

Chapter 3

Digital Transformation of Business Models

Summary

This chapter introduces relevant definitions for elements pertaining to the digital transformation of business models. These definitions are developed based upon existing definitions from the field of digital transformation. The concept of a business model is also explained. Lastly, the definition and development of the digital transformation of business models is presented.

3.1 Digital Transformation

There is currently no single, commonly accepted definition for the term digital transformation, although we have arrived at one for the purposes of this book. Moreover, the terms digitization, digitalization and the digital age are often used interchangeably (BDI and Roland Berger 2015: 4). Selected definitions referring to digital transformation are shown in Table 3.1.

BMW_i does not explicitly define their concept of digital transformation, but does emphasize the importance of digitalization. Digitalization is considered to be a networking of all areas of business and society. In addition, digitization is the ability to collect relevant information, analyze it and translate into actions, which is linked to the topics of big data and analytics (BMW_i 2015: 3).

Bowersox et al. use the term digital business transformation and their definition includes the process of redefining a business, digitizing processes, and expanding relationships across multiple value-added chains. They see the challenge for management to be leading companies and leveraging the full potential of information technology along the entire value chain (Bowersox et al. 2005: 22). Several dimensions of digital transformation are relevant.

Westerman et al. understand the role of technology in digital transformation to be the enhancement of the performance or the reach of companies. The use of new

Table 3.1 Selected definitions of the term “digital transformation”

Reference	Definition
BMWi (2015: 3)	Digitization stands for the complete networking of all sectors of the economy and society, as well as the ability to collect relevant information, and to analyze and translate this information into actions. The changes bring advantages and opportunities, but they create completely new challenges
Bowersox et al. (2005: 22ff)	Digital Business Transformation is a “process of reinventing a business to digitize operations and formulate extended supply chain relationships. The DBT [Digital Business Transformation] leadership challenge is about reenergizing businesses that may already be successful to capture the full potential of information technology across the total supply chain”
Westerman et al. (2011: 5)	“Digital Transformation (DT)—the use of technology to radically improve the performance or reach of enterprises—is becoming a hot topic for companies across the globe. Executives in all industries are using digital advances such as analytics, mobility, social media, and smart embedded devices—and improving their use of traditional technologies such as ERP—to change customer relationships, internal processes, and value propositions”
Mazzone (2014: 8)	“Digital Transformation is the deliberate and ongoing digital evolution of a company, business model, idea process, or methodology, both strategically and tactically”
PwC (2013: 9)	Digital transformation describes the fundamental transformation of the entire business world through the establishment of new technologies based on the internet with a fundamental impact on society as a whole
Bouécé and Schaible (2015: 6)	We understand digital transformation as a consistent networking of all sectors of the economy and adjustment of the players to the new realities of the digital economy. Decisions in networked systems include data exchange and analysis, calculation and evaluation of options, as well as initiation of actions and introduction of consequences

technologies serves to address the following dimensions: operational processes, customer experiences, and business models (Westerman et al. 2011).

Mazzone (2014: 8) defines digital transformation as the conscious and ongoing digital evolution of a company, a business model, an idea, a process, or a method, which can be both strategic and tactical. This definition shows that digital transformation can also relate to different dimensions.

PwC (2013: 9) defines the digital transformation as a transformation of the corporate world through the establishment of new technologies based on the internet that impact society as a whole. It is clear that the use of new technologies is at the forefront of this definition.

Bouée and Schaible (2015: 6) understand this trend as the networking of all economic sectors and the adaptation of the actors to new realities of the digital economy. To do so involves decisions about networked systems, which includes data exchange and data analysis, the calculation and evaluation of options, as well as the initiation of actions and the introduction of consequences.

Digital Transformation

The digital transformation framework includes the networking of actors, such as businesses and customers, across all value-added chain segments (BMW 2015: 3; Bowersox et al. 2005: 22; Bouée and Schaible 2015: 6), and the application of new technologies (PwC 2013: 9; Westerman et al. 2011: 5). As such, digital transformation requires skills that involve the extraction and exchange of data as well as the analysis and conversion of that data into actionable information. This information should be used to calculate and evaluate options, in order to enable decisions and/or initiate activities (BMW 2015: 3; Bouée and Schaible 2015: 6) which increase the performance and reach of a company (Westerman et al. 2011: 5). Digital transformation involves companies, business models, processes, relationships, products, etc. (Bowersox et al. 2005: 22; Mazzone 2014: 8).

3.2 Business Model

To fully address this trend, it is important to first define the term, “business model.”

Definition 1: Business Model (Schallmo 2013: 22)

A business model is the basic, underlying logic of a company which describes what benefits are provided to customers and partners. A business model answers the question of how the benefits provided by the company also flow back into the company in the form of revenue. The value created enables a differentiation from competitors, the consolidation of customer relationships, and the formation of competitive advantage. A business model involves the following dimensions and elements:

- The *customer dimension* contains the customer segments, customer channels, and customer relationships.
- The *benefit dimension* includes products, services, and values.
- The *value-added dimension* includes the resources, skills, and processes.

(continued)

- The *partner dimension* includes partners, partner channels, and partner relations.
- The *financial dimension* includes revenues and expenses.

The objective is to combine the business model elements in such a way that they mutually reinforce each other. Thus, it is possible to achieve growth in a way that is difficult for competitors to imitate.

3.3 Digital Transformation of Business Models

Based on the aforementioned statements and the definition of Business Model Innovation (Schallmo 2013: 29), we define the digital transformation of business models as follows:

Definition 2: Digital Transformation of Business Models

The digital transformation of business models relates to individual business model elements, the entire business model, value-added chains, as well as the networking of different actors in a value-added network.

The degree of the digital transformation relates to the incremental (marginal) as well as the radical (fundamental) change of a business model. The reference unit with regards to the level of novelty is primarily the customer, but it can also affect its own business, partners, industry, and competitors.

Within the digital transformation of business models, enabler(s) or technologies (e.g., big data) are used to generate new applications or services (e.g., on-demand predictions). These enablers require skills that make data collection and exchange, as well as analysis, possible, which the enablers must be able to use to calculate and evaluate options. The options are then used to initiate new processes within the business model.

The digital transformation of business models is based on an approach which includes a sequence of tasks and decisions that are related to one another in a logical and temporal context. It affects four target dimensions: time, finance, space, and quality.

Figure 3.1 presents digital transformation of business models definitions and components.

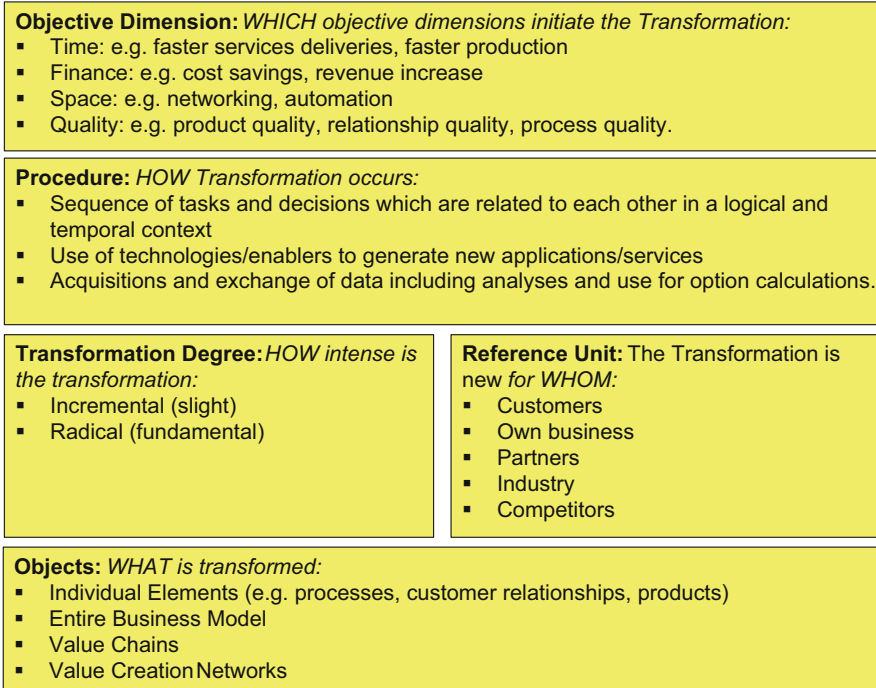


Fig. 3.1 Digital transformation definition

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