challenges. The way users, organisations, and governments approach these challenges varies based on cultural norms around privacy. In collaboration with researchers at the University of Maryland and the University of Wisconsin-Milwaukee, this project evaluates how mobile users in the Netherlands and the U.S. think about and make decisions about their privacy and personal data. The project's primary goal is to inform ways of thinking about privacy in the digital age, with an emphasis on tensions between privacy, disclosure, mobility and surveillance. Furthermore, this study highlights important implications for policy decisions regarding privacy.

The first phase of the project develops an understanding of privacy awareness and practices across three mobile technologies: health and fitness tracking apps and wearables (e.g., Fitbit), mobile messaging apps (e.g., Whatsapp), and intelligent digital personal assistants (e.g., Siri). Building on these findings, phase 2 involves the development and implementation of a cross-cultural survey featuring a series of 'privacy vignettes' (scenarios/situations). This will serve to evaluate the nuances in privacy concerns across individual and cultural characteristics. The project's final phase focuses on the dissemination of researchers. This cross-cultural project expands the understanding of the contextual nature of mobile privacy, while also providing practical implications for a Privacy by Design framework.