Chapter 2

Literature Review

The researcher has studied concepts, theories and related research used to determine the research guidelines as follows:

1. Digital Transformation
2. PEST Analysis
3. SWOT Analysis and TOWS Matrix
4. Resource-based Theory
5. Contingency Theory
6. Related Research

Digital Transformation

1. Definition and Framework of Digital Transformation

By comparing the concept of "digital transformation" in the Chinese and English contexts, we can gain a profound understanding of its impact on the industry and enterprise competitiveness. The two English terms corresponding to "Digitization" are "digitization" and "Digitalization," and they have distinct logical differences. "Digitization" pertains to the conversion of information from analog to digital, as defined by Gartner's IT Glossary. On the other hand, "Digitalization" emphasizes the application of digital technology to transform business models, create new revenue streams, and generate value, as per Gartner's definition.

However, the English equivalent of 'digital transformation' is not 'Digitization' or 'Digitalization.' Instead, the more precise term is 'Digital Transformation' or 'Digital Business Transformation,' which is Gartner's definition of the process. It involves the development of digital technologies and supporting capabilities to create a dynamic digital business model. Thus, digital transformation goes well beyond merely digitizing information; its focus lies in achieving the 'digitization of business.' This, in turn, enables enterprises to develop new businesses, innovative business models, and enhance their core competitiveness in the new digital business environment.

Digital transformation pertains to incorporating digital technologies across all aspects of a business, leading to significant alterations in its operations and the way it provides value to customers (Stalmachova, Chinoracky, & Strenitzerova, 2022,

p.127). This process involves utilizing digital technologies to either form new or adapt existing business procedures, culture, and customer interactions in response to evolving business needs and market demands. The primary objective of digital transformation is to enhance efficiency, agility, and innovation, all while delivering an exceptional customer experience.

Hanelta et al. (2021, p.1165) propose a multi-dimensional framework for studying the of digital transformation as shown in Figure 2.1

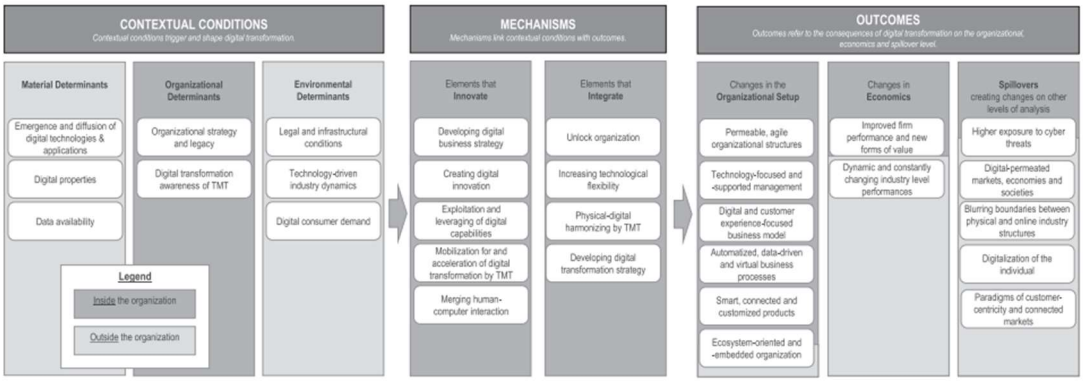

Figure 2.1 Multi-dimensional framework of digital transformation
(Hanelta et al., 2021, p. 1165)

The start of digital transformation (DT) is influenced by contextual conditions, with various factors contributing to and shaping this process. These factors include material, organizational, and environmental antecedents. The primary material antecedents responsible for initiating and shaping DT are the emergence and proliferation of digital technologies and applications. Among these, SMACIT technologies stand out due to their distinctive digital properties, such as reprogrammability, data homogenization, and self-referential nature. The increasing availability of data, facilitated by digital technologies, has significantly elevated the importance of machine learning and data analytics for organizations. As digital technologies are integrated into organizations, they interact with organizational antecedents, and the most influential among these are the organizational and managerial characteristics.

Organizational features encompass the organization's strategy, history, resources, processes, values, and culture. Managerial attributes depend on the top management team's (TMT) awareness of digital transformation to initiate DT successfully. This is demonstrated through a positive attitude towards change and technology. Both material and organizational factors are interconnected and interact with environmental