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Headquarters of the future: The impact of digitalization on headquarters structures and value added

WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

Study Report 2019

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Executive Summary

In this report, we describe the results of our study, which investigated how digitalization impacts headquarters (HQs). It is based on a survey with 85 Austria-based top managers from corporate and divisional HQs from several industries. These are our main conclusions:

- Digitalization is expected to fundamentally change the HQ of the future but only 26% of firms seem well-prepared. Digitalization has a big impact on how the HQ of the future will derive decisions, on how the HQ will interact with its subunits, and on how the HQ will add value to the firm. We will give some more examples of these anticipated changes in the following. Yet, only 26% of our study participants strongly agree with the statement that their firms have developed a clear idea on how digitalization influences the HQ and its activities.
- 67% of study participants consider valueadded more important than cost efficiency. To our surprise, digitalizing the HQ is not primarily seen as a means to improve cost efficiencies (e.g., faster and leaner processes or a smaller HQ). On the contrary, about two-third of all study participants consider digitalization especially as a means to increase the value-added from the HQ to the subunits, through:
 - better information for decision making,
 - more timely information for decision making,
 - and a better ability to predict relevant business factors.
- Two-thirds of study participants expect that the HQ will become more powerful vis-à-vis its subunits. Digitalization will impact the relationships between HQs and subunits. The participants anticipate a development towards a more powerful HQ that will involve itself more in the subunits' businesses (36% strongly agree or agree), will become "closer" to the subunits (46% strongly agree or agree) and will take over more activities (52% strongly agree or agree). This means that many firms will face change management and power struggles in the near future. For example, we expect that debates over subunit roles and responsibilities, delegation, and monitoring will become more salient.

- 78% of study participants do not anticipate a significant change in HQ size. Despite the increase in the HQs' power and involvement, the HQ will not change significantly in size. 78% of participants do not expect any or only a small change in the HQs' size (+/- 10%) in terms of employees. This is due to expected efficiency gains or needed investments into central digital teams.
- 56% of study participants expect more room for strategic thinking. Study participants think that HQ managers will have more room for strategic thinking (56% strongly agree or agree). This means that HQ managers expect that their work will be relieved of more operational issues. However, there is disagreement on how the ongoing digital transformation may influence the importance of personal relationships as well as personal accountability, and which role top managers' intuition will play in the future.
- More advanced firms see 8-11% more potential and HQ power. So far, our findings indicate a number of changes for HQs. However, the anticipations of those participants from more advanced firms - firms that already have developed a clear idea of HQ digitalization (26% of all firms) - are systematically different from those of less advanced firms. The average results from advanced firm participants indicate 11% more potential for cost efficiency and 8% more potential for value-creation by the digital HQ. Additionally, they also attribute a stronger position to the HQ within the corporation. Thus, to stay competitive, firms might need to invest now into getting their head around digitalization's impact on what their HQs do and how they do it. Only then, the full impact of digitalization becomes transparent.
- A quarter of participating HQs lack digital talent. Overall, firms seem to possess the required resources and capabilities to digitalize their HQs such as financial resources or access to partners. The only exception is human resources: Only 24% strongly agree or agree with the statement that they have sufficient access to digital talent.



"Thanks to digital tools and systems, there will be more aspects where headquarters have exactly the same insight into facts on the ground as local management, enabling a quicker and more educated dialogue with local operations."

> Finance Director, large industrial firm

Study Motivation & Design

The age of digital transformation

Digitalization has been attracting companies' interest and it has been having wide-ranging consequences for a variety of industries (Porter, Heppelmann, 2014). To this end, companies are dealing for example with big data analytics, automation, artificial intelligence, and the internet of things.

The adoption of these technologies leads to changes in business models, firm processes, and company cultures, amongst others. As a consequence, initial research showed that some firms have already started to restructure (Galbraith, 2012; Davis, 2016; George, Lin, 2017). It is expected that digitalization will also affect the role of HQs and their relationships to their subunits (Schmitt, Decreton, Nell, 2018; Zimmermann, Huhle, Stocker, 2018).

HQs represent central units within corporations (Collis, Young, Goold, 2007). Their goal is to add value to the corporation and their subunits (Nell, Ambos, 2013). In order to do so, they take over tasks such as:

- coordinating subunits,
- monitoring of subunit performance,
- identifying and realizing synergies, and
- allocating resources (e.g., capital or `insights').

Some HQs add a lot of value to their corporations, some struggle to justify their existence. Some are larger, some are very lean. Some work more top-down, some follow more cooperative models. Some increasingly internationalize or outsource activities, some stay integrated (e.g., Nell, Kappen, Laamanen, 2017; Valentino, Schmitt, Koch, Nell, 2018).

Goal of the study

While there has been valuable research on HQs in general (e.g., Kunisch, Menz, Ambos, 2015), it is not clear how digitalization will impact HQ activities and the way HQs add value to the firm.

With this exploratory study, we shed more light on what the effect of digital transformation will be on HQs. We specifically focus on the following questions:

- How does digitalization change how the HQ creates value?
- How does digitalization change the cost efficiency of HQs?
- How will digitalization impact the HQ size in terms of employees?
- What is the effect of digitalization on the way HQ managers operate?
- To what extent do HQs have sufficient resources and capabilities to create the 'digital' HQ of the future?
- Are there any differences between corporate HQs (CHQs), divisional HQs (DHQs) and industries?

Data collection

The study involves HQs located in Austria. We collected data via an online survey and face-to-face interviews. In sum, we received 85 usable responses (response rate of ~10%). Our sample frame of HQs was provided by Headquarters Austria.

Data collection took place between May and September 2018. Our responses come from highly diverse companies in terms of HQ type¹, industry² and firm size:

- HQ type: 79% CHQ, 21% DHQ managers
- Industry: 46% services, 42% manufacturing, 12% finance
- Sales: 21% >1bn EUR, 51% between 100m EUR and 1bn EUR, 28% <100m EUR
- Employees: 19% >5k, 41% between 500 and 5k, 40% <500

Key variables

We pre-tested the survey extensively before data collection. This approach helped us to eliminate questions that were vague or ambiguous. While the questionnaire was in English, the majority of interviews took place in German.

The questionnaire consists of 43 single items. We conducted several factor analyses and formed the following aggregate constructs³:

- Value-added through digitalization of HQ: degree to which the HQ can realize increased valueadded through HQ digitalization
- Cost savings through digitalization of HQ: degree to which the HQ can realize cost savings through HQ digitalization
- Power of the HQ: degree to which the HQ becomes more powerful vis-à-vis its subunits due to digitalization
- Idea precision of HQ digitalization: degree to which the HQ has already developed clear ideas regarding what digitalization means for the HQ
- Availability of resources and capabilities for digitalization of HQ: degree to which the HQ has sufficient resources and capabilities for HQ digitalization

Limitations

While the study yields some first understanding of digitalization's impact on HQs from the perspective of HQ managers, we acknowledge some limitations. First, our study is limited to Austria. HQ managers in other countries may have differing opinions. Second, we rely on self-reported, subjective data. Yet, we believe that these personal anticipations and beliefs of our participants are valuable. Third, our sample procedure is not random, which may bias our result.

³ Factor loadings are all >0.6 and Cronbach Alpha is always >0.7.

¹ We combined 14 area divisions (regional HQs) with four product/functional divisions (divisional HQs) to form divisional HQs (DHQs).

² We clustered the industries according to SIC codes in manufacturing (01-39), services (40-59 & 70-99), and finance (60-69).

Parenting Advantage (I)

Conceptually, the existence of HQs is justified if the HQ achieves a positive net value added for the whole organization. Net value added is value created by HQs minus costs incurred by HQs.

The HQ can create value by:

- designing and implementing an efficient monitoring and control system,
- gathering and processing valuable information to enable improved decision-making,
- identifying and implementing synergies between subunits.

However, HQs also induce costs, for example additional personnel costs and costs of implementing strategic initiatives which tie up managerial resources at many levels of the firm.

Therefore, a net value gain by HQs occurs when the value created exceeds the costs incurred (Goold, Campbell, Alexander, 1994). If this value is positive, the firm profits from a parenting advantage.

In our survey, we asked the HQ managers how digitalization will change the value creation and the cost efficiency of the HQ.

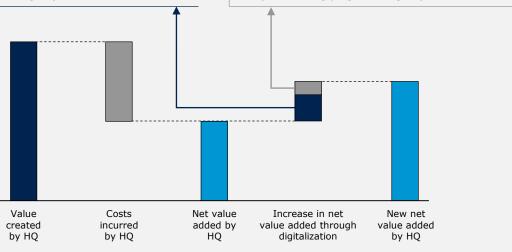
Participants believe that digitalization will improve both value added as well as cost efficiency of the HQ

Top 3 reasons why the digital HQ of the future increases its value added

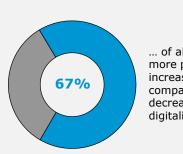
- Availability of more timely information and data for decision-making (92% strongly agree or agree)
- Availability of better information and data for decision-making (86% strongly agree or agree)
- 3. Ability to **better predict** relevant factors (66% strongly agree or agree)

Top 3 reasons why the digital HQ of the future leads to cost savings

- 1. Increase in the **efficiency** of how the HQ is run (75% strongly agree or agree)
- Reduction of administrative work and cumbersome reporting duties for subunits (66% strongly agree or agree)
- 3. Increase in the **speed of decision-making** (59% strongly agree or agree)



Value creation is more important than cost saving potential



... of all participants see more potential for increased value-added as compared to potential for decreasing costs through digitalization



Parenting Advantage (II)

Value added and cost savings

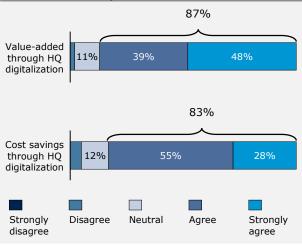
87% of the HQ managers agree or strongly agree that HQs will be able to increase their value-added through digitalization. That is, the HQ will have better and more timely information for decision-making. It will also be able to better predict relevant factors and better strategically guide its subunits.

83% of the participants agree or strongly agree that HQs will become better in cost efficiency thanks to digitalization. HQ managers will increase the efficiency of running the HQ, will increase the speed of decisionmaking and will substantially relieve subunits of administrative work and cumbersome reporting duties.

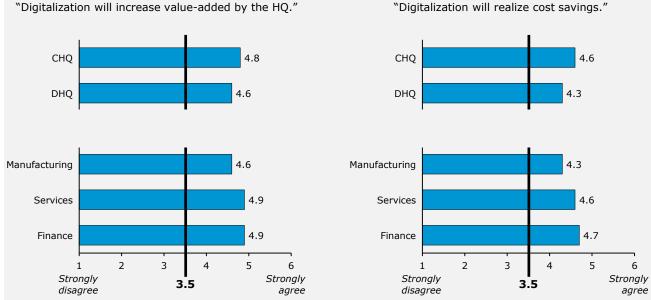
Especially CHQs as well as firms in the services and finance industry see potential for additional value creation and increased cost efficiency (average scores are reported).

Average responses across types of HQs & industries

Distribution of responses



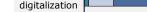
Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.



Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

"I believe that we will have better and more timely information about our businesses and markets, which we can use for better decisionmaking."

> Finance Director Eastern Europe, large consumer goods firm



Power Relationships in Organizations

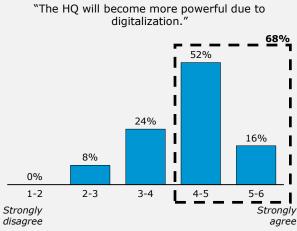
The HQ will become more powerful due to digitalization

In the last decades, many studies observed a trend towards decentralization and flatter hierarchies (e.g., Foss, 2003). The HQ lost importance in the organization.

In times of digital transformation, however, the study participants expect a more powerful HQ again. 68% of participants agree or strongly agree that the HQ will become more powerful thanks to digitalization.

Distribution of responses

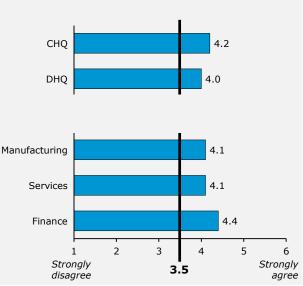
6



Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

This perception holds for all HQ types and industries, but especially the finance industry sees a gain in power for HQs due to digitalization.





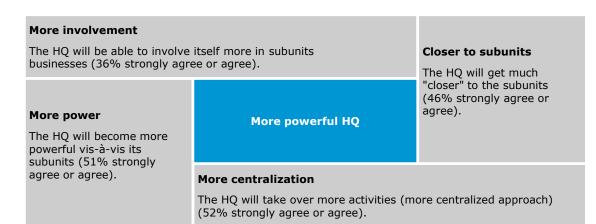
Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.



Consequences of change in power relationships

A more powerful HQ has several consequences for the relationships within the organization. First, the HQ will increase its involvement in the subunits' businesses. The HQ will have better and more timely information about the subunits and this will allow the HQ to know better when to get involved in the subunits' businesses. Hence, the subunits may lose some of their autonomy.

Second, the HQ will get closer to the subunits which may also be connected to the higher availability of reliable and timely information. Hence, HQs are able to understand their subunits better, as they dispose of more (local) information. Third, HQs will take over more activities in the organization, which leads to a more centralized approach, for instance in data and predictive analytics.



Understanding Digitalization's Impact

Only 1/4 of firms seem to be well-prepared for HQ digitalization

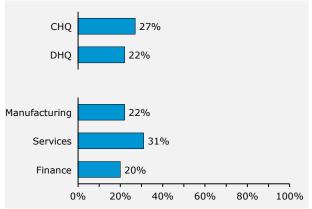
Only 26% of our participants think that their firms have developed a clear idea of HQ digitalization. There is little variation if we look at this percentage on a more granular level.

Share of well-prepared firms across entire sample

26% ... of all partic strongly agree that they have very clear ide digitalization's the HQ

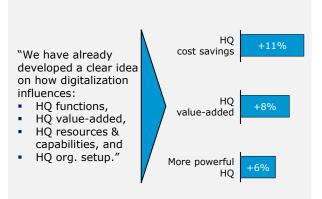
... of all participants strongly agree or agree that they have developed a very clear idea of digitalization's impact on the HQ While CHQs in general and service firms seem to have developed a clearer idea on HQ digitalization, DHQs and manufacturing as well as finance firms are lagging behind in this regard.

Share of well-prepared firms across types of HQs & industries



Understanding digitalization's impact on the HQ more clearly reveals its potential

Effect from understanding HQ digitalization



Those HQs with a clear idea on HQ digitalization are more optimistic concerning digitalization's effect on HQs.

- They see more potential in cost savings (+11%) and value-added (+8%) through digitalization.
- They also think that the HQ will become more powerful vis-à-vis its subunits in the future (+6%).

Thus, to stay competitive, firms might need to invest now to understand digitalization's impact on what their HQs do and how they do it. Only then, the full impact of digitalization becomes transparent.



"From a legal perspective, there are currently clear limits to delegating top management decision making to 'machines'; the legal framework, however, may have to adapt as technology evolves."

Gottfried Gassner, Partner at Binder Grösswang, Vienna

Development of HQ Size

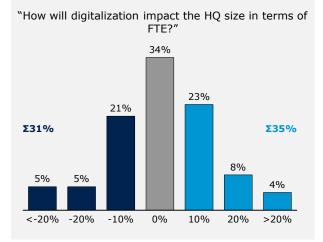
HQ managers do not have a clear opinion on the development of HQ size

Even though the majority of participants thinks that the HQ will become more powerful, there is not a clear picture with regards to the number of FTE that HQs will employ. Roughly 1/3 of our participants think that the HQ will decrease in size, approximately 1/3 do not expect any change, 1/3 expect an increase in HQ size.

Interestingly, especially CHQ representatives and manufacturing firms expect a substantially larger HQ in

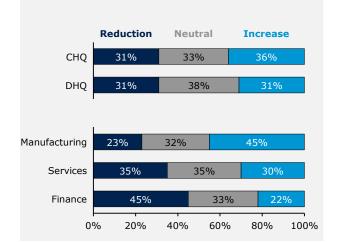
Distribution of responses

8



the future, firms from the financial sector a smaller HQ due to digitalization. 45% of the respondents of manufacturing firms believe that HQs will become larger.

This unclear development reflects the opposing trends of efficiency gains (reduction in HQ size) and an increase in power and activities (increase in HQ size) due to digitalization.

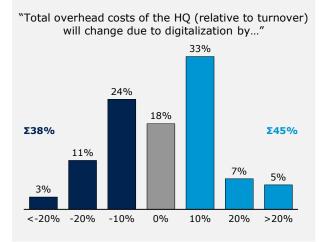


Distribution across types of HQs & industries

HQ managers do not agree on the development of total overhead costs of HQs either

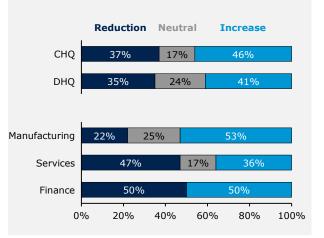
There is no clear tendency with regards to the development of total overhead costs of the HQ either. While 38% anticipate a decrease in costs, 45% expect an increase in costs. Again, especially manufacturing firms see increasing costs, while service firms see potential for cost reduction.

Distribution of responses



Our interview partners emphasized that the time horizon in this discussion matters a lot. In the short term, HQs are expected to invest a lot in the upcoming years in order to keep pace with the digital transformation and to build relevant expertise. The expected efficiency gains through these investments will only pay off later.

Distribution across types of HQs & industries

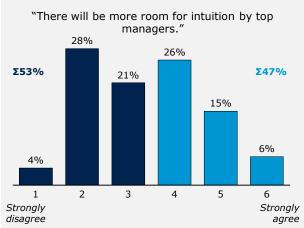


Operations of HQ Managers

Respondents do not agree if room for intuition will increase or decrease

While 53% of HQ managers anticipate that there will be less room for intuition, 47% of HQ managers expect more room for intuition by top managers.

Distribution of responses



Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

HQ digitalization will give HQ managers more room for strategic thinking

A strong majority of 88% of the participants expect more room for strategic thinking at the digital HQ of the future. This might be due to more automated tasks and less effortful fact checking. Participants clearly expect that they can commit more effort to strategic, non-standardized tasks.

"The HQ will have more room for strategic thinking." 35% 32% Σ12% Σ88% 21% 7% 4% 1% 3 1 2 4 5 6 Strongly Strongly disaaree agree

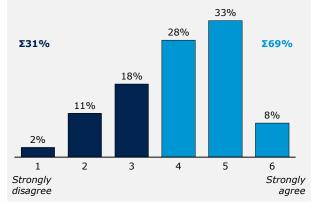
Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

HQ digitalization will increase the importance of personal accountability

A clear majority of 69% of HQ managers think that personal accountability will become more important in the future. Even though some decisions will be taken by machines, firms may become better at tracking and evaluate individual decisions.

Distribution of responses

"Personal accountability will become more important."

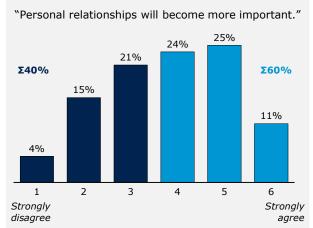


Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

HQ digitalization will increase the importance of personal relationships

60% of participants expect that personal relationships will become more important. Hence, digitalization is not expected to reduce the role of personal relationship. On the contrary. Personal relationship and interaction will still be an important component of HQ management. This is in line with the results regarding personal accountability and more room for strategic thinking.

Distribution of responses



Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

Distribution of responses

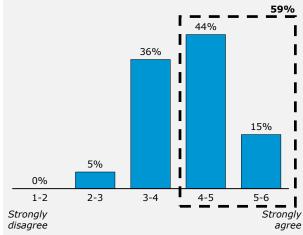
Availability of Resources & Capabilities

HQs appear to be well-prepared for the digital transformation

Overall, HQs seem to be well-equipped for the digital transformation. 59% of participants agree or strongly agree that they have the required resources and capabilities for HQ digitalization.

Distribution of responses

"We have sufficient resources and capabilities to adapt the HQ to the digital transformation."

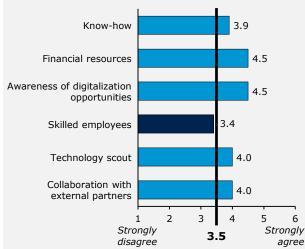


Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

Digital talent represents the biggest barrier to HQ digitalization

The HQ managers indicate that they have the financial resources for HQ digitalization and are aware of digitalization opportunities. However, they lack, to some extent, skilled employees (digital talent). This represents the biggest challenge for HQs and will be crucial for successfully digitalizing the HQ.

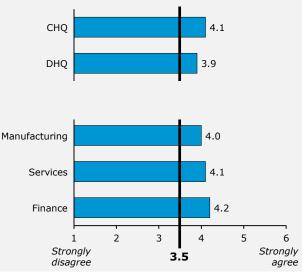
Averages per resource



Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

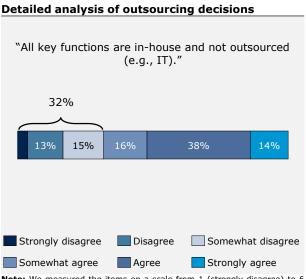
This optimistic view applies to both CHQs and DHQs as well as to all industries, while the finance industry seems to be slightly better prepared than manufacturing and service firms.

Averages across types of HQs & industries



Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.

Almost 1/3 of all participants indicate that they outsourced some key functions such as IT, which are considered digitalization enablers. This may make it harder for those companies to master the digitalization journey. This might increase dependence on third party parties, slow down digitalization, and trigger a wave of insourcing projects.



Note: We measured the items on a scale from 1 (strongly disagree) to 6 (strongly agree) with an expected average of 3.5.



Constructs¹

Value-added through digitalization of HQ (degree to which the HQ can realize increased value-added through HQ digitalization):

- The digital transformation will allow us to have better information and data for decision making (e.g., through more sophisticated data mining tools)
- The digital transformation will allow us to have more timely information and data for decision making (e.g., through real-time dashboards)
- The digital transformation will enable us to better predict relevant factors (e.g., better sales forecasts via predictive analytics)
- The digital transformation will improve performance feedback for the overall corporation
- The digital transformation will improve our ability to strategically guide our subunits (e.g., communicating new insights of how customer benefits can be achieved)
- The digital transformation will improve our ability to transfer best practices to our subunits (e.g., through advanced gaps analysis and process mining)
- The digital transformation will improve our ability to identify and implement synergies between subunits (e.g., due to more and better information about the subunits' contexts)
- The digital transformation will allow us to better allocate our attention to real issues in our subunits (e.g., through AI-driven alert systems)

Cost savings through digitalization of HQ (degree to which the HQ can realize cost savings through HQ digitalization):

- The digital transformation will increase the efficiency in how we run our HQ
- The digital transformation will reduce the complexity of HQ processes
- The digital transformation will increase the speed of decision making (e.g., by having some automated decisions)
- The digital transformation will allow us to allocate capital more efficiently (e.g., digital support to avoid allocation biases)
- The digital transformation will substantially relieve subunits of administrative work & cumbersome reporting duties (e.g., through automated data collection and digitally-enabled shared service centers)
- The digital transformation will lead to substantial cost savings for subunits (e.g., through AI-identified savings potentials)

Power of the HQ (degree to which the HQ becomes more powerful vis-à-vis its subunits due to digitalization):

- The HQ will be able to involve itself more in subunits businesses
- The HQ will get much "closer" to the subunits
- The HQ will become more powerful vis-à-vis its subunits
- The HQ will take over more activities (more centralized approach)

Idea precision of HQ digitalization (degree to which the HQ has already developed clear ideas regarding what digitalization means for the HQ):

- We have developed a very clear idea of digitalization's impact on how the HQ functions
- We have developed a very clear idea of digitalization's impact on how the HQ adds value to the firm in the future
- We have developed a very clear idea of digitalization's impact on what resources and capabilities the HQ needs
- We have developed a very clear idea of digitalization's impact on what the organizational setup of the HQ shall be

Availability of resources and capabilities for digitalization of HQ (degree to which the HQ has sufficient resources and capabilities for HQ digitalization):

- We have the required know-how in the HQ to drive digitalization
- We have sufficient financial resources
- We are well aware of digitalization opportunities for the HQ
- We have enough well-qualified/skilled employees in the HQ
- We are the technology scout for digitalization within the organization
- We have already established a good set of external partners (e.g., with consultants) that help us with digitalization

¹ Factor loadings are all >0.6 and Cronbach Alpha is always >0.7.

References

- Collis, D., Young, D., & Goold, M. (2007). The size, structure, and performance of corporate headquarters. *Strategic Management Journal*, 28(4), 383-405.
- Davis, G. F. (2016). *The vanishing American corporation: Navigating the hazards of a new economy*. Berrett-Koehler Publishers.
- Foss, N. J. (2003). Selective intervention and internal hybrids: Interpreting and learning from the rise and decline of the Oticon spaghetti organization. *Organization Science*, *14*(3), 331-349.
- Galbraith, J. R. (2012). The Future of Organization Design. *Journal of Organization Design*, 1(1), 3-6.
- George, G., & Lin, Y. (2017). Analytics, innovation, and organizational adaptation. *Innovation*, 19(1), 16-22.
- Goold, M., Campbell, A., & Alexander, M. (1994). *Corporate-level strategy: Creating value in the multibusiness company*. New York: J. Wiley.
- Kunisch, S., Menz, M., & Ambos, B. (2015). Changes at corporate headquarters: Review, integration and future research. *International Journal of Management Reviews*, *17*(3), 356-381.
- Nell, P. C., & Ambos, B. (2013). Parenting advantage in the MNC: An embeddedness perspective on the value added by headquarters. *Strategic Management Journal*, *34*(9), 1086-1103.
- Nell, P. C., Kappen, P., & Laamanen, T. (2017). Reconceptualising hierarchies: The disaggregation and dispersion of headquarters in multinational corporations. *Journal of Management Studies*, 54(8), 1121-1143.
- Porter, M. E., & Heppelmann, J. E. (2014). How smart, connected products are transforming competition. *Harvard Business Review*, 92(11), 64-88.
- Schmitt, J., Decreton, B., & Nell, P. C. (2018). Parenting advantage in times of digital transformation: The golden age of corporate headquarters? *Working Paper*.
- Valentino, A., Schmitt, J., Koch, B., & Nell, P. C. (2018). Leaving home: An institutional perspective on intermediary HQ relocations. *Journal of World Business*.
- Zimmermann, T., Huhle, F. & Stocker, A. (2018). Corporate Headquarters Study #CHQbyDesign

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