

Obstacles and Drivers to digital transformation in German family businesses

Percy Menth

Abstract

German family businesses are frequently characterized by a long tradition and hence may be questioned how they will cope with the ongoing digital transformation. In the lens of an obvious gap between the new opportunities arising from digitalization and the commonly related path dependencies, the objective of this paper is to understand why digital transformation in German family firms could fail even before it has started. This paper addresses this issue by reviewing 15 C-level-manager interviews in family businesses that are exposed to digital transformation processes and differ on their individual progress. This study identifies the main obstacles value, leadership, and culture that might promote or constrain digital transformations of family firms. Consistent with the observations “picking up” the people and taking them along on the firm's future trip may be one of the fundamental management tasks in digital transformation processes, while culture can be seen as a key driver for digital transformation and make family businesses unique in a progressively dynamic and competitive setting. As family businesses typically play an important role in all national economies worldwide, the potential contribution of this paper gets amplified.

Key words: digital transformation, family businesses, Germany

JEL Code: M10, M21, O30

Introduction

German family businesses are frequently characterized by a long tradition and hence may be questioned how they cope with the ongoing digital transformation. Following current estimates, firm's digital transformations failures rate from 66% to 84% (Libert, Beck & Wind, 2017). Thus, the balancing of traditional businesses with the new technologies of digitalization seems tough for most of the firms. In the spotlight of an apparent gap between the new degrees of freedoms and opportunities arising from digitalization and the frequently related path dependencies, the objective of this paper is to understand why digital transformation in German family businesses could fail even before it has started. Although there is a growing research attention towards

innovation management (De Massis et al., 2016), empirical insights on how family firms are approaching digital transformation continue to be rather scarce. In this study I will specifically analyze 15 C-level-manager interviews from 15 German family businesses that are challenged with the digital frame conditions and the related needs of their organization's transformation. The results of the qualitative analysis allow me to identify several obstacles and drivers that might be considered when family firms in Germany establishes digital transformation of their businesses. My patterns may give insights why firms could fail with their digital transformation even before they have started and what can be prospective drivers for digitally transforming their businesses. It is also designed for encouraging family businesses and any other type of organization to start digital transformation of their businesses in good time, so that they will be able to enhance their future competitiveness by building bridges to the digital world.

1 Theoretical Framework

There are well-known examples like Netflix, that have transformed their business thanks to the digitalization (Teece, 2018). Though, digital transformation is not always straightforward since there are many reasons why digital transformation may fail. Just to name two of them, that have been reviewed frequently, family firms target digital transformations and end up with digital upgrades, realizing new digital technologies to increase efficiency or effectiveness.

1.1 Digital Transformation

“Digital transformation describes an ongoing process of changes based on digital technologies, affecting companies like a digital revolution of society as a whole and in economic terms in particular” (Wolan, 2018). One term often used in the lens of digital transformation in Germany is called industry 4.0, being mainly related to manufacturing issues and the support of products in production processes. However, and following several authors (e.g. Brynjolfsson & McAfee, 2018), the new digital technologies do not just provide new occasions in terms of production, but also in doing business in general. This paper's focus is primarily on family firm's view and describes the digital transformation of companies.

1.2 Family Businesses

Family businesses are defined as businesses where decisions are influenced by a family invested in the business and providing direction to steer, allocate, supplement, or divest the resources of the business to drive strategic initiatives in pursuit of family-centric goals (De Massis et al., 2014). They are omnipresent in every global economy (De Massis et al., 2018). In Germany, family firms are the oldest and most important organizational form of entrepreneurial activities.

They are considered as the backbone of the German economy (May, 2012). Because of the new framework conditions resulting from digitalization, the German family businesses are facing a variety of challenges, including the digital revolution and the potential disruption of traditional business models (Leitner, Leitterstorf & Kammerlander, 2019).

2 Research Design and Methodology

2.1 Empirical Setting, Research Design, and Sample

This paper is based on qualitative research design. Following (Yin, 2014), I consider the study as “an empirical inquiry that investigates a contemporary phenomenon in-depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. Minimizing external variation beyond the phenomenon of interest (Eisenhardt, 1989), I selected 15 family businesses that are all active in the engineering business but differ in terms of their digital transformation progress. The cases were selected carefully to maximize similarity and variances across the cases, and so to improve theory building (Eisenhardt, 2021). As said by Eisenhardt (Gehman et al., 2017) “theory building [...] is centered on theory that is testable, generalizable, logically coherent, and empirically valid”. Yet, digitalization takes place in a speedy and novel dynamic set, so a quantitative research design might not necessarily be sufficient and valid enough in terms of data. Therefore, and with the objective to find relevant, valuable, and reliable data, the decision was made to prepare and realize modern of science by explicitly selected C-level-manager interviews. Would-be interview partners were those with highest promising background of expertise and experience in digitally transforming businesses with suitable management responsibility and power to action. Still, the prognostic quality of the data is limited due to the highly dynamic field of research.

2.2 Data Collection

Before collecting primary data, secondary data like company websites, and press releases, were reviewed to become more familiar with the individual family businesses history, activities, and latest situation and the interviewees’ background. Key data source was embodied by extensive interviews aimed to capture and contrast the direct experiences of the 15 interview partners involved in digitalization activities. Interviews took place online or personally from January to February 2022 and lasted an average of more than 80 minutes. The 12 questions should offer the most open-minded and broad coverage about the problem fields and alternative solutions and thus served primarily as interview guidelines. Answers were written down, coded, and then categorized. Prior to the realization of the C-level-interviews, the questionnaire was piloted.

2.3 Data Analysis

Consistent with the common practice of inductive multiple-case research (Eisenhardt, 1989), I have analyzed data by primarily developing individual case study summaries, integrating, and contrasting interviews' transcripts and the field records collected before and after the interviews. During this process of analysis attention was always paid on (Eisenhardt, 1989) "to go beyond initial impressions" and use of a replication logic to see if and how the single cases may confirm or potentially refute the findings. Moreover, I stepped through multiple readings of the data to design a data structure. For this purpose, I iteratively coded 1st order data, created 2nd order themes, and aggregate 2nd order categories helping me to identify obstacles of family businesses to digital transformation and drivers to build bridges to the digital world. Afterwards, file cards were created for each of the four pillars value position, profit formula, resources, and processes. Every pillars was given an individual color coding. As the next step, columns were established and relationships between the individual recurring contents created. Then, unique keywords from the recurring contents of the interviews were systematically selected from the file cards and confronted with the scientific fields of tension classified. These were identified beforehand on the results of the literature research with different scientific views. By analyzing, evaluating, and synchronizing the relationships of the repeating contents, connections based on the selected literature and the reiterating interview contents were systematically contrasted. In this way, an evolution of C. Christensen's business model definition (Christensen, 2016), which is principally linked to traditional businesses, can be designed by critically evaluating the model and combining it with relevant indicators developed from the interviews for digital framework conditions. Figure 1 (see appendix) describes this paper's data structure. Starting with explicit 1st order data named by the interview partners, through more general researcher-induced 2nd order guiding themes, to aggregate 2nd order categories. Due to their relevance to business model innovations and digital transformation, 2nd order guiding themes and aggregate 2nd order categories serve as the core for the following grounded theory of obstacles and drivers. Even though this study occurs in dynamic framework conditions, it is not a dynamic model.

3 Findings

Analyzing the 15 cases and interviews enabled patterns to be identified that indicate possible obstacles to digital transformation of family businesses in Germany at the beginning of 2022. These patterns simultaneously allow some indications as to how the restrictions identified could be overcome. They are illustrated on Figure 2 (see appendix).

3.1 Obstacles to digital transformation in German family businesses

In outlining the obstacles to digital transformation in German family businesses from C-level managers' perspective, I start with the 2nd order themes change and confidence from the enabler culture via innovation and entrepreneurship from leadership as the hub to the 2nd order themes technical focus and customer proximity representing the results to culture and leadership.

Change

Like mentioned by FB06, “customers are getting younger, and the user behavior of contacts is changing. Young people are more willing to change, open to experiments, and have different information behavior. As a company, we must respond to this.” This statement indicates that framework conditions have substantially shifted after 200 years of industrial history and that so far valid frames and existing patterns come to their limitations. Enhanced by internal aspects FB03 stated “on the one hand, processes are getting more and more documented and fixed due to their digitalization, and on the other hand, people who are used to acting with entrepreneurial freedom are partially losing freedom.” So, there seems significance to pick up the people early and explain them the urgency of changes effected by the digitalization. Yet, this implies that the management itself has understood the need for changes. Fitting with FB08 there “has been a complete change in mindset. The senior employees thought the young colleagues were crazy by speaking “this will never work, and customers will quit friendship, but “ ... The opposite was the case, many customers said, "Thank God you are finally doing this.”” This illustrates that there might be different trends within family businesses and that older employees in particular can find it difficult to cope with digital transformation. This seems only natural against the background that “we are on the way from the Tour de France to the Ironman“ (FB02). For successful digital transformation the firm's pro-active doings need to be higher than the changes of frame conditions. Being able to walk this route, it seems necessary to think about firms' long-standing corporate structures. One of the family businesses studied has done so and describes that “our latest basic organizational restructuring happened in 2021 with the objective of increasing networking and breaking down silos to increase speed and agility of the family business. Moving from a matrix organization with divisions to more networked cooperation in cross-functional teams as a guiding principle at corporate level” (FB12). Hereby it can also be avoided that “as the family businesses' CEO, I also partly force the employees into the digital transformation” (FB14). Thus, change is the first identified 2nd order theme, resulting from Christensen's business model elements resources and processes.

Confidence

Closely connected to change is the second identified 2nd order theme confidence. FB12's quote "let the technicians do their work and let the salespeople do theirs, they should not bother each other" can be interpreted as silo thinking instead of acting in corporate ways. FB07 underscored this by saying "it is my castle of success" when it comes to internal cooperation. The result may be a lack of trust among each other as it was not learned nor lived in the past. Basically, humans are naturally inert and biased towards changes and transformation. This can be seen for instance in the fact that effects of inertia and bias make realizations of needed innovations in firms more difficult or prevent them completely, as the necessity of innovations is not suitably recognized by the staffs (FB01). It is even more important that employees, as described in the study from (Naveed et al., 2022) agree with changes to make the culture of a firm as successful as possible because according to FB01 the corporate culture, that is the very key to success. Besides, and especially for family businesses with their tendency towards technical perfection it is important for management teams to create a culture in the organization where they consider failure to be a success if identified at an early stage (FB05). "I strongly believe in an open error culture. It is extremely important since it makes an organization fast. Errors are very much related to the confidence of an organization in what the people involved are telling. The greatest asset in an organization is trust towards another person" (FB15). Together, the 2nd order themes change, and confidence form the aggregate 2nd order category culture. In this context and supported by the FB01 statement "The corporate culture, that is the very key to success", culture can be seen as an enabler and starting point of digital business transformation.

Innovation

Deduced from profit formula of Christensen's business model definition, I have identified, that German family businesses are typically inside-out driven, and technical areas are the ones with the power to decide (FB01; FB02; FB04; FB05; FB06; FB09; FB11; FB12; FB13). Firms are proud of this strong technical orientation by underlining the robustness in their present business models since they often sell complex products (FB01). Given the impact of changing conditions on business performance and how the firms address them, I examined that KPIs they rely on to manage business are sometimes counterproductive, as they do not have explicit digitalization KPIs (FB15), and use classical KPIs for all types of business (FB10). Based on the assumption that future innovations should be built on basically different and new paths than those taken in the past, it might be useful to be able to cope with the increasingly complex frame conditions by using both types of KPIs. This is true, even if all the projects a family business is working

on, will complement the current business model because the firm strongly believes that in five years from now, at least 80% of their revenues will still come from hardware in the sense of products (FB05). And it seems even more true from a strategic perspective as many company's ambition to technological leadership, innovations are constantly driven to stay ahead as the core of their attack strategies (FB15). As described by (Christensen, 2016) "to achieve successful business model innovation, focus on creating new business models, rather than changing existing ones". Yet, many of the reviewed family firms assume, that innovations around new product features are the key growth driver or at least one of them (FB09).

Entrepreneurship

Directly connected to innovations is the 2nd order theme entrepreneurship. Here I observed that frequently the patriarch's and accordingly the family's influence on the strategic and operational business is not just evident, but enormous (FB01). In other words, "the family has a great deal of power, which leads to short decision-making processes, but also to very limited critical input from outside" (FB10). This may become critical about digital transformation, as a lighthouse-like orientation set by the family management has a positive effect on the employees, while at the same time too strong leadership can turn out to be contrary to the family businesses' targets, because it takes away the employees' freedom and prevents their potentially good ideas from entering the company. And this effect is strengthened by the fact that it requires the firm's belief of all employees that they need to move towards digitalization. "This might be a problem that SMEs and family businesses, perhaps even particularly in Germany, must deal with" (FB01).

Technical focus

As pointed out by (FB06) "we are a typical German family business with engineers being able to make the most beautiful, the best, and most excellent from a simple piece of iron" As added from (FB12) "our customers appreciate that we offer unique products in terms of functionality and longevity. We specifically address customers with exclusive demands on performance, and who are willing to pay a corresponding price for functionality and longevity". These statements indicate that the German family businesses do have an extremely strong technical focus to their activities. According to (FB15) "the family businesses' depth of added value is quite deep as anyone, who intends to produce in Germany, with its rather high labour costs, must also cover the entire depth of value creation. Moreover, as we were neither able to buy the desired quality nor the technology expected for certain topics, we developed the expertise ourselves and will continue to do so in the future. Hence, our depth of added value correlates with the production depth and vice versa". So, it is not surprising, that family businesses identify themselves about

early involvement of suppliers and strategic partners, to have further potential (FB09). Besides, I identified that from the C-level-view, there is a certain robustness in current business models, and anything tried in terms of business model innovation typically ends up in service, so at best in developing new service models, but no digital business models up to now (FB01). The unique selling propositions from all the family firms studied result from classic technical developments (e.g. FB04). Self-reflecting, FB01 exemplarily remarked that “feasibly we over-specified many products since we always want to be the best from the market point of view”. This might lead to higher complexity, a loss of speed and agility, and reduced business's digital transformation.

Customer proximity

It is essential for companies taking the customer's view and understand them well by referring to customer insights. However, if in times of digitalization salespeople still appreciate face-to-face contacts and knowing all customers personally (FB04) this may be questioned. Currently, this might still happen because family businesses are dealing with a lot of products that need to be explained, which implies that companies on both sides also need physical contact persons. Hence, digital is not yet an option (FB05) and following (FB01) “E-Commerce is not something we actively target, and we are very cautious in our activities”. Family firms state they consider the direct channel to the customer an essential asset and unique selling proposition. Therefore, they do not want to accept any third parties in this distribution channel (FB12). Although the proximity to the customer is very high due to the business model and the professional proximity quite intensive because of the consulting approach (FB08) it is important to mention that it is precisely this very strong proximity to customers that can lead to traditional paths being kept in the future and digital opportunities thus not or not being used sufficiently in the sense of a cross-generational way of thinking and acting.

3.2 Drivers to digital transformation building the bridge to a digital world

What may happen studying digital transformation of family firms, if they continue to strengthen the key findings from 1st order data as obstacles to digital transformation by their behavior? To approach this, I “confronted“ the identified obstacles (aggregate 2nd order categories) with the overall development of digitalization. Drivers identified are: Outside-in perspectives for value, cross-functional organization for leadership and transformation capabilities for culture.

Outside-In-Perspectives

Changing one's mindset from very strong technical focus and customer proximity was identified as an obstacle key finding since family firms primarily favor product innovations and adding

services to the current product portfolios, instead of starting a comprehensive and “real” digital transformation of the firm. It is mandatory to use the digital technologies to shape and further develop the processes from thinking in terms of products and services to thinking and acting in the meaning of values. On behalf of this, it is essential for family firms to transform the present power of the technicians in a fitting way. This is even more basic since ever-shorter product life cycles require an increasing speed of innovation, which the technicians of the businesses may only meet to a limited extent or not at all in the age of digitalization. Mastering these contexts will sooner or later require advanced cooperation with partners. As said by (FB10) “anyone entering networks is a potential provider of benefits to our family business”. Digitalization does not mean translating analog content into 010101. Rather, it is about starting a change of mindset from all stakeholders involved. It includes the value-creating leveraging of data and above the interactions of existing knowledge and data in businesses with the target of creating added value for present and future customers. “Since big data companies bear the risk that we lose the direct customer relationship and thus our relevance with the customer, we must make our data offering attractive to the customer. In other words, I do not want to get disrupted by Amazon, Google nor someone else since we did not do our homework” (FB05). The value by smart data may be understood as an enabler for transforming one’s mindset towards a more outside-in-perspective.

Cross-functional organization

Creating new organizational structures can be a very complex matter, that requires courage, since firstly you need to look ahead and secondly changes always mean changes for employees, too. So, what has already been a challenge in the industrial age is an even greater challenge for managers in times of digitalization. It is necessary to adapt the organizational structures to the new, digital frame conditions providing the best possible conditions for future competitiveness and growth of business. (FB03) can serve here as an indicator, where “in doing so, we have not only streamlined the organization on the top and broadened it at the bottom but have also placed two further topics in top management that were not there before, specifically the expansion of our existing business model and the topics of processes and digitalization. Besides, we initiated a process of streamlining, structuring, illustrating, and defining our multiple processes. Creating structured processes enabled us to digitalize many processes since without digitalization, our family business will no longer be able to exist in a few years.” Moreover, the introduction of a product management team in 2018 built a bridge between engineering and sales for (FB13).

Transformation capabilities

Transformation gains employee's confidence once innovative ideas are shared with something familiar while offering attractive personal benefits in line with people's value system. It allows to bridge path dependencies, which can be described by two aspects: First, in the widespread skepticism in Germany towards new things, and secondly, in the recurring silo thinking instead of more comprehensive view. Transformation capabilities can therefore be termed as the third factor overcoming obstacles to digital transformation of family firms. As described, corporate culture is closely linked to the firm's transformation capabilities. I analyzed this by contrasting the traditional environment with the new environment, the impact of changing circumstances on family businesses' performance and how they deal with it.

4 Discussion

In this study I addressed the question why digital transformation in German family businesses could fail even before it has started. The inductive analysis of 15 cases and interviews revealed obstacles and drivers that may occur when family businesses organize digital transformation.

Culture

As said by (FB01) "corporate culture, that is the very key to success" for digital transformation. So, it is the corporate culture that can be interpreted to make family businesses unique and lead to unique selling propositions, primarily in a more and more competitive environment with fundamental changes in the customer's worlds like user behavior of contacts shifting (FB06). While the world of industrialization was characterized by a culture of analysis and focusing on the use of expert expertise to exploit existing industry standards and rules, in a digitalized world, a distinctive ability for abstraction, networking in a variety of ways and the correlated shifting of limitations are key elements and can be supported by creativity. Creativity can at least partly replace more intensive preparation of decisions. The intention might be to use creativity pushing one's own capabilities to the next higher level, being skillful to provide a value-oriented amount to the own business and to value networks. In this spotlight, the transformation speed appears more essential than perfection. Living creativity in practice, it seems central to move away from the "zero-defect culture" that is usually prevalent in family businesses studied. A certain amount of courage seems needed to be creative strategically and in daily operations. Hence, leaders are invited to rethink the family businesses' cultural artifacts and embrace their new role as leaders.

Leadership

One of the key topics about leadership for C-level managers of family businesses in the context of digital transformation could be to “discover” the balance between the extensive opportunities of digitalization such as digitalization of processes and the - for family businesses typical - traditional elements of culture like openness, and trust (FB03) as “trust towards another person is the greatest asset in an organization like family businesses” (FB15). To reach the overall goals it appears essential for management teams to understand the necessity to communicate a lot and very well to convince the staff (FB03) and to develop clear and reliable guidelines, that should be communicated openly, clearly, and with the maximum level of transparency. Besides, leadership has a lighthouse-like character by giving orientation to the people. However, it must also be considered that too much leadership can turn into the opposite and the staffs can feel restricted in the freedom they are familiar with. Therefore, it might be feasible to combine the traditional understanding of managing in the sense of control with the autonomy in action desired by the people. This thinking is supported by the fact that it requires the firm’s belief of all employees that they have to get on board and move in the direction of digitalization. Leadership can hence be an important capability that improves constant actions combined with ongoing self-reflection of the leaders in family businesses. Consistent with the study, leadership demands the maximum reasonable degree of empathy. “Picking up” the people and taking them along on the common journey can be understood as one of the central leadership responsibilities in times of digital transformation and beyond.

Value

As a firm you deliver value to the customers. Agreeing with the study German family businesses do this preferably with an extreme focus on technology linked to the ambitions of functionality and longevity in their physical products. In some cases, this may extend to the point where they over-specify their products in the meaning of “happy engineering” since they permanently want to be the best from the market’s view despite the fact, this can lead to higher internal complexity including a loss of speed and agility. Consequently, this typically results in reduced business’s digital transformation. It seems valuable to consider that the robustness of the existing business models allows openness to digital products, digital services, and business model innovations. Related to this, it might be beneficial to reflect in parallel on the above-average proximity to customers and newly interpret this in the sense of ambidexterity.

Conclusion

Digital transformation of businesses represents one of the greatest challenges and opportunities for firms and leaders today and tomorrow. In this paper, I studied, why digital transformation in German family business can fail, even before it has started. An analysis of 15 German family businesses by 15 C-level interviews indicated that digital transformation first of all requires to taking people on board. Corporate culture is hence the first evaluated factor to do so. From the observation, employees should be “picked up” by the management and guided in an appropriate manner for the company’s future trip. Balancing the broad opportunities of digitalization such as digitalization of processes and the traditional elements of culture, particularly confidence as a typical pattern in family businesses should be integrated with one another and be attended by an intensive and convincing communication. Moreover, observations of the obstacles in this environment exposed, that family businesses should be aware of the possible tension between entrepreneurial leadership and operational freedom for employees and organize this for future successes. It defines the second factor overcoming the obstacles. As a third possible driver to digital transformation may serve the approach to allow physical products based on high levels of functionality and longevity to get matched with adequate openness to digital products, digital services, and business model innovation in the sense of ambidexterity to create added value to all parties involved. As such, I hope that my study can stimulate future research around value, leadership, and culture in our today’s dynamic world and its multiple opportunities to digital transformation of family businesses.

References

- Brynjolfsson, E., & McAfee, A. (2018). *The Second Machine Age: Work, progress, and prosperity in a time of Brilliant Technologies*. Langara College.
- Christensen, C. M. (2016, September 13). *The Hard Truth About Business Model Innovation*. MIT Sloan Management Review. Retrieved June 22, 2022, from <https://sloanreview.mit.edu/article/the-hard-truth-about-business-model-innovation/>
- De Massis, A., Frattini, F., Majocchi, A., & Piscitello, L. (2018). Family firms in the global economy: Toward a deeper understanding of internationalization determinants, processes, and outcomes. *Global Strategy Journal*, 8(1), 3–21. <https://doi.org/10.1002/gsj.1199>

- De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A. M., & Wright, M. (2016). Innovation through tradition: Lessons from innovative family businesses and directions for future research. *Academy of Management Perspectives*, 30(1), 93–116.
<https://doi.org/10.5465/amp.2015.0017>
- De Massis, A., Kotlar, J., Chua, J. H., & Chrisman, J. J. (2014). Ability and willingness as sufficiency conditions for family-oriented particularistic behavior: Implications for theory and empirical studies. *Journal of Small Business Management*, 52(2), 344–364.
<https://doi.org/10.1111/jsbm.12102>
- Eisenhardt, K. M. (1989). Building theories from Case Study Research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/amr.1989.4308385>
- Eisenhardt, K. M. (2021). What is the Eisenhardt method, really? *Strategic Organization*, 19(1), 147–160. <https://doi.org/10.1177/1476127020982866>
- Gehman, J., Glaser, V. L., Eisenhardt, K. M., Gioia, D., Langley, A., & Corley, K. G. (2017). Finding theory–method fit: A comparison of three qualitative approaches to theory building. *Journal of Management Inquiry*, 27(3), 284–300. <https://doi.org/10.1177/1056492617706029>
- Leitner, L., Leitterstorf, M. P., & Kammerlander, N. (2019). Startups und familienunternehmen : Ein Leitfaden für Unternehmerfamilien und startup-gründer. *EconBiz*. Retrieved June 22, 2022, from <https://www.econbiz.de/Record/startups-und-familienunternehmen-ein-leitfaden-f%C3%BCr-unternehmerfamilien-und-startup-gr%C3%BCnder-leitner-larissa/10012178089>
- Libert, B., Beck, M., & Wind, Y. (2017, April 24). 7 questions to ask before your next digital transformation. *Harvard Business Review*. Retrieved June 22, 2022, from <https://hbr.org/2016/07/7-questions-to-ask-before-your-next-digital-transformation>
- May, P. (2012). *Erfolgsmodell Familienunternehmen das Strategie-Buch*. Murmann.
- Naveed, R. T., Alhaidan, H., Halbusi, H. A., & Al-Swidi, A. K. (2022). Do organizations really evolve? the critical link between organizational culture and organizational innovation toward organizational effectiveness: Pivotal role of Organizational Resistance. *Journal of Innovation & Knowledge*, 7(2), 100178. <https://doi.org/10.1016/j.jik.2022.100178>

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49.

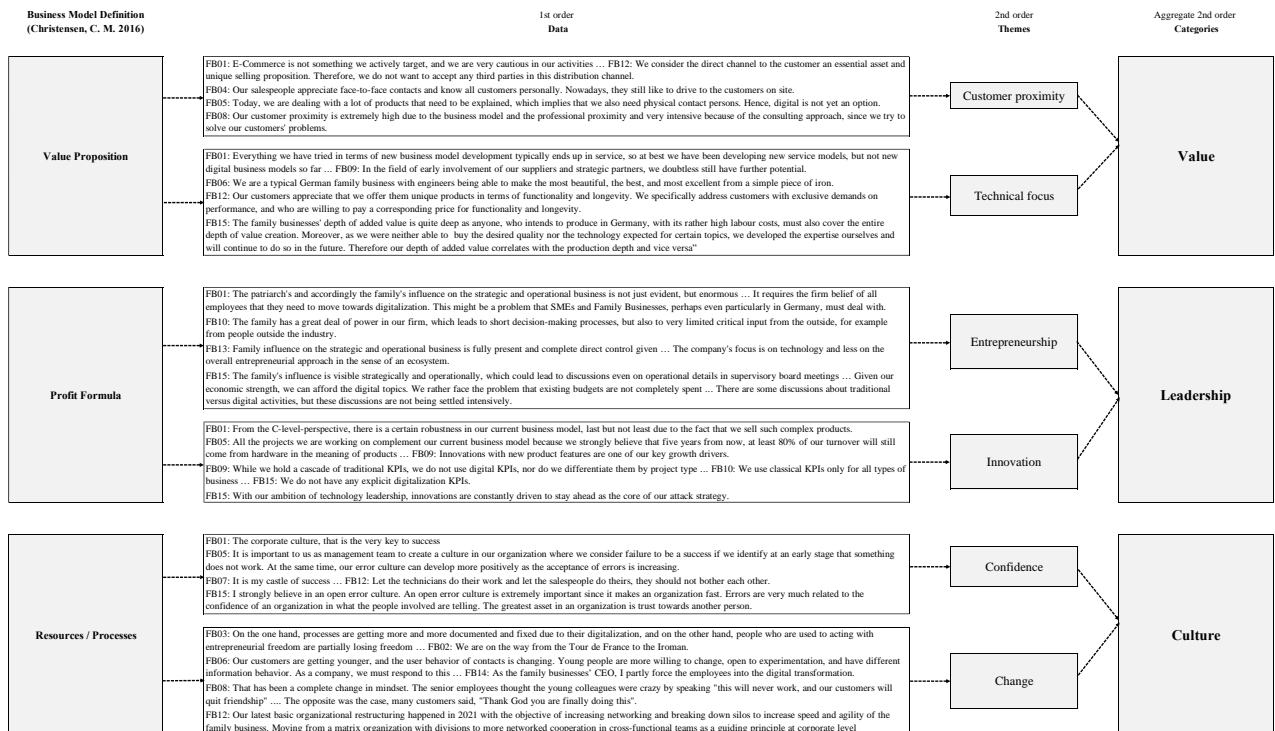
<https://doi.org/10.1016/j.lrp.2017.06.007>

Wolan, M. (2018). *Digitale Innovation: Schneller. Wirtschaftlicher. Nachhaltiger. BusinessVillage.*

Yin, R. K. (2014). *Case study research: Design and methods.* Sage Publication.

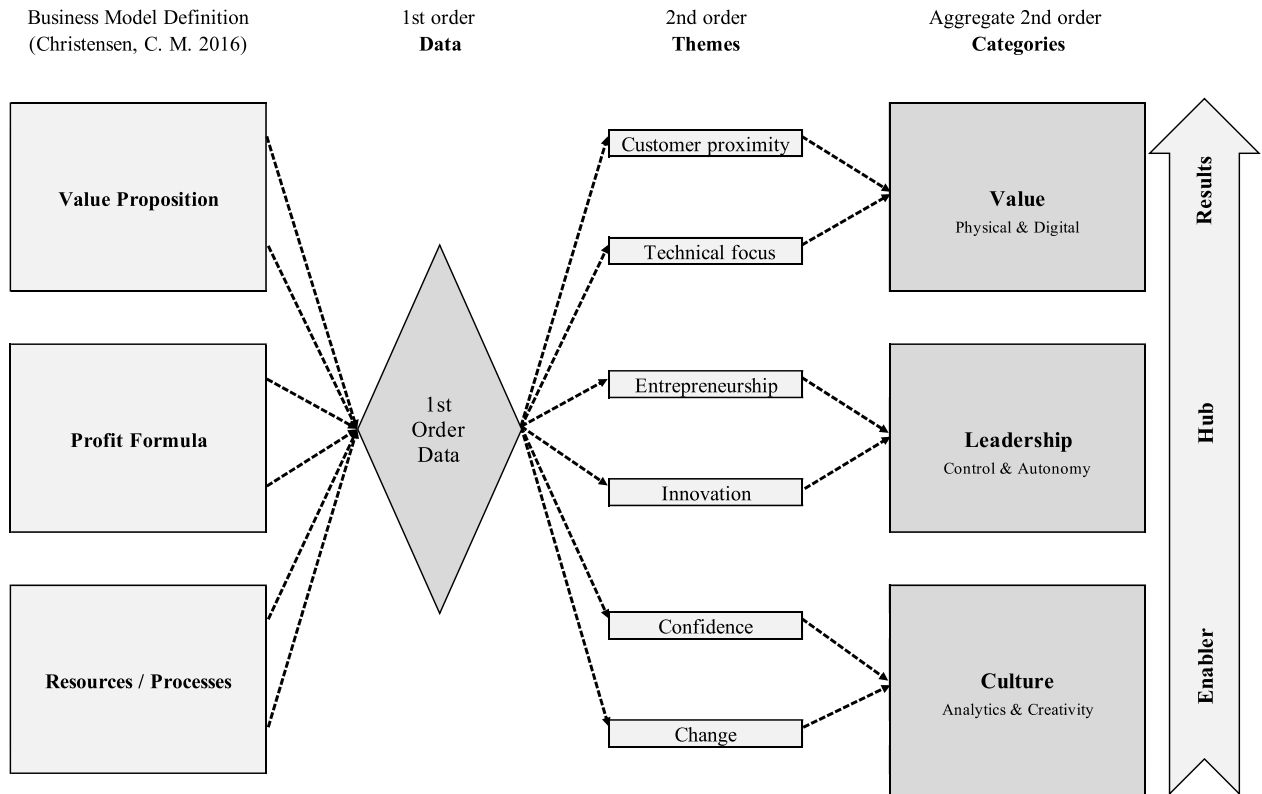
Appendix

Fig. 1: Data structure



Source: Own creation based on 15 C-level-manager interviews' findings

Fig. 2: Emerging patterns to digital transformation in German family businesses



Source: Own creation based on 15 C-level-manager interviews' findings

Contact

Percy Menth

VSE / Prague University of Economics and Business, Faculty of Business Administration
 nám. W. Churchilla 1938/4

130 67 Prague 3 – Czech Republic

menth@percymenth.com