## From factory to living room

The Internet of Things is expanding, and connected cars and industrial plants are just the beginning. The granulate of connected items and areas is growing finer and finer. Whether smart coffee cups and intelligent ballpoint pens join its ranks any time soon remains to be seen. What can be said for sure, however, is that we have entered a new phase of networking, and a glance at upcoming trends will show us what awaits us.

M2M will vanish. In keeping with Mark Weiser's dictum, the most far-reaching technologies will integrate themselves into everyday life, become a matter of course, and by virtue of being ubiquitous they will no longer be perceptible. Automated data interchange between things that are around us is one such technology. In individual areas such as fleet management, M2M solutions are already indispensable. In the future they will extend to more and more areas – both in day-to-day business and in private life.

## *More connections, more knowledge*

Falling prices and the miniaturization and energy-efficiency of modules and sensors are key drivers of this development. The smaller, the less expensive and the more energy-saving they become, the more attractive it will be to connect even seemingly trivial objects such as items of furniture. Today, next to nobody would think of putting an office chair on the Internet with the aid of a box that costs €50, but if the box the size of a cigarette packet was a buttonsized device costing one euro, it would be another matter entirely. As part of a Smart Office landscape the connected chair might, for example, analyze sitting habits and posture, leading to improvements in workplace ergonomics.

When things become smart in this way, they open up entirely new opportunities. We can already see this with, say, vending machines. A vending telemetry solution begins by supporting day-to-day business. Operators can check filling levels and operating data remotely and thereby reduce filling and maintenance costs. In a next step additional services such as mobile payment and digital signage are integrated and connections with social media channels established. But the data collected holds the greatest potential. Operators can see exactly which products are in demand when and where. This knowledge provides them with a totally new basis on which to make business decisions.

## **Connected products for consumers**

Falling prices are also one of the reasons why more and more connected devices and services for private users are coming onto the market, be they wearables like data glasses and smart watches or products for the Smart Home. Unlike in industrial applications these offerings must not primarily reduce costs and simplify processes. They can also simply provide greater comfort or entertainment value. The trend toward a culture of sharing exercises a strong stimulus in this connection. Take car sharing, for example. Free floating offers will only be feasible if the position of available vehicles is easily accessible. M2M is the precondition for making offers of this kind possible.

The trend toward connected everyday life will have repercussions for the entire M2Mindustry. More and more companies that have until now concentrated on B2B-driven M2M business will open up for more far-reaching networking solutions and the consumer-led Internet of Things. They will especially include telecommunications providers. Telcos used to be seen as mere bit pipe providers; today they are seen as paving the way for connected ecosystems such as the Smart Home or the Smart City.



## Contact

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