Welcome to the After-IT World
Will IT Organizations Still Be Around in 2045?

William Koot

In the main, we are not very good at imagining future scenarios, being restrained by our lack of imagination and biased by our experiences of the past. Nonetheless, this past may also remind us of the profound technological changes that have altered our society fundamentally and will probably continue to do so in the decades ahead of us. William Koot argues that information technology (IT) will simply cease to exist. Or at any rate in its current form.

Back to 1985: The Internet, Personal Computers and Mobile Phones Did Not Exist!

Extrapolating trends is a rather risky way of forecasting future scenarios, as unexpected influences – "elephants in the room" – will inevitably have a major impact on them. Influences that are hard to imagine. Nonetheless, looking back at the changes of the past 30 years at least teaches us how profound these changes are. Let's go back to 1985. In those days we used typewriters to write memos and letters. The personal computer was in its infancy and to operate it, one had to understand the rigid command structure of DOS. Phones had wires and certainly no touchscreen, and tapping and sweeping a screen would have sounded like absurd science fiction. In fact, the possibility of playing music or sharing photos via a computer or phone was beyond our imagination. The word search engine didn't even exist at the time. And clouds were things in the sky, nothing to do with giant server farms.

The difference with today's world is spectacular. Our world as we know it can be summarized with Muhammed Ali's famous words: "Impossible is nothing". We have adjusted our expectations and expect flawless and intuitive technology in whatever we do. However, human nature has not changed since 1985, which means that it's still very hard for us to imagine a world beyond the current limitations of technology. Not at all unlike 1985.

2045: Every Product and Person Is Traceable in Nanoseconds

Let's explore the bounds of what we can imagine. First, let's look at the future potential of the search engine that is so dominant nowadays in our personal and professional lives. There's no doubt that search technology will become more sophisticated, and that we will be able to distinguish a variety of attributes, such as smell, taste, texture and so on. Experts expect that we may soon be able to deploy a search engine for the physical world. This may sound far-fetched, but is in fact not so exotic when we consider the current trend towards an exploding Internet of Things, which connects everything to the Internet, from our clothes and our cars to our keys and our pets. In other words: Googling the whereabouts of products and persons is easy and cheap.

In 2045, most organizations will no longer need a CIO to run all technology

The younger generation simply gets it and doesn't need help from an IT professional

2045: Will There Still Be Work for Humans When Robots Perform All Our Activities?

Another area of change is the future of work and employment. This is related to the (renewed) interest in robots combined with artificial intelligence. Ever since the 1960s, Artificial Intelligence has been subject to swinging cycles of hype and disappointment. There is even a term for a period of pessimism: the "AI Winter." Our experience of recent years suggests that this winter is over, with companies such as Google, Facebook and IBM (with its supercomputer Watson) investing in this domain. In the near future, a new class of smart robots may well take over the work of hundreds of millions , from service workers and nurses to clerical workers, as new robots can now execute tasks that previously required both a human *and* a computer. Thus our biggest challenge for the future may be defining ourselves without the notion of "work", because basically "work" will disappear.

2045: IT Departments Will Disappear

Or not. Only time will tell and I'm not pretending to be a futurist. But when looking at the combination of trends, one thing seems perfectly clear. IT will be so dominant in everything we do – and so easy to develop – that it will in fact no longer be a specialized function in an organization. Which, I believe, is a good thing and makes sense too, given the current state of affairs in IT.

Already, computers are no longer the typical playground of the geek squad. The younger generation simply gets it and doesn't need help from an IT professional. Moreover, we don't need a central IT department to keep the servers running. Previously, we needed local expertise to get our IT services. Nowadays we just order it from a website. Compatibility is hardly an issue, driven by a standardization of systems and protocols.

For comparison, think of the water that comes out of your tap. It's simply there. You don't need a water manager in your organization to operate the taps, nor do you need departments to build new taps and to control them. My prediction for 2045 is that information technology will be like water. It's simply there. You take it whenever you need it.

This after-IT world is not the end of IT. It's the end of IT as we know it. What does this imply for the CIO? Could it be the end of this profession? In my view, most organizations will no longer need a CIO to supervise all technology and all information, as this is a responsibility for the business. And we will not have to wait 30 years for this to happen. I expect that from 2025 onwards, most IT departments will gradually disappear.

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