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Privacy as default.
Privacy by default!

Concept of Privacy in Ubiquitous Computing

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Privacy as default. Privacy by default!
Concept for Privacy in Ubiquitous Computing

Department Interface Design/Design Concepts *(Prof. Heidkamp & Tumminelli)*

Abstract In 1991 Mark Weiser promoted his vision of the computer of the 21st century, that no longer exist as ugly identifiable technology, but seamlessly integrates in our everyday life. Since then 15 years have passed and new technologies like the internet and RFID have arrived to bring the vision to reality.

But looking even at today's use of information and communication technologies, we already have lost control of them. With every new technology and incarnation of their use, we lose a piece of privacy, as privacy is defined as the right to be left alone. We cannot control who collects personal information about us or what happens with this information. Every new technology seems to add to a complete system of surveillance, in which every step of us is monitored. Only ignorance helps to use all of this technologies with trust. Looking at the current system in detail leaves you with very unfomfortable distrust in technologies and the instituitions and companies, that provides them.

This distrust is a catastrophy for the vision of ubiquitous computing. Who would incorporate all this invisible and ubiquitous technologies, if there is no chance in controlling them? So there is a need to reenable trust und therefore control over the technologies and their use. Privacy can't be anymore a default, if we really want the information society, that is proclaimed by the highest councils, shall become a reality.

My work contains a concept of how privacy could be incorporated into everyday's use of information and communication technologies. Not as a complicated add-on, that nobody understands and wants to use, but as an easy unobstrusive matter of fact. Privacy without the necessity of the user's interaction — privacy by default.

But controlling who gets our data is just the half way to privacy. In today's enviroment it isn't too important that we have an easy system of controlling which communication reaches to us, but in an ubiquitous computing future there will be the need to easily control ingoing communication, or we will be overwhelmed by information. Fortunately the concept for privacy that provides the user with a control of who gets information is also useable as a control of wich communication reaches us.

Basically my concept provides a privacy that could be as a matter of course as the technologies of the ubiquitous computing vision will be. It's designed to match with the possibilites of technology and the way they are put in use. So, privacy could be integrated into the information and communication systems, if there would be the will to do so and the enlightment about the importance to do so. My concept is meant as contribution to this discussion, how we will use technology in the future, and how much control we will have over them. A topic that needs to be discussed also by designers, not only by developing new fancy gadgets that adds to the total overwhelming and surveillance, but by thinking about the whole system of thousands of intelligent objects and devices and how we will live with them.

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