At the last IRIS/SCIS (2018), Prof. Tina Blegind of CBS gave a fantastic keynote on the digital transformation of work, aka smart work. I should know this, since I was the one that invited her to do so. Tina’s presentation impeccably went through the different aspects of what smart work is and how it is enabled by technology.

This invariably brings up pictures of a good-looking guy (why always a guy?) working from a hammock, with a laptop on the laps, with a tropical beach in the background. Indeed, time, location, and organizational independency are at the top of smart work benefits. Tina also explored the darker sides of smart work: the control enabled by technology, the isolation from the organizational life, the disappearing boundaries between work life and private life, that ultimately bring to the question: is it smart work or simply hard(er) work?

As correctly pointed out in the talk, the topic of technology enabled work is not new and works by Mumford (e.g., Mumford and Banks 1967) or Zuboff (1988) strongly defined one of the classic areas of study of the IS discipline. In some ways, these studies seem today more modern than ever. Mumford and Banks write:

At the beginning of 1960 we learned that a bank was proposing to install a computer to take over routine branch accountancy. … Initially the bank planned to transfer the work of nine local branches onto the computer but this number was revised to five soon after our investigations began.
Statements like this could easily come from one of the seemingly endless series of reports on work automation that dominate the scene in these few last years. Yet, they refer to the late 1950’s. However much has also changed since these classic studies that call for a revision of their results (Cunha and Carugati 2018). Faster, cheaper, more powerful, more mobile technologies coupled with a different approach to technology, enable the individuals to do more with technology than ever before with the results highlighted above.

However, for every employee that enjoys or suffers the consequences of smart work, there is an organization on the other side that is faced with the challenge of designing this smart way of working. If there is one addition to be made to Tina Blegind presentation, is that the balance of the presentation was towards the employee side. I will therefore provide some balance towards the challenges faced by organizations in the design of smart work. Our research shows that the design of new work and work processes enabled by smart technologies like big data, machine learning, or software robots should not be taken lightly by organizations. The business case of cutting heads (and costs) is simply not an option in today’s VUCA world (Bennett and Lemoine 2014). Facing the dynamic complexities of our times requires a flexible and capable workforce with drive, agility, and curiosity not strained, fatigued employees. Investments in new activities need to be done with a portfolio approach that maximizes the betting average (Fonstad 2017) not with safe business cases. In this world, the winning companies will be the ones able to retain employees with the right culture. Loosing these employees is not an option. So, the work of the future needs to be designed in a way that enables, motivates, and challenges the employees in the right way. And this is a challenge in itself. Our research has been focusing specifically on the work design and change as experienced by banks and their financial advisors with robo-advisors in four different countries. Banks are among the first type of organizations to take advanced IT seriously into work design because of the financial potential of the results. In our study, we are taking a balanced approach collecting data from bank leaders and managers (the designers of the smart work system), the developers and financial advisors (the designers of the smart work system), and the branch personnel and clients (the smart workers and the ultimate judges of the smart work solution). Even if the study is still at the beginning we can observe that the banks are taking different approaches to the ‘smartification’ of the work of the financial advisor: one bank has gone for a standard solution, while the other three have decided to develop proprietary solution. Two banks are planning to put the robo-advisor in direct contact with the client, while for two others the robo-advisor advises the employee. In two banks the financial advisors will face customers that have
already been advised by the robo-advisor, while in the other two banks the client will not even know that the banks use AI in providing them with advice.

Is there a common denominator? All of the banks have in common a design approach of trial and error since the number and configuration of variables on this technological frontier is such that no organization has the luxury to alienate either customers or employees. One of the concerns for the advisors in our case is, of course, that the more automation gets into the provision of services to the customers, the less needed the work of the advisors will be. However, the strategies for smart work design are more concerned with growth with new and better services rather than cost cutting. We see the deployment of four strategies for the design of smart work:

1. Automate: Focus on the automation of high volume, minimally complex, tedious tasks. The bank is deploying artificial intelligence (AI) to automate simple, not value adding tasks, that require limited flexibility. These tasks can be for example, character recognition and data entry from written forms to databases.

2. Optimize: Focus on finding better ways to use the same resources. Banks see in technologies like the robo-advisor also a way to keep active otherwise idle resources. Thanks to technologies like robo-advisors and videoconferencing banks are able to professionalize remote branches and keep them open.

3. Augment: Focus on providing new tools to the advisors to do a better job. One of the tools with which banks are experimenting is a AI based sentiment analysis tool that provides feedback to the advisors about the state of the client during a videoconference session. The client is not aware that the sentiment analysis is being performed but the advisor has live information about the customer mental state and therefore this allows the remote session – where typically some non-verbal clues are missed – to go more smoothly.

4. Predict: Focus on being pro-active in identifying customers’ needs instead of being reactive. Banks are working towards a more in-depth understanding of the customer life events so that the advisors can act proactively in proposing solutions to the clients.

Normally we would expect that the flexibility in terms of when, where, and how employees work would lead to multiple adverse effects associated with new emerging patterns of work. We would expect resistance to participation in the design sprint, maybe even sabotage. Our study is showing that a balanced approach to work design and growth strategies can smooth out these problems. Yet, some projects never go beyond the drawing board, some are bogged down by technical difficulties, some others are instead closed because culture won’t allow them to move forward. A design approach
is sufficient to increase the betting average but it is also a costly strategy if the results of the bet are known before projects are started.

A research agenda for smart work needs take a balanced approach to work design and execution to capture both the organization and the employee perspective. It needs to be both process and variance oriented to provide an understanding of both the why and the what. Finally, it needs to be interdisciplinary to make sure that we do not reinvent the wheel ... every now and then. Tina’s talk showed us egregiously one half of the equation. This commentary merely asks for balancing the scale.

References


