

Foster Strategy Alignment in the Digital Age

A methodic approach for guiding SME to a Digital Transformation

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Abstract. Goal of this paper is to demonstrate the need for a structured framework and method to support and lead SME into the Digital Age. A framework including all relevant business areas of an enterprise where technology is seen as an enabler serves as a starting point for strategic discussion and possible reorientation of the company. Hence, the framework-based method named Transformation Compass combines the aspects Customer Centricity, Operational Excellence, Business Models, and Organizational Excellence. Since SME in particular face many challenges transforming their business, a specific approach that takes into account the challenges and opportunities of an SME has a high potential for success.

Keywords: Strategy Alignment, Strategy Consulting, Digital Transformation, Customer Centricity, Operational Excellence, Business Model, Organizational Excellence.

1 Introduction

Digital technologies are changing the way we work, consume, live, and interact with each other. This ongoing change poses not only a major challenge for companies but also great opportunities [1]. Therefore, companies should start as early as possible to align their strategy to the new market situation and possibilities that the Digital Age offers [2]. The goal of Digital Transformation is rather a ‘thinking outside the box’ approach in finding new ways to do business than transforming the whole company into a fully digitalized environment.

Nowadays, small and medium-sized enterprises (SME) are facing more and more the challenge and importance to transform their business into the digital age [3]. One of the main challenges is that SME only have limited resources at their disposal [4]. Not only the budget for investments and projects is low, SME do not have the technical equipment and expert knowledge needed [3, 5-6]. In addition, according to a study from the University of Applied Sciences in Business Administration Zurich regarding the

digitalization of Switzerland, SME with more than 100 employees have difficulties regarding change management and unclear responsibilities [5].

Different studies have shown that SME are already making efforts in the direction of Digital Transformation [3, 7]. However, the studies have demonstrated that most companies are not satisfied with their current activities regarding Digital Transformation, despite the high demand from the industries for digital transformation approaches.

Nevertheless, most of the SME are aware of the importance of digitalization in different areas of their business such as processes or employees and culture [7]. Thus, SME need external support to improve their transformation projects and efficiently and successfully transform their business. Many of these projects are implemented bottom-up and miss a strategic positioning of the top management. Hence, a top-down implementation is the key to success in Digital Transformation projects [2].

To achieve strategy alignment in the Digital Age, Digital Transformation Consultancy (DTC) needs to be carried out. DTC is a way to support stakeholders such as CEOs or other business leaders to benefit from the “efforts to leverage Digital technologies that enable the innovation of their entire business or elements of their business and operating models” [8]. Therefore, in order to support SME a methodic and time-efficient approach, which takes into account all relevant areas of a Digital Transformation that might have an impact on the organization, is essential [9]. Out of this, SME can use the potential and benefits from increased sales through new digital products and services, improved customer experience that leads to a higher customer loyalty, cost reduction, and an increased efficiency in operation [5, 10].

The aim of this paper is to introduce the Transformation Compass, a structured framework and method to support and lead SME into the Digital Age used for the definition of the strategy alignment. The framework combines the aspects Customer Centricity, Operational Excellence, Business Models, and Organizational Excellence. It considers all relevant business areas of an enterprise where technology is seen as an enabler, serves as a starting point for strategic discussion, and possible reorientation of the company.

The research for this paper was done by applying a design research approach, which is a design oriented research strategy with the aim to develop an artefact [11].

The paper is organized as follows: in section 2, an overview of existing frameworks and models that describe relevant elements of Digital Transformation are given. Based on this literature, the structure of a specific framework and approach for SME towards Digital Transformation is elaborated in section 3. Section 4 focuses on the evaluation of the developed framework and method. The last section evinces the conclusion of this research paper.

2 Frameworks and Models to Foster Strategy Alignment

In order to receive inputs for the development of a specific framework for SME to handle their Digital Transformation, a literature research regarding frameworks and models in the context of Digital Transformation has been performed.

The research revealed that many of these models use a technical starting point by asking questions such as about the integration of tools in the organization or the automation degree of processes. However, Digital Transformation is much more than just a shift from analog to digital [12].

This research is embedded within the topic of Digital Transformation and not on digitization of a business, thus, the technical assessment tools are not being compared as part of this research. Instead, the Digital Transformation methods for a holistic approach to be used by companies is being investigated. Thus, six major frameworks and models for Digital Transformation were found suitable to match this requirement and have been analyzed in detail for this research. Two of these frameworks have been developed by universities, one has been developed during the creation of a scientific book and three have been developed by well-established consulting companies.

The following table shows the six different frameworks which have been analyzed for this research based on their purpose and whether they are SME specific or not:

Table 1. Overview of existing frameworks

Framework	Publisher	Purpose	SME specific
Digital innovation and transformation framework	Gerhard Oswald and Michael Kleinemeier	create a comprehensive digital strategy with the customer [12]	no
Digital Transformation Framework	Capgemini & MIT Center for Digital Business	help organizations navigate through their digital transformation [13]	no
Digital Portfolio	Ernst & Young	deliver integrated business solutions that empower enterprises [14]	no
McKinsey Model	McKinsey	the impact of technology on various areas in a business [15]	no
Digital Transformation Framework	Cognizant	develop a digital transformation blueprint [16]	no
Digital Maturity Model	University of St. Gallen	typical transformation stages and the prioritization made by the organization [17]	no

Each of the mentioned frameworks in Table 1 are based on different building blocks that include various different aspects for navigating through the Digital Transformation of a business.

In order to further compare the six frameworks, a cluster of building blocks have been determined based on the majority of common or very similar aspects of each framework. The comparison reveals that there are seven main building blocks a Digital Transformation consists of. The following table shows an overview of the frameworks and the building blocks that are covered in the frameworks:

Table 2. Overview of relevant building blocks based on existing frameworks

Framework	Offering	Processes & Systems	Organization	Customer (experience)	Business Modell	Digital Capacities	Employees
Digital innovation and transformation framework [12]	✓	✓	✓	✓	✓	✓	✓
Digital Transformation Framework by Capgemini & MIT [13]	✓	✓	✓	✓	✓	✓	
Digital Portfolio [14]	✓	✓		✓	✓		✓
McKinsey Model [15]	✓	✓		✓	✓		✓
Digital Transformation Framework by Cognizant [16]	✓	✓	✓	✓			
Digital Maturity Model [17]	✓	✓	✓	✓			✓

As the comparison reveals, only the first framework takes all the identified aspects of a Digital Transformation into account. The second analyzed framework has been the second best framework for covering the identified building blocks. It has almost all building blocks covered, except the building block employee. Thus, these two frameworks have been the basis for starting with the development of a SME specific Digital Transformation framework, as none of these frameworks was developed with specific concern of SME challenges.

Summarizing, most frameworks and models are not specifically tailored to the needs of SME. Yet, they might be applicable on SME as well but mostly do not consider the specific challenges and opportunities of SME. Furthermore, almost every model ends with giving an evaluation about the current or target strategic focus but does not include specific recommendations on how to improve the current situation.

3 Development of a Strategy Alignment Method

Based on the research results of chapter 2, this section focus on developing an approach to foster strategy alignment in SME. The developed strategy alignment method, which is suitable for Digital Transformation initiatives of SME, has been named Transformation Compass by the authors. The title should make SME understand that this framework-based method helps them, just like a compass, to define their strategic alignment. Since most SME will need to adapt their current business conditions, the method has also the name Transformation in it, as the SME will most likely have to change their current strategy to match their business to the conditions of the Digital Age.

3.1 Purpose of Transformation Compass

The Transformation Compass allows SME to define the current and targeted strategic focus of a company and to align it with existing digital technologies and other activities to foster Digital Transformation in the organization.

As many SME are overwhelmed by the opportunities and challenges the Digital Age offers, the aim of the Transformation Compass is to inspire and direct a company into the digital future. This takes place in showing SME different possibilities on how the company can either optimize or change its current business.

3.2 Definition of the Building Blocks for the Transformation Compass

Customer experience is one key motivation towards Digital Transformation [13]. Customer centricity on the other hand is the journey of a customer, which includes customer experience [3]. A customer journey is split into phases of attracting the customer, interacting with the customer, the experience of a customer and how a company empowers its customers [12, 18]. Thus, a first building block of the Transformation Compass is the Customer Centricity.

Another key area for SME is to improve operational processes [19]. Not only processes but also the strategy and corporate management, such as the importance of data within the organization, are important aspects of Digital Transformation [13, 20]. All these aspects are combined in a second building block of the Transformation Compass named Operational Excellence.

A third building block is the Business Model. This building block represents innovation in form of for example new products and services or Cooperation with other companies as enabler for a market growth [12, 19, 21]. Acquisition might be a further aspect but due to the usually very low number of acquisitions with SME, this category is not included in the Transformation Compass [22].

As a fourth building block, Organizational Excellence addresses the organization with its culture, the way people are managed and lead, as well as how employees are interacting with each other [12, 20]. Another important aspect is how companies deal with changes and implement them into the organization [12].

Table 3. Mapping of the four Transformation Compass buildings blocks

Building blocks of Transformation Compass	Offering	Processes & Systems	Organization	Customer (experience)	Business Modell	Digital Capacities	Employees
Customer Centricity	✓			✓		✓	
Operational Excellence		✓				✓	
Business Model	✓				✓	✓	
Organizational Excellence			✓			✓	✓

Yet, the following question remains: How do these four building blocks for the Transformation Compass compare to the seven building blocks shown in Table 2. After the literature review was completed and the seven building blocks were defined, the goal was to include all the identified seven building blocks for the to-be developed method. Table 3 shows how the four defined building blocks have been mapped with the existing seven aspects from the literature review.

The two aspects Offering and Digital Capacities might be the two building blocks from the literature, which at first glance are not fully understandable of how their mapping has been done to new building blocks. The aspect Offering is included within Customer Centricity and Business Model due to the fact that the services and products a company offers need to be defined as part of the Business Model with the customer in focus. The aspect Digital Capacities is part of each of the four new building blocks, because these capacities are regarded to be relevant for each subcategory of the Transformation Compass as enabling drivers for the Digital Transformation of the SME.

3.3 Framework of Transformation Compass

Each of the four building blocks, discussed in the previous chapter, consist of several main categories, 15 in total. In order to achieve an optimal structure for a methodical procedure, the 15 main categories are further divided into a total of 50 subcategories.

To determine the 15 main categories and its corresponding subcategories, a deep literature search was conducted.

Thus, the Transformation Compass has a structure that takes into account the most important aspects of Digital Transformation found in the literature in general and specifically adapted for the needs of an SME. Hence, all areas, processes, and stakeholders of a company such as marketing, strategy, culture, and employees are included in the framework. The literature reveals that “specific capabilities include consulting services for digital strategy and transformation, digital operations, and digital customer experience” [8].

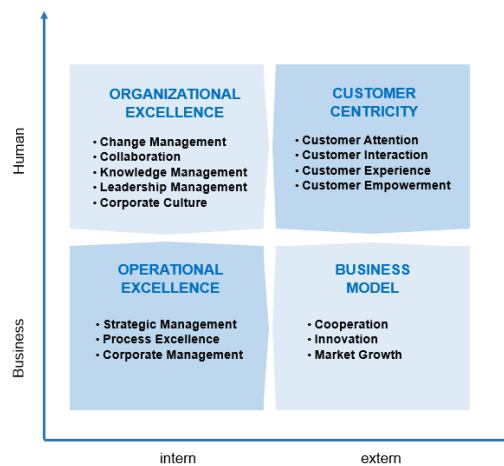


Fig. 1. Overview of the Transformation Compass building blocks

In order to visualize, the four building blocks can be organized in a matrix, as shown in Figure 1, where one axis represents the external or internal perspective and the other axis the focus on a human oriented or business oriented strategic alignment. All of the building blocks are linked with each other to illustrate that a change or optimization on one category might have an impact on another category as well.

In difference to other existing models and frameworks such as the six described frameworks in chapter 2, the building blocks are derived from an economic point of view. For example, the question might be how a company applies Knowledge Management in its organization and not what kind of tools are in use to support collaboration. Therefore, one of the characteristics of the Transformation Compass is how technology can enable a specific strategic business opportunity. Like a compass, the methodology leads the organization into a specific direction while having the overall strategy of the company as a goal.

The structure of Transformation Compass is visualized in Figure 2.



Fig. 2. Structure and application process at the example of Business Model

3.4 Working with the Transformation Compass

The main idea is to apply the Transformation Compass in workshops where a coach, who is trained on this method, guides the companies in defining the relevance, priority, and position of their current and targeted strategic alignment.

We start with following scenario. Customers are interested to analyze how their company can develop a new Business Model. Therefore, at Level 1 the building block Business Model is the relevant one. In a next step, the workshop coach defines together with the customer whether the main categories, represented in Level 2, such as Cooperation or Innovation are relevant or not in the organization's context. Following, if the discussion reveals that Innovation is relevant for their business, the priority is defined for every single subcategory of Innovation, such as 'Type of innovation', represented on Level 3. The priority options rank from not applicable to low, middle, or high. In a last step, based on the subcategories, the current and targeted position of the strategic alignment for the subcategory is selected. This finally represents Level 4.

To support the coach during the workshop, there are several instruments available such as posters to every building block and fact sheets with relevant information based on level 3 and 4 from Figure 2. In addition, a web-based tool allows the coach to enter all the data such as the relevance, priority, current and target position to receive an automatically generated output that is further elaborated in chapter 3.6.

3.5 Instruments of the Transformation Compass

As a support for the coaches to facilitate their workshop moderation, fact sheets for each of the 50 subcategories have been developed. These fact sheets help to visualize the content on a single page and combine all necessary information to answer the relevance, priority, and positioning of the customer's business. Figure 3 shows a fact sheet for the subcategory 'Type of innovation' with the corresponding statements.

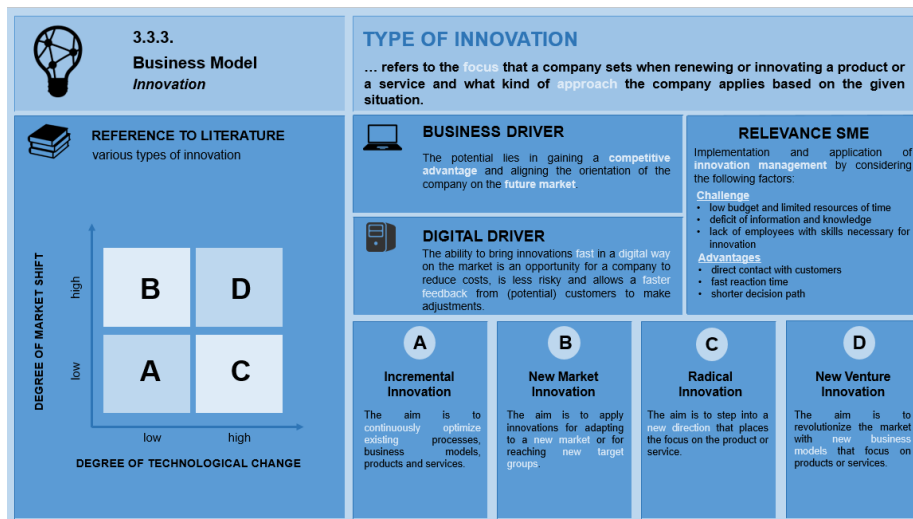


Fig. 3. Fact sheet based on the example of the subcategory 'Type of Innovation'

Each of the 50 fact sheets is structured in the exact same way. The visualization and organization of the four statements is done in form of a matrix. By combining both axis, a general statement of where the company sees its strategy alignment, currently and in the future, is made possible. In addition, for every single statement an example is available in order to support the explanation of the statement so that the customer can map the own business in a facilitated way.

The content of the fact sheets have been developed by the use of sentence pattern. A clear structure fosters an easier understanding of the content even for people without a background in the given topic. In addition, it allows adapting and implementing new categories or statements efficiently. The sentence pattern follows for every type of definition, statement, or example a specific syntax in giving a clear structure how to define the texts and what kind of information to enter or add. As an example, key words such

as Incremental Innovation are used to complete systematically the sentence pattern for defining the statements. Key benefits of using a sentence pattern is standardized results and a reduced risk of multiple interpretation [23].

In addition, the workshop coach can use posters, which have been developed as part of this research, for organizing interactive workshops. The goal by using the posters is to have the possibility to define the relevance, priority, and position and for summarizing and classifying the workshop results within a matrix. The posters are supportive to the final determination of the focus areas on which the customer wants to concentrate their transformation initiatives. Following, Figure 4 illustrates an example of such a poster based on the building block Business Model for evaluating the workshop results.



Fig. 4. Example of a poster for use during workshops

3.6 Outcome of Transformation Compass

As a result, from performing the Transformation Compass the gap between the current and target position, as well as the priority lead to one or several focus areas and specific recommendations are given to the SME. The recommendations are a combined set including the relevant processes to either adapt or implement, necessary skills as well as rolls an organization should define, and the technical support in form of systems or tools that are applicable for the SME. In addition, the software tool evaluates automatically the focus areas and gives out an overview in form of a spider diagram and a table, a benchmark as well as the specific recommendations according to the focus area.

4 Evaluation of the Strategy Alignment Method

In order to evaluate the Transformation Compass, the tool has been applied on several one-day workshops with various SME of different industries, such as retail or trustee, and of different sizes. Each of the workshops held was identically organized and led by an experienced coach with a profound knowledge of Digital Transformation and the Transformation Compass. This coach guided the participants of the workshop through

the Transformation Compass. In addition, the framework and its application method have been applied as a case study in a class about Digital Transformation of a further education program at the University of Applied Sciences and Arts Northwestern Switzerland (FHNW). The 24 participants of this class were from different industries, SME as well as big companies and with different backgrounds.

Although the workshops were quite successful, it is important to define in advance the workshop attendees from the customer's side. Depending on the topics discussed during the workshop, it is recommendable to invite the key stakeholders of that topic, such as the head of marketing if the topic is regarding Customer Centricity. This contributes by adding value to the discussion and includes the specific people that have a deeper knowledge of the corresponding building block or category.

In some cases a pre-selection of the 15 main categories by the workshop coach is necessary. That is another outcome and definitely the case for workshops where managers cannot afford spending too much time in applying the Transformation Compass with all its categories. A pre-selection allows a more concrete workshop on the topics identified as relevant and assists in defining the participants of the workshop.

The material provided for the workshops as well as the structured approach has been proven to be successful through the evaluation from the workshop participants. As a supportive instrument for the coaches, the fact sheets help the participants to understand what kind of strategy they currently apply. In addition, it fosters participants to broaden their horizon in exploring what other options exist in this specific area. The posters provide a good overview of the current discussion and results can be reused in a further workshop.

5 Conclusion

As the Digital Transformation is omnipresent and poses a high potential, SME are facing the challenge of taking steps into the Digital Age by performing a Digital Transformation on their business. However, due to the limited resources that SME have at their disposal, there is a high need for an approach that guides SME efficiently and systematically towards Digital Transformation. Whenever an SME is faced with moving from the well-known into something new or even disruptive, it is essential to get on the path and start the journey towards the Digital Age. The Transformation Compass offers a way to incrementally optimize or change the organization by taking small steps and if needed to reflect from time to time if the way is still applicable due to the current and future situation.

The structured method with its scientific background convinces through a standardized approach and user-friendly design. It allows the user to understand the concept of its procedure easily and apply it to the own company. As the key words of the statements are based on generally well-known economic concepts or terms and come with examples, the interaction with the top management is facilitated. The focus areas and recommendations that are defined together with the participants, serve as a basis to define a concrete Digital Agenda in a further workshop where a so-called Digital Nav-

igation Canvas is applied. This canvas includes relevant elements such as the technological and economical environment, organization, operations, competences, and resources.

To conclude, the Transformation Compass ensures a transfer of knowledge in order to develop a deeper understanding of the key areas and aspects of a Digital Transformation with regards to SME. The Transformation Compass is not a tool that measures the maturity of an organization, but it supports an SME to set their individual strategic focus in the Digital Age.

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