

The determinants and effects of implementing a digital business strategy

Citation for published version (APA):

de Baat Doelman, M. S. (2021). *The determinants and effects of implementing a digital business strategy*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20210302mb>

Document status and date:

Published: 01/01/2021

DOI:

[10.26481/dis.20210302mb](https://doi.org/10.26481/dis.20210302mb)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

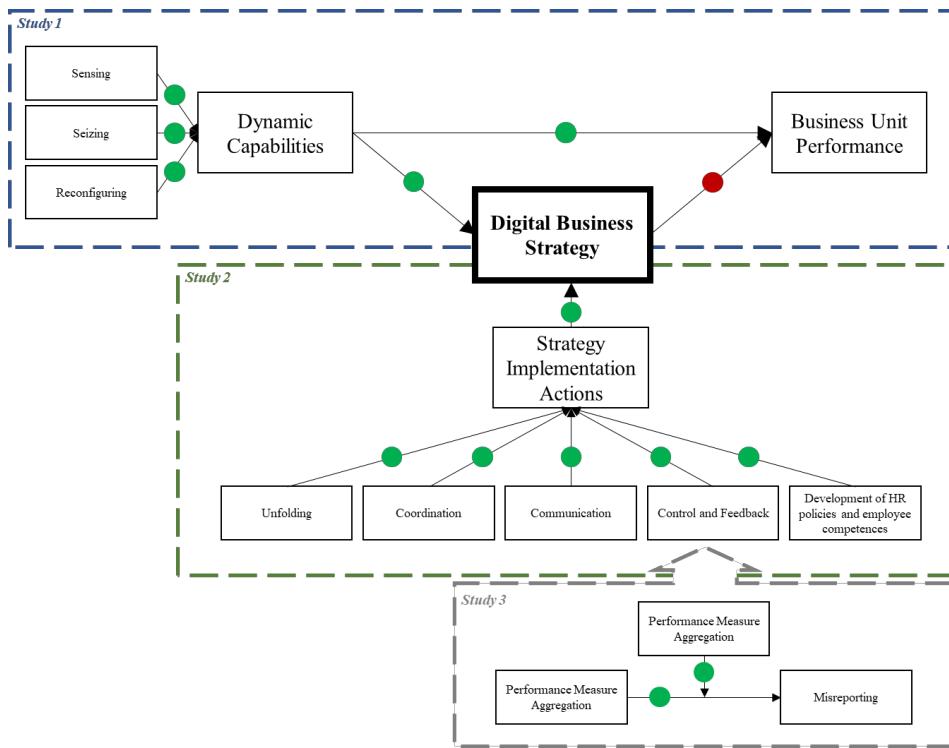
providing details and we will investigate your claim.

5. CONCLUSION

5.1. Summary

In this dissertation, I examine the role of determinants in the implementation process of a digital business strategy as well as the effects of this implementation process. Due to the rapidly changing business environment, largely caused by digitalization, the successful implementation of a digital business strategy becomes vital for many organizations. While multiple studies have focused on the strategy formulation process, we know relatively little about the strategy implementation process. This is particularly true with regards to digital business strategy, since this field has just recently begun to emerge from a combination of the two fields of management information systems and strategic management. In order to shed more light on the developing field, the studies in this dissertation focus on specific preconditions or actions facilitating the implementation of a digital business strategy as well as its effect on aspects like performance. The final conceptualization of this dissertation including the findings of each study are illustrated in Figure 10.

Figure 10
Final Model of Dissertation



- = significant effect
- = insignificant effect

In the first study (chapter 2), I focus on the dynamic capabilities construct as the appropriate precondition for the implementation of a digital business strategy. To explore this field, I investigate the question whether higher dynamic capabilities lead to higher implementation levels of digital business strategy. Further, I analyze the question if stronger dynamic capabilities lead to an increase in business unit performance. Lastly, I explore the question of whether the latter relation is mediated by the implementation level of a digital business strategy. In order to find answers to these questions, I cooperated with a large German manufacturing firm, which had implemented a digital business strategy two years prior to the data gathering process. Using expert interviews and an online survey addressing all senior vice

presidents and vice presidents, I find that dynamic capabilities lead to a higher implementation level of a digital business strategy. I further find that in addition, dynamic capabilities improve a business unit's performance, which further highlights the beneficial role of dynamic capabilities. Lastly, while I find a positive effect of dynamic capabilities on business unit performance, I did not find a mediating effect of digital business strategy on this relation. These findings hold regardless of the implementation level of digital business strategy within a business unit or its daily tasks. Overall, this study adds to the understanding of the required preconditions for implementing digital business strategy.

In the second study (chapter 3), I focus on actions that enhance the implementation of a digital business strategy. Even though the implementation of a strategy is an essential stage to achieve the anticipated success (e.g., Ho et al. 2014; Hrebiniaik 2006), many executives largely focus on the formulation stage. Similar problems can be observed in the academic literature, where most studies focus on the formulation process (Pryor et al. 2007). It is however important for organizations to understand the underlying mechanism during the implementation process, in order to adequately address the threats and opportunities resulting from digitalization. To explore this field, I examine the question of whether strategy implementation actions facilitate the implementation of a digital business strategy. Aiming to answer this question, I used an action component proposed by Oliveira et al. (2019) as the basis for my study and investigated the question, whether their developed actions are indeed crucial components in the strategy implementation process. To examine these questions, I again used all senior vice presidents and vice presidents of a large German manufacturing organization as my sample. I utilized an online survey to get insights on the variables of interest. The findings indicate that the proposed action dimensions by Oliveira et al. (2019) represent important components of strategy implementation actions. I further find that these strategy implementation actions are an important lever towards increasing the implementation level of a digital business strategy. Lastly, the findings indicate that these results are generalizable and that they hold irrespective of the implementation level of digital business strategy already achieved, or the everyday tasks of a business unit. The results of the second study provide novel evidence on the

implementation process of a digital business strategy. The identified strategy implementation actions can serve as guidelines for future implementation initiatives.

In the third study (chapter 4), I focus on a narrow aspect of the strategy implementation actions introduced in the second study. More specifically, I concentrate on the performance reporting process, which applies in the strategy implementation action ‘control and feedback’. As the second study showed that control and feedback actions subsequently result in an increased implementation level of digital business strategy, it is important to identify mechanisms that ensure the correctness of the reported performance. I therefore raise the question of how the required aggregation level of information during the reporting process, as well as performance targets, influence the level of misreporting. The aggregation level of information is an important aspect to consider as it presents the person that reports its performance, with more or fewer instances to misreport actual performance. With regards to targets, their introduction serves as an effective management tool (Locke and Latham 1990) and increases reporting honesty (Newman 2014). Consistent with my expectations, I find that the level of misreporting increases in cases of aggregated performance reporting mechanisms. This finding is however reduced in instances in which performance targets are introduced under more aggregated performance reporting schemes, as they lead to a decrease in the level of misreporting. The results indicate the important interplay of different mechanism in the performance reporting process. It is therefore important to always consider potential reciprocal effects. These findings are especially valuable during the implementation process of a digital business strategy as control and feedback activities play an important role here.

Overall, the three studies highlight that the implementation of a digital business strategy is a highly sensitive topic and depends on the interplay of various factors. First, it is important to establish a common understanding regarding the aspects included in a digital business strategy. As this field has not been sufficiently analyzed in the past, this dissertation adds several aspects to the pre-existing model. Besides the aspects identified in Leischnig et al. (2017), future digital business strategy initiatives should incorporate the fields of data, IT, working methods, culture and customer centricity to the construct in order to have a complete view on the construct. This is an important step in the theory building exercise of digital business

strategy. Second, this dissertation provides important insights regarding the effect of digital business strategy. As I failed to find a positive effect of digital business strategy on performance, it is important to have the right expectations for all stakeholders involved regarding the outcome of implementing a digital business strategy. Recognizing that digital business strategy does not lead to increased team effectiveness does however not state that implementing digital business strategy might result in an increase in different aspects of performance like an increase in capital market rating, employee satisfaction, customer satisfaction, and quality. Third, the findings indicate that concepts like dynamic capabilities or strategy implementation actions, which normally address a different scope, apply in the context of digital business strategy likewise. This points to the fact, that digital business strategy in itself is not a detached concept but is highly interdependent on a diverse set of determinants like activities or competences within an organization. Fourth, the findings of this dissertation give clear guidelines on how to organize the implementation process of a digital business strategy. On the one hand, it is important to consider the given competences as these have a strong impact on the success of an implementation initiative. On the other hand, organizations need to strictly organize their implementation initiative among the five strategy implementation actions (i.e. unfolding, coordination, communication, control and feedback, and development of human resources policies and employee competences) in order to ensure a successful implementation of digital business strategy.

,