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Anika Schroder

Copenhagen Business School, asc.digi@cbs.dk

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AMBIDEXTROUS DIGITAL TRANSFORMATION – A TALE OF A DIGITAL INNOVATION UNIT & ITS MAIN ORGANIZATION

TREO Paper

Schroder, Anika, Copenhagen Business School, Denmark, asc.digi@cbs.dk

Abstract

This study explores the long-term effects of ambidextrous strategies on digital transformation, with a focus on the interplay between a digital innovation unit (DIU) and the main organization towards a unified digital transformation strategy. This study follows an incumbent's digital transformation journey and its strategic move to divide their focus into distinct paths of exploitation and exploration (with establishment of an autonomous internal start-up (so called DIU). Our case study captures the essence of ambidexterity in action, showcasing the delicate balance between leveraging existing assets and exploring new opportunities. Our process model underscores the dynamic and continuous nature of digital transformation, highlighting the complex interplay between stability and innovation in an organization's journey towards digital excellence.

Keywords: Digital Transformation, Ambidexterity, Digital Innovation Unit (DIU).

1 Introduction

Embarking on a digital transformation journey inevitably brings a host of tensions for established organizations. To navigate these complexities, we delve into the digital transformation process of an incumbent. The process of digital transformation has been a research focus for many, with studies highlighting distinctive aspects of the digital transformation journey (see e.g., Scuik et al., 2023 review). Studies range from understanding the process of formulating digital transformation strategies (Chaniias et al., 2019) to demonstrating the development of digital capabilities (Warner & Wäger, 2019). The digital transformation process is characterized by a diverse array of initiatives from incumbents. One initiative that has recently surged in popularity involves the creation of dedicated units specifically designed for digital innovation (e.g., Hund et al., 2021), so-called digital innovation units (DIUs). DIUs can be associated with kick-starting larger digital transformation efforts (e.g., Svahn et al., 2017), which was also the case for the incumbent we examined for this research. DIUs stand out due to their structural autonomy, enabling incumbents to navigate the digital landscape with agility and swiftly leverage new technologies to drive innovation, which might accelerate digital transformation efforts. Thus, we explore: *How does a digital innovation unit interplay with its main organization to shape its digital transformation strategy?*

We use organizational ambidexterity as a lens to understand the interplay between a DIU and its main organization. Ambidexterity refers to an organization's ability to exploit existing competencies while simultaneously exploring novel opportunities. There are three distinct approaches: dividing tasks that focus on exploration and exploitation into separate units (structural ambidexterity), engaging in tasks sequentially (temporal ambidexterity), or simultaneously conducting these tasks within different organizational contexts (contextual ambidexterity) (O'Reilly & Tushman, 2013). Ambidexterity is particularly relevant in digital transformation, as it requires balancing the efficiency of current systems with the agility to leverage emerging digital trends. The juxtaposition of these two strategic

orientations—operational optimization and innovation—often leads to tensions that must be managed effectively in an incumbent’s digital transformation strategy. The establishment of a DIU introduces structural ambidexterity within an organization. This structural separation fosters specialization and allocates dedicated resources effectively but also requires careful integration mechanisms to ensure the organization as a whole remains aligned over time. Thus, we explore the process of an incumbent’s digital transformation by investigating its interplay with the DIU and its mechanisms to align toward one unified digital transformation strategy.

2 Digital Transformation and Digital Innovation Units

Digital transformation (DT) has been conceptualized as the process of change triggered by intentional actions taken by organizational members, without specifying the nature of the transformation itself (Markus & Rowe, 2023). Our research focuses on the process perspective; thus, we adopt Vial’s definition of digital transformation, which is the *"process where digital technologies create disruptions that trigger strategic responses from organizations. These organizations seek to alter their value creation paths while managing the structural changes and organizational barriers that affect the positive and negative outcomes of this process"* (Vial, 2019). Therefore, digital transformation prompts profound changes across multiple levels (Bayiere et al., 2020) of an organization, reshaping both internal and external environments (Chaniyas et al., 2019). One way to respond to these disruptions is through digital innovation units.

Digital innovation units (DIUs) can be seen as pivotal building blocks for structural changes of the digital transformation process, specifically concerning the evolution of value creation pathways (Vial, 2019). DIUs leverage new structures and practices that differ from those of the main organization (Haskamp et al., 2023). While DIUs can be part of various digital transformation initiatives (Jöhnk et al., 2020), they can also play an essential role in the digital transformation strategy (Wiesböck & Hess, 2019). DIUs contribute to organizational ambidexterity (e.g., Holotiuk & Beimborn, 2019); however, further research is needed to understand how DIUs create value for the main organization and co-evolve in the dynamic process of digital transformation (Haskamp et al., 2023).

3 Case Study Methods

To explore how an incumbent navigates these tensions, our research employs a longitudinal case study approach, observing the DT process of an incumbent over an eight-year span. The incumbent, specializing in hardware for the agri-food industry, embarked on its digital transformation journey in 2016 by integrating digital services into its offering. This strategic pivot presented substantial challenges for the organization. In response, management took a decisive step by establishing a new digital innovation unit (DIU) within the firm. Over five years, this DIU evolved into a fully autonomous internal start-up, marking a significant evolution in the company's approach to innovation and digital expansion. To explore the DIU's evolution, we adopt a process perspective to explain the patterns through a dynamic sequence of events (Langley, 1999). Through archival data, interviews, strategic documents, and a three-year ethnographic study (from 2020 to 2023), we piece together the activities and strategies employed by the main organization and its DIU on how they addressed and resolved arising tensions when embarking on a digital transformation journey. An inductive data analysis approach is adopted, constantly comparing different data sources and framing our understanding of the digital transformation process and DIUs based on prior literature. The analysis is guided by data-driven thematic analysis (Braun & Clarke, 2006), and the data is coded accordingly.

4 Expected Contributions

The incumbent’s approach to digital transformation, through the establishment of a digital innovation unit (DIU), represents a sustained effort to balance exploration and exploitation, exemplifying organizational ambidexterity. Whereas structural ambidexterity (achieved by establishing a DIU) is a key component of the digital transformation process. However, other forms of organizational

ambidexterity also emerge, especially in digital product development or specific projects that align closely with the main organization's core business (indicating contextual ambidexterity). Our process model illustrates the evolution of the DIU, identifies mechanisms that facilitate interaction between the DIU and its main organization, and demonstrates how this interplay shapes the digital transformation strategy. This model offers insights into how an ambidextrous organizational setup can expedite the digital transformation journey, while also spotlighting arising tensions with the main organization.

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