

Editorial: What is Smart?

When discussing Smart Cities, Smart Grid, Smart Mobility and Smart everything, we have to reflect what this means in terms of investment and return. Which options for surveillance and Big Data applications are created? What is really desirable?

Originally, smart technologies comprised digitally enhanced functionality. It was easy to understand what was improved, as in watches the accuracy, in cars the injection, in elevators a clever plan to pick up persons and to accelerate and slow down smoothly.

Today we face an increasingly connected world. The potential for a global and better optimum is always present. However, counter-balances are – if existing at all - hardly considered today: borders of properties, interests, unwanted duplication of data, and decaying privacy are our future needs.

Smart Cities, Smart Mobility, Smart Grids, Smart Home, Smart Car, Smart Socks, Smart Leasing, Smart Configurator, Smart Roadster, Smart Market, Smart Portal, Smart Hotel... today it looks like everything is smart, and if you don't believe it, please double-check with the search engine of your choice.

This resembles the fairy-tale about a robe which is much softer than silk, so soft that you nearly cannot feel it. And this robe, which the smart tailor was in term to sew for the king had another property: only smart people can see the robe, all others don't see that robe at all ...

Smart technologies are wonderful tools to humankind. We have to explore these to understand how to use them in a way which serves us as human beings. With technology and our increasingly interconnected world, many applications and business cases are feasible today:

- We can track anybody's location. We can measure accurately any time how much one is driving and keep this information available for the insurance company. We can use the information to optimise the data traffic flow, to generate advertisements based on one's actual location, and keep all data stored for 20 years for forensic and other investigations. We can collect travel intentions and pool common interests.

- We can measure our consumption on calories, sorted to fat sugar and other ingredients for advising us what to eat, optimising our health, measuring our behaviour and providing that information to insurers. Additionally food distribution could be optimised world-wide.
- We can measure our consumption on energy (electricity, gas and oil) every minute to optimise the balance between supply and demand. Also, we can punish bad behaviour by dynamic pricing mechanisms or by switching off the supply. We can generate personal profiles and categorise individuals in different classes. Based on these classes we can develop new services such that the future need is covered in the best possible way.
- And please add your own visions, how we can make your and our world smarter ...

Reflecting on the above ideas and many additional ones, we can ask ourselves in which world we would like to live in the future? What is desirable? What are the hard boundaries we don't want to cross? Somewhere there is another optimum of smartness with which we are happy to live with.

In engineering, when building such a new smarter world, we have the responsibility to respect one's individual freedom and privacy including the option that we – as human beings – have the right to redefine ourselves according to our will. It is a fascinating time we live in, creating this new and smart world. But we should be careful to avoid ending up naked in front of everybody – just as the king in the fairy tale – without any privacy and self-determination.

As always, selected links – mostly derived from the articles – enhanced with some insider hints, events and exhibitions conclude this issue.

Enjoy reading this issue of the ECN!

PS. Authors willing to contribute to future ECN issues are very welcome.



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