

Guest post - Public Health's Digitization-Boost (- this is no "thank you corona")

Who led the digital transformation of your company?

A) CEO

B) CTO

C) COVID-19

With the outbreak of the pandemic, digitization took up speed rapidly. Just as fast, the question on the drivers of this digital transformation was omnipresent. Implicitly, explicitly, often in a much more serious tone than in the viral tweet I quoted above. It asks for - and suggests - the processes responsible for a paradigm shift towards digitization that so many have been calling for, for a very long time: schools, working moms and dads, companies, hospitals, universities, and above all public administration. All of a sudden, with the precursors of the pandemic, the need for this shift was discussed almost as much as the virus itself. Some even started to see a positive correlation between the ability to survive the crisis and being state of the art digitized, with IT-infrastructure, tools and knowledge.

And rightfully so. Obviously, digital infrastructure and equipment enabled home office and other new-work arrangements and thus have created the possibility to continue working under pandemic conditions. Furthermore, in hospitals and care facilities digital technology prevents death quite visibly: indispensable med-tech, like digital patient monitors, patient records, workflow-planning or other medical devices, aid healthcare professionals in establishing a diagnosis or even surgery. And, additionally, a great share of healthcare digitization happens outside clinics. Society-facing mHealth applications increase effectiveness and efficiency of various processes. A famous example these days is the real time outbreak and epidemic surveillance software, SORMAS. Once built to control Ebola outbreaks in Nigeria, the system now helps track-and-trace corona infection chains in (among others) German, French and Swiss health authorities' offices, thus speeding up paper-based processes with smart, digital data management and worklist management for the staff.

However, compared to other sectors, and globally, the German healthcare sector still falls behind in digitization in many ways. The existing tools could be much more interoperable, much more digital process oriented, much more user-friendly. In some cases, their mere existence would be an improvement. For example, drinking water quality management or school enrollment examinations don't have any digital processes, yet. And we're still only talking about public health.

But, as it usually is, a crisis makes you consider what counts. Hence, it was not very surprising that in response to the pandemic the mHealth services landscape exploded. Countless new tools have been

developed to support health authorities as well as individuals to fight the virus. Health authorities' offices introduced infection chain tracking software, like SORMAS, with - metaphorically speaking - speed of light. Companies, research consortiums, non-for-profits and individuals with civic engagement created a high double-digit number of digital contact tracing tools, that beckon potential with reports about measurable benefits for their users and against the virus. They are great, often altruistic, contributions to our society. They are timely attempts to digitize a sector that has been neglected far too long.

But - plot twist - the perpetually lively debate around digitization and the Covid pandemic comes with an implicit criticism: That digitization is never fast enough. That an organization - be it a private company or a health authority - might never be digitized enough. And this criticism is perfectly justified in many, many cases - like track-and-trace management, which still includes far too many non-digitized components. We needed - and still need - functioning digital tools to get us out of the corona mess. They were and are absent. And their absence has cost lives, and still does. The tricky detail here is that criticism about missing digitization and slow progress was, throughout the crisis, loudest in the public health sector. The very sector whose job it is to help us survive the corona crisis, through public health prevention.

Sure. Public health is one of the least digitalized sectors in Germany, as I've argued above. And looking at and working with many health offices throughout the pandemic I have seen them noting down patients' data on paper, fill them, at the end of their office day, manually into a spreadsheet that gets imported into a surveillance outbreak response management system, and a second (!) system that transfers the data to the RKI. A process that is not only imperfectly digitized but is, especially in cases of data loss or illegible handwritings, jeopardizing lives. Due to avoidable errors, because people can simply not be warned or put in quarantine. Ironically, if a fully digitized system had been implemented before the pandemic, it would have saved crucial time for cluster detection and patient care.

After all, there is no doubt that change is needed. No one wants a new pandemic under these circumstances. All agree that drinking water quality management or school enrollment examinations would be easier if digitized. But change-management on this scale comes with a price. And when sixty contact tracing apps (and many other digital tools) come running at the nearly four hundred German local health authorities *during a pandemic*, they cannot do otherwise but surrender to digitization. They are caught in a dilemma: they want to do everything in their power to carry out their day-to-day business. And that currently means fighting the pandemic. And they want to do it as efficient as possible. And that means digitizing first.

The pandemic blows up their usual track-and-trace processes, that might work for twenty Hepatitis cases per year, but now require very different approaches. But translating to a digital platform takes time and has potential for failure, thus taking more time, the one resource no one has these days. This creates a tug of war you -macro socially speaking- can only lose. Especially when every one of the nearly four hundred local health authorities in Germany is responsible for their own digitization strategy.

From a certain perspective it does look as if our society is unable to act with foresight, as it is busy reacting to pressing issues. Nevertheless, saddling a horse while it runs at full speed is a challenge. I wish the criticism was framed in a way that appreciates the miracles the people in the health offices are performing. Recalling that we all cheered for them on our balconies earlier in the pandemic. Yes, we're not digitized enough. But thinking about it from the perspective that every given technology can ever only be an interim solution until the latest version is overhauled, we can calmly tick c) and start to value the positive effects the pandemic has on societal digitization.

This is not to say "thank you corona". This is to say that sometimes it doesn't matter who the driver of our transformations is, as long as the transformations are useful. This is to say that we should learn from the experiences we made in extraordinary, extreme times and move forward. This is to say "Corona you suck, but we'll make the best of it."

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