

Responsible design of connected objects.

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This position paper will attempt to illustrate how the new paradigm of the “internet of things” will support a shift in thinking in users and professionals towards more responsible and sustainable practices and behaviors, using “Stint”, a service designed around a collectivity of connected objects.

If we dig a little further into the current trend of the “experience economy” and PSS (UNEP) i.e. a product service society, we are encouraged to address sustainability by encouraging people to seek value from what they have access to and not what they own. On the opposite end of the spectrum however, mass customization and rapid prototyping are also on the rise as business practices follow the user-generated trend. Easy access to material goods, however personalized they might be, might lead to what one might call “moral hazard” (Reid J. Lifset, 2005) as our thirst for new and exciting products and material-based experiences have increased tenfold (J.Chapman, 2005). The semantics of objects is lost and disposal is easier because ownership is no longer valuable. This is where connected objects might play an important part.

“The internet of things” seeks to illustrate the value of connectivity and ubiquitous computing by tagging and keeping track of our surrounding everyday objects. This will become relevant in the objects we will design in the future. This means that a layer of retrievable, virtual and linkable meaning can be associated to any given object and as designers we might start to consider objects as part of an ecosystem, a collective, a society of objects. This might in turn address how we design such objects and the interactions we have with them. What are a user’s expectations of a connected object and it’s capabilities? Would the use of an object change when it is semantic understood as belonging to a family? In the case of “Stint”, that question was addressed and offered one of many solutions.

Stint is a music sharing service made of physical tokens that link to people's music. The way that a person collects and interacts with those tokens is communicated to a widget that also talks to the main music application online. Each physical object links to someone’s musical donations. A typical user would therefore collect all these tokens as representations and physical links to the music that each person would send them, in real time. To have access to that music as it reaches each token the user has to push each one. This physical connection with the object itself allows the system to record and track what content is accessed, but also allows the object to take an active part in the system. As time goes by each stint will get used and show who are the people whose collection that person has interacted most with. Inversely she will be able to identify if her friends are listening to her music by looking at their objects or their virtual and connected counterparts.

In this case study, the connected objects were treated in such a way as to physically show and display the use which matched the data being collected. The design approach goes far beyond what is traditionally considered product design (ergonomics, aesthetics, industrial processes) but starts to scratch the surface of

new ways in which practitioners could use technology to infuse life and meaning into objects that make people want to build relationships with them that are more meaningful and rich than what is currently available. A new set of behaviors and semantics will change people's understanding of the material world and eventually change their consumption habits as each object's history becomes as precious as the object itself.

In conclusion we can expect to see a change in the practice of product design as connected objects become more popular. The interconnectedness of physical elements is bound to play a part in how we will design the behaviors and interactions they will have with each other , with their users and between users.

References:

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