

# Digitalization of the Finance Function

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Digitalization has considerably transformed the finance functions of large multinational corporations. As researchers of the Stockholm School of Economics, the authors have been witnessing this transformation for several years and received insights into how companies expect digitalization to affect the finance function in the future.

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The last couple of decades have shown tremendous change with regards to the roles of the finance function and the way different tasks are organized. For instance, transactional accounting was first centralized and later outsourced, often to low cost countries. Also, the controller function was divided into a statutory dimension and a more business-oriented controller function.

## Summary

- Even though digitalization has already made the work and processes of finance functions more efficient, controllers of large multinational corporations often still do not have enough time to act as business partners.
- Corporations approach this problem in different ways, for instance, by investing in automation or by using various new digital tools.
- The corporations expect that decision making processes will change due to further digitalization in the future, that they will have to become more agile, a cultural change will be needed, and that controllers will require new skills and have to get used to working side by side with robots.

We have been following the development of the finance function for several decades as teachers, as researchers and as program directors of an executive education program for senior business and financial controllers in large Nordic multinational corporations. We understand that one of the major challenges the finance function is currently facing is the digital transformation, which many companies embrace as a do-or-die mantra. As a new set of skills is needed and new professions such as that of the data scientist emerge, the profession of the controller is increasingly questioned and challenged. The main question we examine is how the finance function, given its fundamental responsibilities, which we believe cannot change, will maneuver into new domains and into the unknown.

## Where do we come from?

The basic resource of the finance function is information about the company's activities in the form of data. Today, much of this data is delivered by enterprise resource planning (ERP) systems. However, it is challenging to design an effective ERP system in a large multinational organization with many products and business units. Many of the companies that we talk to struggle to reduce the number of ERPs and to integrate them. The chart of account is a good start, but there is a corresponding need for

integration in related processes and procedures. Too often we have seen an ERP system driving the strategy and the organization, and not the other way around.

Over the years, different hardware and software solutions have been employed to maintain and work with the data. We have seen a substantial growth of releases of new versions and updates of hardware, peripherals, software, network technologies, and other tools, and – at the same time – a vast increase of computing power. One only needs to recall the development from mainframe to mini- and office to personal computers. The development of software tools followed along similar lines, such as in the case of the first in-memory software Visicalc, starting a revolution of new software and leading to the development of Microsoft Excel and other spreadsheet software programs.

It is easy to be impressed by all the visions, expectations, and promises of the various suppliers of hardware and software. However, some fundamental problems remain: As the hardware and the software are complex technical systems, one weak component, such as outdated technology, can compromise an entire system. Moreover, as the complexity of business models increases simultaneously with the complexity of the organizational structure and the speed of business, it becomes more critical to understand and tackle these fundamental problems in an effective manner.

### Where are we heading?

When listening to the companies we work with, we found that there are several ambitious projects related to the digitalization of the finance function. However, we very recently observed the finance function of a major multinational corporation still spending 30 percent of their time on producing management reports – despite of all recent technological developments. Clearly, they could use this time more effectively, for instance, by acting as business partners. Most companies have therefore started to invest in robotic process automation (RPA) in order to pursue automation of the transactional accounting activities.

One industrial company, which we have followed closely over the years, that has chosen to invest in RPAs, can be characterized as a company with a highly decentralized structure at the business area level. It has chosen to insource transactional activities from a supplier located in a low-cost country. In this case, the initiative was taken by a business unit without any formal coordination on the group level. Other companies with a centralized finance function have decided at a

corporate level against developing RPAs, as the calculations were still in favor of external suppliers of transactional accounting. In contrast, a third company with a large number of internal and inter-company transactions clearly sees the benefits of investing in RPAs, one of the reasons being the general need to standardize processes and increase transparency internally. RPA investment patterns are thus dependent upon companies' technological infrastructure. For example, companies with a large number of routine transactions, as those active in the retail sector, it will be easier to build a business case around investing in automation.

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Visualization is another common issue for the Nordic multinational corporations that we meet. All of them have adopted some sort of visualization tool intended to improve the way financial reports are communicated both within the finance function and, perhaps more importantly, externally. Hence, visualization tools are also a way to improve business partnering skills for our case companies. An interesting observation is that products of well-known suppliers are combined with in-house solutions in order to meet specific visualization demands.

Other types of digital technologies, such as blockchain and machine learning, are not used extensively in the companies we follow. This observation has also been confirmed by recent research (Moll/Yigitbasioglu 2019). However, interesting attempts around predictive forecasting can be noted. For example, one company active in the telecommunication industry tested whether human- or machine-based predictions deliver more accurate forecasts, with machines being the better forecaster. However, such attempts are still rare, and even the most advanced companies (those selling the systems) are struggling with their application. Many efforts aimed at digital transformation are still centered around ERP systems. For large multinational corporations, the suppliers are still mainly SAP and Oracle, with the main concerns being whether the ERP systems should be more or less centralized and whether they truly support the strategy of the companies.

However, new technologies like RPA or machine learning per se do not seem to be at the top of the agendas of the com-

panies we study, but rather an activity that has always been a core task of the finance function: closing the books. What is new is that the books are no longer expected to be closed within four to five days after the end of a month. New digital tools make the companies aim for zero days closing or even completely refrain from monthly reporting. It seems to be of great importance to them to always have the reports at their fingertips. They believe that this will facilitate quicker decision making and free up time for other tasks for their controllers. At the same time, they expect the reports, which were previously designed and made available by the controllers, to be available to every decision maker at any time. Hence, both business and financial controllers will need to find new and different tasks to conduct in the future.

### How will the finance function be affected?

It is likely that the digital transformation of the finance function will impact the decision making processes in large multinational corporations. It will influence how fast and where decisions are made. Many of the companies we meet strive to speed up their decision making processes and, at the same

time, free their controllers completely from spending time on generating and designing reports. However, in reality, many controllers still spend a substantial amount of their time on preparing and producing management reports and therefore have limited time to work as business partners. Often, they also have too little time for the communication and analysis of the reports. In consequence, decision making is not prepared for in the best possible way. Decisions may be taken more quickly, but may sometimes be the wrong ones. We therefore believe that decision making will not necessarily benefit from the increased speed. And we are not alone with our worries: Quattrone (2016) sees this as a potential negative effect of digitalization in organizations as well.

*“The companies that we meet have the same type of message for the controller community: You have to change!”*

As information and data are spread more quickly within organizations and access becomes easier, it is even foreseeable that the eternal debate on whether organizations should be centralized or decentralized will come to an end. Cloud-based ERP systems in combination with digital tools may make it easier for companies to be efficient and agile as well as centralized and decentralized at the same time. The controller needs to master an organization that has the capacity to be both home base oriented and organized around global hubs or centers of excellence, resembling what Hedlund (1986) described as heterarchical organizations. However, there are also dark sides of decentralized access to data, as it can be used to build alliances and mobilize relationships for political purposes (see also Hippke/Schäffer 2018) when it is available for actors who previously did not have access to it.

Although they adopt digital tools at a different pace, the companies that we meet have the same type of message for the controller community: You have to change! This not only refers to technological change, as, in fact, many of the companies we talk to emphasize the need for cultural change, both on an organizational level and, first and foremost, on an individual level. It means that individuals should and must embrace the technological and digital change (“because there is no alternative”) and that the required skillset will change. However, it is less clear which exact set of skills will be needed in the future.

### Methodology

This article is based on an ongoing research project on the development on the finance function and the role of business controllers in multinational corporations (Glader/Strömsten 2020). The present article’s empirical data set principally consists of formal and informal interviews with about 30 financial and business controllers in seven Nordic multinational companies. The interviews have been complemented with a large number of company presentations and internal documents around digital transformation within the finance function of these companies. Questions about the design and use of digital tools have been supplemented with questions about strategic and organizational issues in order to understand the context and what fundamental problems the digitalization efforts in the companies we researched addressed. Our research approach was abductive to its nature as our reading of theories (mainly theories about management control and internationalization strategies and control in multinational corporations) informed our understanding and steered our data collection.

Formerly, it was the profession itself which determined what defines a qualified controller (Newmand/Westrup 2006). With the introduction of information systems and later of ERP systems, this changed profoundly. Companies like SAP and Oracle became more prominent in defining and deciding what types of skills were needed in order to succeed as a business or financial controller in a large multinational company. We believe that digital transformation will further reinforce this trend. For instance, companies will require skills in dealing with business intelligence or machine learning from their controllers. Being able to conduct high level analyses based on large amounts of data is frequently mentioned in this context. It indicates that statistics is a skill which many business controllers will likely be expected to master or least to be able to understand in order to assess and value the information that comes out from these types of analyses.

In contrast, when talking to the companies we study, we were told on numerous occasions that a finance degree is no longer considered an absolute necessity for a career in the finance function. This, in our eyes, gives rise to some concern. If there is no one in charge who actually understands the mechanics of accounting and finance and if the business partners are advocates for business to a greater extent than for controlling, we will see decision making going wrong very fast.

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Even though many of the companies we interviewed are inherently positive about the digital transformation, they expect the number of people performing certain tasks in the finance function to decrease. Due to automation, less people will be needed for routine tasks such as preparing reports. They will be replaced by “digital employees” who will take care of the automated accounting transactions. What we find interesting is that these new “colleagues” will belong to the companies’ human resources systems, and will also be given employee numbers, and even be part of certain organizational units. Companies will do so not to make the robots more human, but to make sure that there is someone accountable for the algorithms that run the show.

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