Chapter 27

Mergers and Acquisitions as Enabler of Digital Business Transformation: Introducing an Integrated Process

Leonhard Riedel and Reza Asghari

Abstract Digitalization requires business development agents to align their business models to meet customer demands and competition requirements. To achieve this transformation however is a challenge for incumbent organizations, since over time they have often developed rigidity and they might suffer under lack of necessary competencies. Acquiring digital start-ups is an often used and promising strategy to close these feasibility gaps. However, digitalization and mergers and acquisitions have not yet been brought together in business sciences. Therefore, this paper aims on identifying process steps of both, digital business transformation and mergers and acquisition models and to relate these process steps for designing a new integrated process. Finally, the resulting process is described in terms of main tasks and their sequence. The paper concludes that future research should focus on integrating operative methods to provide further support for incumbents when facing digitalization.

Keywords Digitalization · Mergers and acquisitions · Business transformation

27.1 Introduction

Technological achievements are a major driver of organizational change. There are various ways in which technological progress can affect innovating firms. It can lead to new opportunities for product innovation, value creation or business models. However, opportunities and risks often arise at the same time. New competitors can enter the markets and changing customer requirements must be understood and met (Zainun and Smith 2011).

Innovating incumbencies are often confronted by two main challenges relating technological progress. On the one hand, they are required to establish a suitable knowledge fundament within the organization as a pre-requirement for innovation.

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On the other hand, they need to harmonize the firm's managerial system of coordination and control according to these technology-related external changes (Pavitt 2005). Especially today, in times of ever accelerating technological progress, this means a severe challenge for established enterprises (Peter 2017). Digitalization, a term used to describe the managerial issues that emerge by new digital technologies, requires managers to find the ideal organizational configuration. This is achieved by multifaceted change processes, often referred to as digital business transformation (DBT) (Obermaier 2016; Bowersox et al. 2005; Picot et al. 2017). DBT can provide benefits, such as increasing customer satisfaction and loyalty, improving process efficiency or creating new revenue streams. Corporate organizations are entailed to carry out DBT to maintain their competitiveness (Teece and Linden 2017). Yet, DBT requires certain digital competencies and business agility that both often lack in incumbent organizations (Augsten et al. 2017; BMWi 2016). While only a few incumbents have these characteristics, they are particularly pronounced in digital start-ups (Kreutzer and Land 2013). Collaboration and alliances among established firms and digital start-ups thus can be a promising strategy. While incumbencies profit by overcoming their feasibility gaps by acquiring lacking digital technologies and competencies, start-ups can benefit mainly by access to lacking resources (Leube and Grellier 2017; Islam et al. 2017).

There are several forms of how incumbencies can cooperate with start-ups. Mergers & Acquisitions (M&A) is the most intense and financially riskiest form of cooperation. Yet, it allows to attain the entire technology stock and competence properties of a start-up and consequently enables for the most radical DBT in a short time (Ernst and Young 2019; Feix 2018). In practice, organizations are already using M&A activities for DBT. In literature however, DBT and M&A have yet only been subject of distinct research fields. This paper attempts to close the gap by suggesting a procedure that includes phases of DBT and M&A. Enterprises benefit by our findings as our approach helps navigating along the DBT process and highlights M&A as a feasible strategy to foster DBT capabilities. The paper aims on a consistent and harmonized process. The resulting process addresses both key challenges of technology induced organizational change mentioned above. First, the development of a required knowledge foundation to carry out DBT by acquiring required competencies. Secondly, the M&A integrated DBT process supports organizations to coordinate and control organizational change by providing a systematic guideline.

To achieve these goals, Sect. 27.2 presents process steps of DBT and M&A as a foundation for the integrated process. In that section, several process steps are derived from two literature reviews. Section 27.3 allocates M&A and DBT process steps and provides a step by step description of the integrated process. The paper closes by a brief discussion and conclusion.

Table 27.1 Review on process steps of DBT

References			Process steps			
Bloching et al. (2015)		Analyze digitalization effects on industry	Reflect on corporate situation		Implementation roadmap	
Carolis et al. (2017)		Maturity assessment	Strengths and weaknesses	Opportunities Identification	Digital roadmap	
Deloitte and Touche GmbH Wirtschaftsprüfungsgesellschaft (2019)		Sensitization	Implementation	Transformation	Continuous innovation	
Esser (2019)	Analysis	Strategy	Design	Impact	Transformation	
Schallmo (2016)	Digital reality	Digital ambition	Digital opportunities	Digital fit	Digital implementation	
Botzkowski (2018)	Analyze imminent disruption	Business model and value chain status	Transformation Goals	Check available resources	Business transformation	Evaluation and learning
Issa et al. (2018)	Task force setup	Digitalization assessment	Focus definition	Use case idea generation	Use case impact estimation	Use case selection

27.2 Elements of DBT and M&A

27.2.1 Process Steps of DBT

This section provides an overview of different DBT models that have been described in literature. In our study we solely include DBT models that distinguish different process steps. We identify seven models of DBT with a range of three to six process steps. The resulting compendium of DBT process steps is shown in Table 27.1.

From the literature review it can be concluded that DBT models differ in terms of their process steps and scope. Some authors describe personnel-related initialization phases. They emphasize the need for sensitization and the formation of a task force. However, most authors begin the DBT process with an analysis of technology-related changes. These changes are then mapped against the overall organizational situation and capabilities to form a business transformation strategy. The overall scopes of DBT processes differ in that three contributions close with the DBT implementation plan, two with the implementation itself and two go beyond the actual implementation by learning or a continuation of innovation and change.

27.2.2 Process Steps of M&A

In this section, M&A process steps from literature are accumulated and compared with each other. Similar to our approach regarding the analysis of DBT phases, we

Table 27.2 Review on process steps of M&A

References	Process steps			
Feix (2017)	M&A strategy	Transaction management		Integration
Frankenberger et al. (2006)	Pre-merger	Merger		Post-merger
Weber (2013)	Planning strategic management	Negotiation, due diligence and agreement		Integration
Jansen (1998)	Strategic analysis and conception	Transaction	Integration	Monitoring
Wöhler and Cumpelik (2006)	Strategy	Screening	Transaction	Integration

only include procedural models of M&A that distinguish distinct process steps. A resulting compendium of M&A process steps is provided in Table 27.2.

The results indicate that M&A processes start with an initialization phase in which the incumbent reviews the strategic business environment and identifies a strategic gap. On the basis of these objectives, an M&A strategy is then derived, and a screening is carried out to identify suitable business units. After successful negotiation, the external business is integrated into the company. Two procedural models suggest phases beyond integration by reviewing and monitoring goal achievements.

27.3 Introducing the M&A Integrated DBT Process

27.3.1 *Convergence and Complementarity of M&A and DBT*

To propose an M&A integrated process for DBT it first requires a conclusive and deeper understanding for both individual processes. This is realized by separately connecting the individual process steps in Sects. 27.2.1 and 27.2.2. Then, it is analyzed how the M&A and DBT processes are related to one another, i.e. which process steps share similar contents. Finally, process steps of M&A that cannot be integrated into existing process steps of DBT are allocated to suitable positions of the DBT process. The results are shown in Fig. 27.1. The upper arrow describes the M&A process and the lower arrow describes the DBT process. Process steps with equivalent content that can be merged are referred to as convergent. M&A process steps that cannot be integrated into existing DBT process steps are termed complementary and become additional steps for the M&A integrated DBT process. The merging and assignment of complementary and convergent M&A process steps to suitable positions in the DBT process is visualized by the arrows in the allocation section. The results show that M&A can be integrated into the DBT process. The M&A strategy must be derived from the individual problem statement of the established enterprise. This in turn is based on a specific analysis of the business environment. Thereby,

Fig. 27.1 Integrating the M&A process into the DBT process

analysis-related process steps of DBT focus more on technology-driven opportunities and risks than the general M&A process. In addition, DBT includes a more distinctive creative exploration of ideas and strategies to cope with these external changes. The resulting M&A integrated DBT process is described more thoroughly in Sect. 27.3.2.

27.3.2 Description of the Integrated Process

This section outlines main activities of different process steps of M&A integrated DBT. The overall process has been divided into nine steps in four phases with distinct aims and purposes.

Initialization Phase. The Initialization Phase aims at mobilizing forces of organizational change and building a shared understanding of emerging threats.

Task Force Setup. DBT concerns the whole organization. Therefore, in the first step, an interdisciplinary task force is set up. It requires interdisciplinarity to carry out multifaceted discussions from different perspectives on the organization and to provide detailed and relevant information regarding all organizational departments (Issa et al. 2018). A balanced composition of the Task Force is therefore crucial for a successful DBT.

Business Environment Analysis and Digital Disruption Analysis. In second step the overall business environment must be reviewed. The task force analyzes the status quo of the organization and its strategy (Jansen 1998). Emergent changes in the industrial sector due to digitalization are discussed. Thereby, the task force not only focuses on the organization itself, but also on digitalization effects on the whole value chain (Bloching et al. 2015). They review on changing customer demands and how digitalization may aggravate the competitive situation (Esser 2019; Schallmo 2016; Botzkowski 2018; Jansen 1998).

Exploration Phase. In this phase, the task force develops a digitalization vision for the company. They also gain a deeper understanding of how this vision can be achieved by identifying related enablers and examining their status.

Use Case Ideation. The first step of the exploration phase is to identify benefits of digitalization and to generate broad ideas of what can be implemented (Schallmo 2016). Hence, the task force identifies best practices from other organizations in different areas of the business model or utilizes internal staff knowledge for ideation (Deloitte and Touche GmbH Wirtschaftsprüfungsgesellschaft 2019; Issa et al. 2018).

Maturity Assessment and Transformation Goals. In this consecutive step, organizational enablers that contribute synergistically to each use case are identified (Schallmo 2016). The maturity levels of these enablers are then determined (Carolus et al. 2017; Esser 2019). In the case of gaps, between the status quo and requirements the closure of these gaps is set as a goal of DBT when following respective use cases (Deloitte and Touche GmbH Wirtschaftsprüfungsgesellschaft 2019; Botzkowski 2018).

Prioritization Phase. The two process steps in this phase support companies in defining a digitization roadmap. This strategic plan contains specific objectives of what is to be changed first to transform the organization and how this transformation is to be carried out.

Review Transformation Modalities, Check Feasibility and Cost-efficiency. In this step, the task force first evaluates various modalities of carrying out DBT. The main questions are whether the company has the capabilities and resources to fulfill parts of the digitization vision and how external resources could support this process (Esser 2019; Schallmo 2016; Botzkowski 2018). These DBT modalities will then be subject to feasibility and cost-efficiency evaluations (Issa et al. 2018).

Focus Definition. After the task force has reviewed alternative elements of the digitalization vision and their modalities, these options are then prioritized to identify the ideal DBT starting point (Bloching et al. 2015; Carolis et al. 2017; Schallmo 2016; Botzkowski 2018).

Implementation Phase. This phase contains the implementation of DBT via M&A.

Acquisition Strategy and Screening. In case M&A is an attractive option for closing the factual gaps to carry out DBT, an acquisition strategy is drafted based on the digitalization roadmap. It frames the overall M&A purpose and activities and serves as a starting point for defining screening criteria (Feix 2017; Weber 2013; Jansen 1998; Wöhler and Cumpelik 2006). The task force defines search methods and completes the screening. This process step results in identifying suitable digital start-ups to be addressed.

Transaction, Integration and Business Transformation. Once both parties come to an agreement, the start-up is integrated into the incumbent organization (Feix 2017; Frankenberger et al. 2006; Weber 2013; Jansen 1998; Wöhler and Cumpelik 2006). Therefore, organizational change management and integration management converge to carry out DBT. Goals that have been set up within the Prioritization Phase are then operationalized. Related changes of the business models are tested on the market (Deloitte and Touche GmbH Wirtschaftsprüfungsgesellschaft 2019; Esser 2019; Schallmo 2016; Botzkowski 2018).

Learning and Evaluation. Finally, it is examined whether the formal objectives of the digital transformation have been achieved and which empirical findings can be gained from the DBT experience for future business development or M&A activities (Botzkowski 2018; Jansen 1998).

With an ever-changing business environment, the overall DBT process is iterated, leading to a continuous and unceasing business development (Deloitte and Touche GmbH Wirtschaftsprüfungsgesellschaft 2019).

27.4 Discussion and Conclusion

By introducing a new process of DBT that integrates M&A, the paper provides a consistent process for closing feasibility gaps of incumbents when confronted with

digitalization. The main limitation for this paper is that the interlocked relationships of M&A and DBT processes have not been regarded in an applicable perspective, such as how screening criteria can be derived and balanced based on the business environment analysis. Also, digitalization may affect the whole M&A process, such as start-up data bases or technological tools to support the post-merger integration. Hence, the digitalization effects on the M&A process itself can be helpful to provide further support for organizations. Future research can also focus on operationalizing DBT by integrating appropriate tools and methods into the process provided in this paper.

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