



IDENTIFYING BUSINESS MODEL PATTERNS OF B2B MASS CUSTOMIZERS: THE CASE OF GERMAN TEXTILE SMEs

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Abstract: *The mass customization (MC) business model, following [32], has gained wide recognition in practice. In theory, the topic was considered on a rather general level or focused on the B2C segment. However, there is little research on business models in B2B markets. Particularly for specialized SMEs in high-wage countries, MC seems highly promising due to its efficiencies. The German textile industry represents an exemplar for narrow-specialized SMEs.*

For this study, 23 interviews with mass-customizing SMEs were conducted during 19 on-site visits, whereby also field notes have been taken. The collected data allowed us to map the three most common business model patterns of this industry regarding their characteristics in the B2B domain.

Key Words: *Business Models, B2B, Mass Customization*

fore the cross case analysis business model patterns are presented. We chose an exploratory approach, analyzing 23 interviews conducted with CEOs and on the management level. This approach is helpful because the aim is to explain and to understand why these business models were developed over time as they are today and what challenges the single parts of patterns are addressing. In this context, business model patterns were identified by revealing similarities among companies in their business models applied, which fit together to one pattern [6, 25]. Drawing on the 19 SMEs we visited, our results show three fictional companies that exhibit the most common business model patterns. Finally, results are summarized and implications from today's perspective and for future research are discussed.

1. INTRODUCTION

The business model of mass customization (MC), as it was described by [32], has gained wide recognition in practice and becomes increasingly popular for companies in order to provide products for individual customer needs [10]. Especially today these individual customer desires become more and more important due to rising customer expectations [21, 36] regarding the aesthetic design, functionality of products, and their related utility. From the theoretical side there is, so far, a clear focus on the Business-to-Customer (B2C) segment, but just little research on the business model and its configuration in Business-to-Business (B2B) markets. Especially, small- and medium-sized enterprises (SMEs) are facing much of complexity while designing, adapting and customizing products according to the technical requirements of their business customers. Nevertheless, the advantages of MC for SMEs, particularly in high-wage countries, seem to be highly promising, wherefore the German textile industry with its narrow-specialized companies stands exemplary for.

Hence, in the following, this study shows an introduction of the most important theory affecting this topic. Afterward, the research design is outlined be-

2. THEORETICAL UNDERPINNINGS

First, a deeper understanding of the underlying terms and concepts is necessary. Therefore, the next sub-section provides an insight into the literature of business models and the way they are also perceived as patterns by some researchers, as well as the concept of MC.

2.1. Business models

Starting with business models, the terms occurred extensively in research just with the rapid development of information technology and the internet in particular, in the mid of the 1990s [38]. Still today there is no common definition of what business models are, which led to a large diversity of characterizations in literature. Following in this study [28], “a business model describes the rationale of how an organization creates, delivers and captures value” (p.14). This means that this abstract conceptual model [27] contains a set of objects and concepts as well as relationships of the objects expressing the logic of a firm's business [18, 29]. There are different terminologies for these sets and opinions about what these sets are. In general, they can be considered on an economic, an operational and a strategic level. The economic level contains the logic of profit generation of a company. Then, the operational level covers the value creation

meaning internal process and the design of the infrastructure of a company. And finally, the strategic level comprises the overall direction of a corporation regarding the interactions with objects outside the organization, the market positioning as well as the growth opportunities [25, 34]. These levels are also in line with the definition of [2] who described a business to be depicting the “design of transaction content, structure, and governance so as to create value through the exploitation of business opportunities” (p.494-495).

However, business models are not always of the same peculiarity. There are differences in the design of the levels even if the way value is created and profits are generated from the outside perspective seems to be the same. Therefore, business models are often described as patterns [6, 25]. Business model patterns are models with similar characteristics, similar behavior, and similarities in the arrangement of the building block the business model consists of [1, 6, 28].

2.2. Mass customization

Next, there is the MC business model, which also could be perceived as a business model pattern in the way value is created for and by customers and which economic rules the company applying MC makes use of. First of all, the business model uses the effects of the economies of scale as well as of the economies of scope [33]. This is achieved by minimizing costs while maximizing the customization of the products offered [32]. Therefore, modular components are created in order to receive a large variety of end products through the configurability of the components. Thereby, the customer is able to design a large number of products during the customization process [33].

Nowadays, MC literature provides definitions characterizing MC in a narrow or broad perspective. The narrow definition states MC to be “a system using information technology, flexible processes, and organizational structure to deliver a wide range of products and services that meet specific needs of individual customers [...], at a cost near that of mass produced items” [10]. The broader definition relates MC to the provision of customized products and services taking the individual customer needs into account by using processes, which are highly flexible, agile and integrated [11].

Refining the picture of MC, [15] described four different approaches in MC, whereof one is collaborative customization (CC) and another is adaptive customization (AC). CC includes the possibility for the customer to actively participate in the design process to fully customize the product. In contrast, AC does not consider an active interaction with the customer and does not result in a fully customized product. AC bases the customized result on standard products or services, which are then modified [15]. AC describes best the MC approach of the companies chosen in this study.

Companies offering customized products or solutions in the B2B context are rather referred to with the term engineer-to-order (ETO) or solution business.

Thereby, ETO shows similar elements in its characterization as MC. It is defined as the re-engineering of products after receiving an order before production starts [7]. Therefore, the decoupling point, which “separates the part of the supply chain that responds directly to the customer from the part [...] that uses forecast planning” [17] by involving standardized parts in the product composition, is set at the design stage [17]. This means that companies choose a modular design of its products using standardized parts [19] and modifying their composition or even develop entirely new designs [17, 19, 20]. In order to realize this efficiently, the company needs to be lean and agile in its processes and its overall strategy [8, 17, 26].

3. RESEARCH DESIGN

This study examines business model patterns in the context of MC regarding the economic, operational and strategic level of the business models for SMEs in B2B markets. In order to achieve an appropriate research design and a sufficient as well as valid data set, an exploratory and descriptive approach was chosen [35]. Furthermore, a multiple case study approach was undertaken [37]. Therefore, the data was evaluated and grouped in three case studies based on an inductive and deductive coding method [14, 37]. The case study approach has shown major benefits for the purpose of this work based on the variety of information gained from the interviews and the capability to answer the questions how and why things are done as they are done [12, 13, 23, 37].

3.1. Data collection

Data was collected during a research project within the East German textile industry, wherein different companies participated. During on-site visits in 19 companies 23 interviews as well as field notes were taken. The companies are doing their business in diverse parts of the textile chain. In order to characterize these companies, four commonalities have to be taken into consideration, while the company selection process in the study. First, all companies can be defined as small or medium-sized enterprises based on their headcount of not more than 250 [3]. Second, their products are modified and designed during a customer-manufacturer interaction process, which means that all offers are customized. This includes the three elements of MC [31]:

- (1) control of supplier-sided complexity (e.g. modularization)
- (2) control of customer-sided complexity (e.g. toolkits, consulting, involvement of designers)
- (3) stringent orientation of value creation, solution space and yield creation regarding the central value components the customer requires in the context of user-centric approaches.

Third, the companies benefit from MC efficiencies in at least one respect. Fourth, most customers of the companies visited during the project are locatable in the B2B market.

In order to identify the appropriate interviewees, the sampling criterion was to be able to give information about strategical, operational and economic aspects of the company. After the companies to be interviewed were identified, the appropriate interview partners were approached. Orientating on the sampling approach by [30] CEOs and the managerial level were addressed for the interviews. These two functions appeared to be useful and sufficient due to the fact that most of the companies are family businesses. Some of the successors are already involved in the business and due to size of the enterprises; the CEO and managerial level functions are still able to keep the overview about operational aspects of the corporation, besides its strategic and economic parts.

The interviews were semi-structured and followed a guideline, which was based on the available literature about the topic of this study. The conversations were recorded, transcribed and analyzed. The database for this study reads as follows:

Table 1. *Overview of interviews conducted*

Industry	East German textile industry
Interview Partners	CEOs, Management Level
Companies	19
Interviews	23
Duration in total	22 h 37 min
Interview duration on average	59 min

3.2. Data analysis

The qualitative data was analyzed by using the coding procedure proposed by [9]. First, a list of codes was developed based on the interview guideline and in accordance with the literature. Afterward, the code list was continuously expanded and revised [9, 24] while using the QDA software Atlas.ti. Then, the patterns within the database were identified. This means, while existing constructs were reflected based on the literature; also new patterns were explored from the data at hand. Thereby, the approach uses aspects from qualitative research, which are of inductive as well as of deductive nature. In line with the recommended practice in qualitative data analysis [16, 22], the data analysis was parallelized to ensure that the processes informed each other. Consistent with the literature, this approach meets the established criteria of credible qualitative research, while providing opportunities to

prove consistency with the underlying interpretations [24].

3.3. Case selection

In total, 23 interviews during 19 on-site visits have been conducted. The companies for the interview were chosen purposefully in order to be able to depict the entire textile chain and identify differences in their business models, which are representative for the entire industry. The variances appeared on all levels – economic, operational and strategical. Interestingly, similarities were not necessarily found among companies being in the same position within the textile chain. Therefore, the business models of the companies were grouped in patterns based on differences as for example in the degree of involvement of the customer into the customization process, the need for order-specific R&D performed inside or outside the company and the information about the case of application of the product with the final customer. Considering all the differences found, it was possible to identify three patterns, which are described in the cases following. The case studies show a large variety of information about this complex topic, which would have been too complex for surveys [37].

4. WITHIN CASE ANALYSIS

The case studies presented in this paper first provide a description of the prototypical characteristics of the company. Second, an exemplary product is chosen in order to describe the peculiarity of specific characteristics in the economic, operational and strategic level.

Before going into detail, this study is embedded in the context of the textile industry in East Germany. Having its roots in the 19th century, many companies were reacquired after the German reunification. While the industry employed 318,000 people in this region in 1989 [5], the number decreased down to 22,500 in 2000 [4], which is mainly due to the globalization. Nowadays, especially narrow-specialized companies are well developed, but still face strong competition. Accordingly, these companies have to innovate continuously in order to gain their position. This situation is considered typical for high-wage countries and thus also relevant for foreign and related industries.

4.1. Case 1 – Priotextile

Priotextile is a small company with up to 50 employees in the area of clothing textiles. These products are mainly sold to sports clubs as business customers, but to a particular extent also to the end-customer. Furthermore, business customers are perceived also as multipliers and intermediates - multipliers for the reason individual club members may need additional sports clothes for other purposes and intermediates in order to transmit one common design information to Priotextile and not all the individual ideas of the team members. From an operational perspective, customers can choose from a predefined range of textiles for jerseys and trunks. On the one hand, the customers are then able to send their own logo, the logos of their

sponsors, the information about their hierarchies as well as particular color constellations to Priotextile by using a virtual tool. An internal design department processes the given information and creates the jerseys and trunks according to the customer's request. Two to three drafts are then sent to the customer from which he chooses or which is the base for minor adjustments. On the other hand, the customer can just provide their own logo and ask the company for its expertise to design something completely new. In both scenarios, the case of use is always known for the company, which is important because depending on the sport and posture of the athlete during its execution logos need to be visible and clothes need to fit. This knowledge also makes it easier to create an appealing design. All the design work is still a source of cost from the economic perspective and just turns into a source of profit after the order is placed by including the costs into a mixed calculation. For Priotextile, MC efficiencies are achieved by larger customers such as sports clubs aiming for a unique design and ordering the jerseys and trunks then in according order volumes.

The value creation on the customer's side occurs due to several aspects and services:

- the perfect fit of the jerseys and trunks,
- the customized design,
- the quality,
- sustainability of the manufacturing process, which is particularly important for the perception of sponsors, and
- the ability to additionally deliver in case another athlete joins the team.

Additionally, the company offers an entire collection fulfillment, which makes it more convenient for large customers as sponsors are to handle different events and its related clothes they support. Finally, also event marketing is offered. This means Priotextile announces sport events, takes photos during them and provide the teams with content for their social media presences. This service is adjusted for every customer group accordingly. By doing so, there is achieved a high convenience for the teams and Priotextile itself has a wider reach with their products. Interestingly, beside the products themselves, Priotextile provides many customized services, which are essential for the customers and the decision to order at Priotextile. This shows that Priotextile is selling services, which are at least as important as the customized product itself. Especially this is pretty much unusual for classical mass customizers, which shows a key difference in the set-up of business.

Beside event marketing, Priotextile disposes of a large set of own marketing activities in order to increase brand awareness and to stay up to date about current events and latest trends, which is key from a strategic perspective. Namely these are different newsletters provided to customer groups of different sport disciplines, video chats are offered about the importance and the correct fit of sports clothes in order to sensitize customers for the decision and purchasing

process later on, testimonials are used for campaigns in specialist journals and on trade fairs and a large variety of social media activities. All these activities are necessary to stay in customer's mind, to stay competitive especially with larger corporations, to develop the advantage of the personal contact and consulting together with the customized design of products further and to embrace growth opportunities on the market.

Considering the characteristics of this business model pattern, the company shows clear evidence for the definition of being a MC company. First, the products and aspects to be customized are modularized in order to deal with the supply-sided complexity. Second, the company uses designers to control the customer-sided complexity. Third, the central value components, which are of interest for customers are considered in the customization process for a stringent value creation.

4.2. Case 2 – Textilelive

Textilelive is a medium-sized company specialized on textile finishing. As part of the textile value chain, the corporation has solely business customers, mainly in the field of technical textiles. On the one hand, the order placed by these customers are either contract work orders for modified finishing processes or orders with a high level of customization. Modified finishing processes need less effort in consulting for the company, because one particular textile, delivered by the customer, taken as a base with one or two standard finishing characteristics just needs relatively few adjustments. The adjustments only occur in the intensity the characteristic finally needs to have. Examples are fire resistance, water permeability and water resistance.

Much more efforts have to be invested into customized orders. Thereby, a common problem is that Textilelive does not know the final application of the textile. Typically, customers do not want to disclose that information for the reason of competition. Furthermore, these orders are related to high expenditures for R&D. Often customers approach the company with a particular need, which cannot be easily satisfied by Textilelive with an extant offer. But customers rely on that finishing company, since there are only few in general having that kind of expertise. Being aware of this, business customers often approach Textilelive with a large catalogue of requirements. Now the R&D process starts, which, in extreme cases, can last up to three years and cause numerous iterations with the customer until a prototype is accepted. The contact during this time is often of personal nature in order to discuss the prototypes. This personal contact is essential for the success of the project due to the complexity of the product, which is the finishing process in this case.

The R&D process itself is either realized internally or in cooperation with the customer or external research institutes. The latter is depending on the extent of the non-disclosure agreements demanded by the ordering company. Depending on the customer, the R&D costs are carried by the customer itself at the

time when they occur or Textilelive needs to take the burden of R&D costs, which afterwards amortize over time after the order was placed. Which case applies is depending on the probability the customer places the order in the end, the predicted order volume or if it is a regular customer already. Right after the R&D phase, MC efficiencies apply due to the high volumes ordered by business customers as for example the automotive industry, although development costs precede MC efficiencies. This company can be considered a soft-customizer in the process with its customized finishing, which is explained in the following.

The company is able to offer a completely customized high quality finishing process to its customers, which can be highly innovative. Furthermore, Textilelive then also applies for and provides the necessary certificates, which are especially important for customers from the public sector. With the developed know-how the company creates value for the customer due to a unique fit and high quality. Additionally, customers need to reorder their customized products at Textilelive, because no competitor would be able to just copy the know-how in a short time perspective. Here again, the company can be sure to generate at least over time large order volumes by its customers, which ensures efficiencies in the sense of economies of scale. We suggest considering Textilelive more as a soft customizer, which is receiving the textiles from its customers, add a finishing and send it further to the customers of its customers.

By doing so, these numerous R&D projects and continuously developing its finishing processes further, Textilelive automatically is doing trend research in its field of businesses and embrace growth opportunities, which seem promising. Furthermore, the company is not doing any other marketing activities besides presenting the company on trade fairs and on their website. Mainly, customers approach them after such a trade fair or because another company recommended Textilelive. So especially here, the word of mouth is essential for long-term success of the company, which requires then also a well-organized customer-relationship management and continuously high efforts in innovative and high quality finishing processes.

In the case of Textilelive, the identification of the MC defining aspects of this company is more difficult. Nevertheless, the company shows these criteria, just in a different shape as a common B2C MC company for example. Considering the supplier-sided complexity, also this company uses a modularization approach regarding different finishing processes, which can be combined. But because finishing processes can just be combined to a particular extent and sometimes the finishing revoke each other's characteristic, consulting activities are necessary to support the customer in finding the correct configuration. This is mainly done by technical departments or designers and is made in order to control the customer-sided complexity. Finally, the customization process is stringently orientating on the value components required by the customers – the finishing in this case – in order to create value in

the defined solution space of possible finishing combinations.

4.3. Case 3 – Pretext

Pretext is a medium-sized company in the area of premium home textiles. The corporation offers textiles for furniture as sofas, chairs and pillows for example to its business customers. Trends in this industry are not as fast moving as in the clothing industry, but nevertheless make a continuous change of designs and colors necessary. Therefore, the firm relies on sales agents, who visit customers on a regular base. From these visits, also new ideas and desires from the customer's side are taken and used for the adjustment of the existing or the set-up of a new collection. Designs are developed inside of the company first and are then presented to the customers as an idea and base for discussion. The reason for this is that customers often cannot imagine haptic aspects of the textiles as well as the color accuracy just from pictures. This means, Pretext has to show samples and prototypes, which are then further developed together with the customer.

A common obstacle is the technical feasibility of the customers' needs and ideas. Therefore, the sales agents and the design department of the company need to be trained in-house regularly in order to respond and react quickly on requests and offer potential solutions, which sometimes differ from the actual ideas of the customers. But even if customers do not receive all aspects of their idea included into a new product, the customers are most often satisfied due to the aspects they also relate to Pretext as quality, longevity, customizability, innovativeness in design and the ability to additionally deliver.

Also the prototypes customers receive over and over again until they are satisfied with the result are essential for the customers' satisfaction. For Pretext, these prototypes are the main cost drivers, because customers are usually not asked to pay for them. Exceptions are customers, who are unwilling to reach a decision and ask for more than four or five prototypes. In this case, the customer is asked to pay for any additional iteration. Based on its experience, Pretext decided to put more efforts into their collection in order to meet customers' needs and faster reach a consensus about a prototype with less iteration. Also costs were meant to decrease. Therefore, the company introduced image folders and mute boards to show already in the beginning of the consulting process a broader range of textiles and colors. During the process, the customer receives the image folder first and decides on a preselection on which basis then the mute boards are send out. In the beginning, the company feared too much confusion on the customer's side with the different kinds of samples. But with well-trained sales agents, decisions were made faster and with less iteration. The reason for this was also found in the customer's feedback. The problem often was, as mentioned earlier, the imagination of patterns on the textile, haptic aspects and color accuracy. Especially for furniture, colors need to be checked in reality and under different lights. Additionally, patterns cause shadows, which

can be perceived as more or less pleasant. But with these mute boards, Pretext is able to decrease this kind of complexity in the consulting process. Furthermore, by using the mute boards the expectations of the customers are met faster, due to the preselection based on the image folder which was done earlier and decreased the number of potential choices beforehand. The developed and chosen designs are then produced in large volumes for the customers from the furniture industry. Especially, due to the fact that trends are changing not as quickly as in the clothing industry large quantities of the same customized textile are often ordered over several years, which again makes the ability to additionally deliver strategically important for Pretext and its customers. Satisfied by this process, customers recommend Pretext to other companies, which added its textiles into their assortment. This shows a strong word of mouth in this industry. Furthermore, trade fairs are perceived as important as well as the website of Pretext as two different ways of a first point of contact.

Deriving now the conclusion about whether Pretext is a MC company or not from the case description, also here evidence can be found. First, the firm controls the supply-sided complexity by setting up a collection, which is then modified according to customers needs'. Thereby, the textiles are predefined and patterns on them are possible to be modified as well as the color. Second, the customer-sided complexity is faced by a design department, which is consulting the customer and creates a customized solution. Third, with this customized solution the customer receives a solution space and value creation oriented product, which is orientating on the central value components required by the customer.

5. CROSS CASE ANALYSIS

During the interviews with the companies, the differences in the business models in order to identify the patterns were found on the economic, the operational as well as the strategic level. Having a look at the operational level, the differences in the way how the companies are interacting with their customers in order to customize a product were diverse. In the case of Priotextile the company is following an adaptive customization approach, Textilelive besides its standard products a collaborative approach for their customized products and Pretext a mixture of both. Furthermore, the value creation and the range of value-added services is different. Priotextile offers a wide variety of additional services to its customers in order to create an experience for and relationship of the customers with the product and the brand. Textilelive and Pretext offered comparably few additional services to their customers. But all three companies had the prototyping service in common. Because especially the textile industry struggles with capability of imagination and haptic aspects for the decision on the customer's side, prototyping is essential for all companies in order to be able to deal with complexity of product characteristics. But then the prototyping itself

was designed differently. In most cases the prototypes are mainly a source of costs on the economic level for the selling company, but Textilelive for example is passes these costs on to the customer and might even be able to turn this aspect to source of profit. In the end, for all companies it is important to have the ability to quickly additionally deliver previously developed products again to the customer, which makes agile processes essential. And especially this ability is also contributing to the MC efficiencies in the business model. Besides the large volumes business customers purchase with one order, which cause scaling effects and are base for MC efficiencies, also the ability to additionally deliver is therefore important due to quantities business customers request over time.

On the strategic level the extent to which the brand perception is built proactively was highly different. Considering Priotextile with a wide range of marketing activities, Textilelive and Pretext have a much smaller set of marketing activities. Also these marketing activities do not necessarily have an impact on potential growth opportunities. Especially, for Textilelive the certification for its finishing processes underlies legal requirements set by politics. With changing legal necessities, the company's customers need to fulfill them, which cause orders as well as R&D efforts for Textilelive. Independent if the companies reach it by marketing activities or mainly word of mouth among customers, the perception of the East German textile industry is coherent, which for all involved economic entities an advantage from a strategic point of view. The industry and thereby most companies are perceived as flexible towards customer request and special needs, innovative, transparent and able to customize their products, mainly sustainable, offering products of high quality and reliable in delivering its products as well as being able to additionally delivering them. Finally, the essential statement, which was mentioned in every interview, was the importance of personal contact with and consultancy for the customers, as well as the ability of the companies to provide small samples and prototypes to its customers.

6. DISCUSSION

The cross case analysis in combination the individual results have shown three different patterns, which essentially differ in the extent of the interaction with the customer. This again has consequences also on other aspects of the companies. The results have shown that in the German textile industry companies with adaptive customization have to offer more value-added services to their customers in order keep them attracted and stay in their perception, than companies offering customers the customization of products with a collaborative approach. The same holds true for necessity of marketing actions. With a collaborative customization approach the importance of the word of mouth among customers and potential ones increases and make additional marketing activities more and more obsolete. This means, as more influence custom-

ers receive in the design and development process of a product, as more attached they feel to it and the producing company the customer is tightly interacting with, and as more the customer is willing to recommend the company, in case the result was satisfying, which means in the end, less necessity for additional marketing activities.

Additionally, the study has shown that the term “Made in Germany” is mainly positively perceived by customers and also further used for promoting products to the end-customer. Thereby, customers of the German textile industry are also willing to pay a price premium for the quality and the services they are receiving. Furthermore, the location has shown to be an advantage due to less transportation costs, shorter waiting periods and ability to order smaller purchasing volumes. In general this means for SMEs in high-wage countries, that locality, a personal customer contact and quality aspects are essential especially for narrow-specialized SMEs in niche markets in order to be able to customize products for customers properly and ensure large order volumes by business customers at least over time.

Besides, the MC efficiencies the companies have shown the three elements of MC are shaped quite differently in the B2B context in comparison to B2C markets. Due to the fact that personal contact with the business customer is so important for a company’s success, configurator solutions do not seem to be an appropriate tool in the co-design-process. Therefore, the companies have found different ways to deal with the customer-sided complexity. Design and technical departments provide support to the customers in order to find a solution, which at least contains the customers’ most important if not all central value components, finally creating value. This means, the MC characterizing elements mentioned earlier cannot strictly be applied by using toolkits in terms of a configurator for example, when it comes to the consideration of B2B markets. For these markets the elements have to be seen in a broader perspective to describe the business activities of these companies and taking the MC efficiencies.

7. CONCLUSION

The German textile industry found its niche in high quality customized products in fields as clothing, technical textiles and furniture. By high efforts in consulting, personal contact with customers and prototyping the complexity of products is made understandable for the customer. Customer interaction, process design and brand as well as industry perception are the essential assets the companies can differentiate from their international competitors. Future research should try to emphasize on how the cooperation among SMEs from a high-wage country within the value chain can be improved in order to provide even more sophisticated services, promote the industry better and reveal further growth opportunities as well as potential decrease costs and increase order volumes. Therefore, network and platform approaches should be examined

in order to develop the business models of the companies and industry further.

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