Reflection Seminar 1

Design Challenges for the Internet of Things

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Abstract— **This document presents my personal reflection of the first seminar of HCI course. I will analyse the most relevant ideas to me.**

I. INTRODUCTION

In this first seminar Ph.D. Vincent Lewandowski gave a speech about Internet Of Things (IOT) highlighting some of its key ideas, as done in his paper [1]. The presenter, as he admitted at the beginning, had a critical view towards IOT. I suspect he tried to point out the fact that IOT has been overestimated and overhyped by a lot of big companies, which might have missunderstood what IOT role in society should be.

In this regard, he explained how humanity could take profit of these technological innovations. How IOT could be used to really improve society and the environment surrounding us.

At the end of the speech, Lewandowski mentioned the term *Design fiction* and briefly explained it.

II. DISCUSSION

IOT is envisioned as an exciting new wave of technology that will re-invent our daily lives and routines. Thus, big companies and publiciters have tended to overhype its potential, sometimes promising more of utopia-like futures than rather real-like futures.

IOT has been around for a while, but it has had a broader impact in industry than in the consumer side. This is mainly due to the fact that IOT has been prooven to be a good practice to reduce costs in business. On the contrary, in the consumer side, it has not been yet shown to have an explicit purpose. Big companies try to show which is their vision of the future with IOT, trying to engage the public by illustrating how these new technologies could provide innovative tools to solve and/or re-invent daily routines.

As the presenter explained, when IOT is used to re-invent an already existing object should provide a plus-value which *beats* the effort required to the user to maintain it. Otherwise it has no reason to exist. IOT should be based on trying to make our lives easier rather than more complicated.

Lewandowski cited an answer from an interview he had with someone from the industry which was really interesting to me: *Inject magic in unloved objects*. This suggests that creativity has a very important role within IOT. This leads to the concept of design fiction, which aims at designing a product, which pretends to be a functioning actor in the future [2]. In order to accomplish this, designers should be as free as possible in the creation process. That is, maybe neglecting fundamental limits given by the reality we are living in and thus imaging a whole new world with new rules. In short, an alternative reality.

We have a huge responsability in choosing what we should be creating and designing for the future, given that the resources in the Earth are limited. Thus, we have to be very careful what is designed and if it is essential for society. A concept I like a lot is *Minimalism* [3] which tries to live with less but with more happiness. Hence, a question that IOT professionals should ask themselves is

What do we really need?

III. CONCLUSION

I personally enjoyed this presentation, since it introduced some interesting skeptical points. I come from an Electrical Engineering background and I can assert that engineers usually get excited about new technologies but tend to miss the real value of them to society. Technology, just as science and arts have done and still are doing, should help us evolve as a civilzation. If we keep wasting the Earth resources in *useless* products we will probably collapse as a society (if we are not already collapsing) and ultimately we will forget who we really are. Instead, IOT should allow us to discover more about ourselves and strengthen the symbiosis between us and the environment.

REFERENCES

[1] Vincent Lewandowski. Design challenges for the internet of things.
[2] Conor Linehan, Ben J Kirman, Stuart Reeves, Mark A Blythe, Joshua G Tanenbaum, Audrey Desjardins, and Ron Wakkary. Alternate endings: using fiction to explore design futures. In *CHI'14 Extended Abstracts on Human Factors in Computing Systems*, pages 45–48. ACM, 2014.
[3] Amitai Etzioni. Less is more: The moral virtue of policy minimalism. *Journal of Globalization Studies*, 2(1), 2011.