The Drivers of Success in Business Model Transformation

Nenad Savič
Irena Ograjenšek
Adriana Rejc Buhovac

Follow this and additional works at: https://www.ebrjournal.net/home

Recommended Citation

This Original Article is brought to you for free and open access by Economic and Business Review. It has been accepted for inclusion in Economic and Business Review by an authorized editor of Economic and Business Review.
THE DRIVERS OF SUCCESS IN BUSINESS MODEL TRANSFORMATION

NENAD SAVIČ
IRENA OGRAJENŠEK
ADRIANA REJC BUHOVAC

Received: 10 September 2015
Accepted: 15 December 2015

ABSTRACT: Existing empirical literature on business models is still inconclusive about the key drivers of successful business model transformation. The paper explores this issue by using a single longitudinal case study design in combination with grounded theory approach on a medium-sized, high-tech and globally oriented company. Based on on-site visits, interviews and secondary documentation data analysis, the study identifies six generic drivers of successful business model transformation: transformational leadership, discovery driven decision-making, industry improvement – customer specific orientation, content-oriented communication, self-initiative collaborators, and phased separation strategy. The new drivers supplement our existing knowledge on how successful transformation takes place and add to existing drivers, while extensive discussion of their implications may help the managers to execute business transformations more effectively.

Keywords: business model, transformation, change, strategic alliances, drivers
JEL Classification: M00; O30
DOI: 10.15458/85451.14

INTRODUCTION

The question of how to transform a business model to spur technology improvements within an existing and highly profitable business model has not yet been addressed. Existing empirical research on internal drivers of business model transformation (hereafter BMT) focuses on the process of experimentation (Achtenhagen, Melin, & Naldi, 2013; McGrath, 2010; Sosna et al., 2010), leadership characteristics (Doz & Kosonen, 2010; Foss & Stieglitz, 2014), and capabilities of managing two business models simultaneously (Casadesus-Masanell & Tarzijan, 2012; Khanagha et al., 2014). Understanding what drives successful BMT is especially important in strategic alliances where small and medium hi-tech companies with innovative technologies complement their capabilities with those of their strategic partners (Medcof, 1997). While such partnerships can be highly profitable, partners might unilaterally embark on a transformation, which is not driven by the desire to have greater profit but to maximize their technological potential. Little is known...
about what makes BMT successful or not, especially over time. Moreover, a systematic examination of the relevant drivers of BMT and the kinds of change they cause is missing from existing business model literature (Saebi, 2014). Although many researchers have been exploring the process of business model innovation, the less innovative but highly demanding process of BMT is still largely under-researched, especially in long-term partnerships. Current research gives primacy to the external context as the driver of business model change with little empirical evidence on key internal drivers and their interdependencies (Martins, Rindova, & Greenbaum, 2015).

The objective of our study was to explore the key drivers of successful BMT. The main research question was: ‘What are the key drivers of successful business model transformation?’ To explore the research question, we developed a longitudinal single-case study design based on an inductive field study of a globally oriented high-tech company. This paper contributes to the knowledge on business model dynamics by addressing the issue at hand from a long-term perspective. Based on information gathered from multiple sources, we identified six drivers of successful BMT. Thus, our paper advances the theory of business model change/transformation. We conclude the paper by discussing our findings and highlighting their implications for managers and academics.

1 LITERATURE REVIEW

A general consensus exists that a business model is oriented towards creating and delivering value to customers (Demil, Lecocq, Ricart, & Zott, 2015), and capturing value for the organization (Massa & Tucci, 2014). Business model change is the process by which the management deliberately and actively (Doz & Kosonen, 2010) alters established intra-organizational and/or extra-organizational systems of activities and their relations to environmental changes (Bucherer, Eisert, & Gassmann, 2012), and is mainly launched by reacting to technological and market-related forces (George & Bock, 2011) and by refocusing from an organization-centric to customer-centric business model (McGrath, 2010).

In the lifetime of a company, the initial design of its very first business model is based on a variety of external and internal factors (George & Bock, 2011); however, the ongoing search for a better competitive position often forces companies to change this model (Chesbrough & Rosenbloom, 2002; Markides & Sosa, 2013). There are three theoretical perspectives on business model change: (1) rational positioning view, which represents a search for a new optimal design that repositions the firm in response to any kind of significant changes in its environment; (2) the evolutionary view, which sees business model development as an initial experiment followed by constant fine-tuning and learning, and (3) the cognitive view, which advocates that business model change is a consequence of managerial mental models, which accrue due to changes in the environment. These perspectives emphasise the external context as a driver of business model change and offer limited insight into the internal drivers of successful business model change (Martins et al., 2015).
While there are different interpretations of business model change (Aspara, Lamberg, Laukia, & Tikkanen, 2013; Doz & Kosonen, 2010; Markides, 2013; Massa & Tucci, 2014; Sosna et al., 2010), authors agree that business model change is likely an ongoing process (Casadesus-Masanell & Ricart, 2011; Khanagha, Volberda & Oshri, 2014) partly characterised by demanding (Aspara et al., 2013; Sosna et al., 2010) and partly by fine-tuning changes (Cavalcante et al., 2011). Business model change activities can range from incremental changes in individual components of business models right through to innovative disruption of core elements of a firm and its business logic (Bucherer et al., 2012). To differentiate business model innovation from other types of business model change, we followed the concepts defined by Massa and Tucci (2014). Business model design relates to newly formed firms and business model reconfiguration to established ones. Along with business model innovation, these two concepts are part of the business model change concept; similarly, business model innovation is part of a broader concept of BMT.

The capabilities required to successfully utilise different types of business model change include evolutionary, innovative, and adaptive change capabilities (Saebi, 2014). BMT combines adaptive change capabilities and directed transformation to respond to technological changes (Khanagha et al., 2014).

When dealing with two competing business models, which seems to be the dominant approach in managerial practice (Bucherer et al., 2012), there is a need for recursive iterations between different modes of separated and integrated structures in line with the emergent nature of strategic intent toward the new business model (Khanagha et al., 2014). To manage two business models simultaneously, a company has to design a context allowing it to achieve a delicate balance. On one hand, it has to create enough distance between the two business models so that they do not suffocate each other, and on the other hand, it has to keep them close enough to exploit synergies between the two (Markides & Sosa, 2013). Working with a new business model requires experimentation and divergent thinking that can be better achieved by flexible and decentralized structures; in addition, continuing with the existing business model requires focus and is better accomplished via efficient and centralized structures (Khanagha et al., 2014).

In the experimentation research stream, creating, identifying and experimenting with new business opportunities has been confirmed as a critical capability in a longitudinal study of 25 small and medium-sized firms (Achtenhagen et al., 2013). The study showed that highly entrepreneurial experimenting is related to market research, new ideas and accepting failures—these were treated as a basis for learning. It has been shown that organizations learn more from failures than successes and that knowledge from failures depreciates more slowly that knowledge from successes (Madsen & Desai, 2010). The acquired knowledge from experimenting subsequently allows exploring alternative approaches to value creation (Sinfield, Calder, McConnell, & Colson, 2012) and successful business model development (Sosna et al., 2010). Focused commitment to one single business model in combination with simultaneous experimentation can influence the long-term survival of ventures operating in uncertainty (Andries, Debackere, & Looy, 2013).
In the leadership research stream, the founder's vision has been found to importantly influence business model development and change (Chesbrough & Rosenbloom, 2002). Strategic sensitivity, which includes sharpening foresight in seeing the needs for a BMT, has been suggested as leadership meta-capability (Doz & Kosonen, 2010). In addition to achieving coherence between active and clear leadership, a strong organisational culture and employee commitment have also been recognized as a critical capability (Achtenhagen et al., 2013). Four roles (monitor, sponsor, moderator, and architect role) of top management in leading business model change are proposed regarding the intensity of the business model change (Foss & Stieglitz, 2014).

Due to technology development, many companies are forced to run two business models simultaneously. In the managing two business models simultaneously research stream, researchers find that companies can run two business models also when they see the opportunities of serving two different customer segments. In such cases, business models can complement each other, for example in the case of LAN airlines (Casadesus-Masanell & Tarzijan, 2012). Four possible strategies for managing dual business strategies are proposed (Markides, 2013); however, complete separation has not been found as the optimal structural approach for dealing with two competing business models (Khanagha et al., 2014). The need for recursive iteration between different modes of separated and integrated structures in line with the emergent nature of strategic intent toward the new business model was highlighted.

The collaboration with customers research stream underlined the need for rethinking the generation of ideas and bringing them to the market. This led to the concept of open innovation and open business models (Chesbrough, 2003) with nine different research streams of which the user perspective is one of the best-researched fields (Gassmann, Enkel, & Chesbrough, 2010). The bibliometric review of the concept of open innovation reveals that it is mainly, but not exclusively, rooted in technology and innovation management literature, with a strong focus on the user-centric perspective (Kovacs, van Looy, & Cassiman, 2015). For example, the exploratory study of 605 innovative SMEs in the Netherlands highlighted that they are practicing open innovation activities extensively and increasingly. Open innovation in these firms was operationalised in the field of technology exploitation and technology exploration (van den Vrande, de Jong, Vanhaverbeke, & de Rochemont, 2009). A study among contributors of freely submitted designs for a jewellery company highlighted the importance of co-creation and its impact on the quantity and quality of designs submitted (Füller, Hutter, & Faullant, 2011).

Previous studies do not provide evidence of a business model change taking place in the strategic alliance separation of a medium sized high-tech company. Leadership focus studies have a limited range (Foss & Stieglitz, 2014) and do not reveal the kinds of leadership style (Yukl, 2010) appropriate in an alliance-related BMT. Often, the focus tends to be on structural solutions while other elements rounding up the company’s organisational context, such as values, vision, incentives, people and culture, are underexplored. Whether cooperation with customers in such a delicate situation has a significant impact on the success of a business model transformation has yet to be investigated.
2 METHODOLOGY

A qualitative research approach with two commonly used methods for inductive research was applied: (1) single case study, justifiable when the research of a topic is at its early stage (Eisenhardt, 1989), is representative, and serves a revelatory and longitudinal purpose (Yin, 2009); and (2) the grounded theory methodology (Glaser & Holton, 2004) in order to assure qualitative rigour in conducting the research (Gioia, Corley, & Hamilton, 2012). We adopted the stance of “theoretical agnosticism” (Charmaz, 2006).

2.1 Case description

The case study involves a medium sized and innovative hi-tech company Dewesoft, which changed its business model to ensure the maximization of its technological potential. In fact, its potential was locked and under-exploited under the first business model when the company was strategically aligned with its Austrian partner. This case is unique in that no other cases known in literature dealing with BMT simultaneously involve strategic alliance separation; therefore, the decision for the single case was justified. During the BMT period from a strategically aligned DAQ SW company to an independent total solution company, Dewesoft established its own global sales network in 38 countries and introduced over 45 innovative DAQ HW measurement instruments perfectly fitted with their own DAQ SW to the market. It completely changed its sales model, a fact reflected by the total turnover achieved at the end of 2014 (€10.7M), which is 7.64 times more compared to the turnover at the end of 2007 (€1.4M). In addition, the company raised the employee added value from €98,800 (2007) to €150,800 (2014), even though the average number of employees in the Slovenian head office increased from 9.6 to 38.3.

2.2 Data collection

Data collection included multiple sources of primary and secondary data in three research sequences (for details on research sequences, see Appendix 1). In the first research sequence, we used three unstructured interviews consisting of an opening question and followed by probe questions which focused on the company's early development stages and BMT perceptions. Interviews were complemented with an on-site visit and informal discussions. Because the BMT was still in progress, we recognised that interviewing only executives and having no access to internal documentation may not yield entirely accurate data. Comprehensive external documentation examinations were carried out between the first and the second data research sequences, and primary data was also collected. This allowed us to draft the first BMT process and its key drivers. Publicly available external documentation included newspaper articles (interviews and company presentation), media accounts (TV), strategic partner’s annual reports, secondary survey data from the project Gazele, graduation theses of Dewesoft’s employees, and the financial database Gvin.
After a period of establishing trust, Dewesoft’s CEO and CTO expressed a willingness to disclose their internal archives. The second research sequence included additional two interviews with executives, a review of internal documentation (business reports, financial reports, company’s presentations, e-mail correspondences, operational guidelines, catalogues, company website, and company video and photo materials). In addition, three informal conversations with executives were carried out.

The second draft of BMT with tentative drivers of success, produced at the end of second research sequence, encouraged the company’s CEO and CTO to ‘open the door’ to other informants, allowing us to broaden our social interactions. In the third research sequence, 18 semi-structured interviews with four groups of other informants (cofounders, experienced engineers, employees, and partners) were conducted, lasting from 30 up to 60 minutes each. They were transcribed on the same day. Except for interviews with partners which were performed at their locations, all interviews were conducted at Dewesoft’s head office. We were also invited to four company meetings; in addition, we had four informal conversations and were engaged in informal social gatherings relevant to our research question. Altogether, more than 200 pages of transcripts were accumulated. The time period for internal sources used was 2003-2014, and for external sources it was 2001-2014. All interviewees were aware of our role in the study and voluntarily agreed to participate in it.

2.3 Data Analysis

The analysis was structured following continuous interplay between data collection and analysis and permitted us to follow the leads that emerged (Charmaz, 2006). In the first data collection period, we familiarised ourselves with the data collected, then analysed interview transcripts and investigated the data from on-site visits and informal conversations to highlight any inconsistencies requiring further examination (Eisenhardt, 1989). With an early analysis, we coded the data to summarize, interpret, and classify information (Miles & Huberman, 1994). The main topics covered were identified and resulted in 291 insights emerging from transcription. Also, a common set of terms was determined, resulting in 29 broad categories that were further analysed for similarities and shared characteristics, ultimately leading to the generation of 6 main categories which served as constituent parts of the first tentative model of key drivers of successful BMT. The coding process was exploratory, relying on informants’ wording.

In the second research sequence, we transcribed and coded—independently from the previous findings—a new set of interview data, personal observations, and excerpts of internal documents. This resulted in 140 insights, which emerged from the transcription. Another feature of this sequence was that we presented the first tentative model of key drivers of successful BMT to the executives after conducting interviews with them. The model was formulated based on the findings of the first research sequence. In the ensuing discussion, 3 major research categories out of the proposed 6 were confirmed as suitable work concepts. The tentative work model was created without analysing internal company
documentation because we only obtained access to it in the second research sequence. This means that we relied on cross-period analysis in which the insights from the first research sequence were compared to the insights from the second one. This resulted in additional vital information that enabled us to understand the broadest context of the company’s operation. By identifying patterns and their connections, and exposing illustrative quotations and thoughts, we condensed the information into 5 tentative drivers by the end the second research sequence. The drivers were presented to executives and confirmed by them.

By the end of the third research period, a wealth of new data and input into the course and consequences of BMT was made available for research, so we decided to once again recode all the available information. The new coding yielded a total of 322 content codes. An ensuing process of finding interconnections between content blocks produced 17 sub-categories that were streamlined into 6 main categories.

3 RESULTS

Figure 1 presents the structure of data after the third research sequence. Illustrative content codes are shown with two items for each sub-category (see Appendices 2 and 3 for the coding sample and a range of illustrative quotes and observations). The formulation of main categories is outlined in Table 1.
Figure 1: Data Structure after the Third Research Sequence

<table>
<thead>
<tr>
<th>Illustrative Content Codes</th>
<th>Sub-Categories</th>
<th>Main Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Personal technology vision</td>
<td>Technology vision</td>
<td>Transformational leadership</td>
</tr>
<tr>
<td>• Technological insight and understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Orientation towards top-quality products with global demand</td>
<td>High quality focus</td>
<td></td>
</tr>
<tr>
<td>• Improving and speeding up procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Employees own a stake in the company</td>
<td>World view</td>
<td></td>
</tr>
<tr>
<td>• Jure has “a big heart”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Unsuccessful online sales</td>
<td>Effectuating / experimenting</td>
<td>Discovery driven decision-making</td>
</tr>
<tr>
<td>• Setting up conditions for independent global sales via the partnership network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Modification of the market logic</td>
<td>Agile deciding</td>
<td></td>
</tr>
<tr>
<td>• Attempt to provide non-competing HW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use of software without annual licensing fees</td>
<td>Customer value proposition</td>
<td>Industry improvement - customer specific orientation</td>
</tr>
<tr>
<td>• Licensing philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Development planning together with customers</td>
<td>Customer – co-creation</td>
<td></td>
</tr>
<tr>
<td>• Understanding and reacting to customer needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Providing free access to new technological solutions</td>
<td>Industry value sharing</td>
<td></td>
</tr>
<tr>
<td>• Lifetime upgrade and solution sharing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Self-initiative development of employees</td>
<td>Engagement</td>
<td>Self-initiative collaborators</td>
</tr>
<tr>
<td>• Focus on individual contribution to the whole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Knowledge transfer policy - culture of learning</td>
<td>Internal knowledge sharing</td>
<td></td>
</tr>
<tr>
<td>• Personal example, sharing profound expertise</td>
<td>Fast and innovative development</td>
<td></td>
</tr>
<tr>
<td>• Innovative upgrades to existing solutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rapid development capabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Informing about changes in software development</td>
<td>Customer-focused communication</td>
<td>Content-Oriented Communication</td>
</tr>
<tr>
<td>• Showcasing development and production facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Direct communication of technology vision to partners</td>
<td>Sales partners-focused communication</td>
<td></td>
</tr>
<tr>
<td>• Putting partners at ease concerning future stability (post-separation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Realistic situation assessment</td>
<td>Sensing</td>
<td>Phased Separation Strategy</td>
</tr>
<tr>
<td>• Trying to find ways to stay in the partnership</td>
<td>Making distinction</td>
<td></td>
</tr>
<tr>
<td>• Production of non-competing products – phase one</td>
<td>Development of missing capabilities</td>
<td></td>
</tr>
<tr>
<td>• Entry into &quot;vacant&quot; technological fields</td>
<td>Ambidexterity</td>
<td></td>
</tr>
<tr>
<td>• Independent and indirect market entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Willingness to coexist and co-develop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Establishment of own sales network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Starting sales under own brand</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1: Drivers of BMT and their subcategories

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategories</th>
</tr>
</thead>
</table>
| Transformational leadership                   | • **Technology vision:** Long-term understanding of the direction of the company’s technological development and the ability to transfer this vision to all involved parties.  
• **High quality focus:** A focus on creating above-average products and innovative services that exceed the expectations of the consumer.  
• **World view:** Fundamental philosophical orientation of the company that guides the pace, course and intensity of its business operations. |
| Discovery driven decision-making              | • **Effectuating / experimenting:** The constant development and execution of new modes of operation with the intent of acquiring experience and information for the purpose of successful decision-making.  
• **Agile deciding:** Ability to adopt BMT decisions that are of current strategic importance to the company. |
| Industry improvement - customer specific orientation | • **Customer value proposition:** Clever way of offering added value to end users.  
• **Customer – co-creation:** Encouraging the active cooperation of customers and partners in the process of constant product improvement, so that end users (and sales agents) have a say in how technological solutions are designed.  
• **Industry value sharing:** Ensuring that solutions developed for specific purposes are then accessible to everyone. |
| Self-initiative collaborators                 | • **Engagement:** Selection and development of personnel that proactively strives to realize the company’s technology vision, on the individual as well as team levels.  
• **Internal knowledge sharing:** It is of key importance to create an atmosphere that encourages each individual to contribute their maximum share to the realization of common goals and stress the importance of everyone’s involvement.  
• **Fast and innovative development:** The ability to perform fast and innovative development is tied to the upgrading of existing products and the utilization of a broad mix of industry knowledge and expertise. |
| Content-Oriented Communication                | • **Customer-focused communication:** Using effective means to inform customers continuously and at the right moments about possibilities for future development.  
• **Sales partners-focused communication:** Ensuring conditions for the establishment of an effective network of sales partners willing to work with a young company on the rise. |
| Phased Separation Strategy                    | • **Sensing:** Executives carefully observe all the moves and decisions conducted by the former strategic partner and regularly adopt counter-measures.  
• **Making distinction:** Ability to differentiate the company from the former strategic partner, coupled with the audacity to compete on the same market.  
• **Development of missing capabilities:** Capabilities that were assured by the former strategic partner had to be developed.  
• **Ambidexterity:** Ability to share resources between the old and new business models during the period of transformation. |
3.1 Transformational leadership

A number of statements emphasise that the CTO Jure Knez is the undisputed leader of the company and that his personal example propelled the realization of the enterprise's technological vision and guided employees throughout the course of BMT. A perceived danger to the realization of the technology vision was in fact one of the key causes for the necessity of BMT, and the leadership's ability to openly communicate its perspective and work hand in hand with employees was one of its key facilitators. The company cofounder stated in his interview: “We're tremendously fortunate to have the opportunity of working with Jure, as he's someone that will go above and beyond his duties to make sure we stay on top”. The realization of the technology vision went in harmony with a focus on the gradual but persistent achievement of state-of-the-art quality and product performance. One example is their software for the acquiring, processing and display of data, which is still the same core product it had been at the company’s establishment, and one they are constantly updating. An important element of the leadership charisma was the CTO's particular world view, which is well illustrated by his answer to a journalist, asking how he sees the individual's ability to change the world: “Being small compared to the rest of the world isn't an excuse to stay passive. Everyone should do their best to pitch in, help out and make the world a better place, then it all adds up.”

3.2 Discovery driven decision-making

Participants in our research believe that their willingness to accept risk and experiment with business practices and technological innovation was essential for the success of BMT. The research further established that the executives did not know how it would look and function once transformation was complete. Many decisions were made on the basis of “as-you-go” information and understanding developed from experimenting and the will to pursue ideas. Experimenting comes with unexpected outcomes but results in useful experience both ways, and interviewees shared a belief in leadership that embraces the possibility of negative outcome. “Even today, we can't say for sure we'll be staying afloat, but the environment changes all the time anyway. It's a sin not to try new things, don't you think?” There is another case, which shows the willingness for experimenting. Dewesoft tried their hand at online sales, which proved to be far less successful than they had envisioned. One executive commented: “When we looked at the success of our internet sales, we were forced to admit they were a failure. And we had to cancel them, sure. But it all ended up being the first step on our way to independence.” Each of the company’s experiments was followed by an analysis of its effects and the adoption of new decisions, which normally ended up being of strategic importance to the company and carried over to the transformation of the strategic model. Thus, failure to reach good sales online helped leadership decide to establish the company's own sales office in Austria.
3.3 Industry improvement - customer specific orientation

On the basis of all the evidence acquired in the interviews, observations and analysis of company documentation, we established that the company is not only focused on creating added value for their customers, but is also extremely willing to listen to their feedback and incorporate it into solutions which then manage to push technological boundaries. Looking at the information we acquired, it is accurate to state that the company created the added value on the basis of technological perfectionism and innovation, pricing policy, a free-of-charge bundle of extra services that provided customers with updates, maintenance and technological upgrades distributed to everyone, as well as a free software package for the analysis and display of data once it was captured by the Dewesoft measurement software. Co-creation with their customers in the development of solutions had always been their trait, but prior to strategic separation, they did not have direct enough access to the customers to perform it to a satisfactory degree. During the BMT, Dewesoft turned what seemed like a shortcoming into an advantage.

The company's accessible and responsive orientation was also confirmed by one of the customers, who said: "Dewesoft reacted right away to our particular needs, and the other makers didn't, so it became a pretty easy choice looking forward ... and that's why we chose them." Based on the collected information, we were also able to ascertain that their next dimension of industry improvement—customer specific orientation—is aimed at the development of industry-wide solutions that push the technology forward for all users, promoting fundamental development. Cutting-edge design rests on systematic technological development, coupled with a broad understanding of end-user issues and expectations as well as a close understanding of the industry as a whole, through cooperation with top experts in the field of automotive, aircraft, space and power technology fields. As the CEO said: … "It was shocking to find out even NASA was prepared to let us make the products we developed specifically for them available to everyone else. We don't believe in exclusivity in science. Everything we ever developed became an update to our core software. 15 year later, we still keep upgrading the same one. And all the improvements are public, freely available to anyone who ever purchased our product.” The approach that adds all customer-specific solutions to the core software package used by everyone makes it incrementally more capable and reliable, in turn attracting a wider and wider circle of customers.

3.4 Self-Initiative Collaborators

The entrepreneurship logic of Dewesoft is characterized by the significant autonomy of each employee, coupled with extensive encouragement of proactive contribution to the company's goals on both the individual as well as team levels. On the other hand, the ability to co-create applicative research for major global companies provides a high degree of personal motivation to ambitious young engineers, who are eager to excel and prove their professional worth, or as one of them said: "When I was at the fair and saw just how much famous companies value Dewesoft's solutions, it made me rethink my work ethic, and
since then I want to do my best even if I have to be here all day...” The willingness to actively share personal expertise is also one of the most outstanding personal traits of the CTO, and this attitude is carried over to those working in the same environment. Dewesoft leadership offers guidance to personnel and expects them to share knowledge between one another, creating a culture of learning not only in the company's internal dealings but also in its relationship with customers and suppliers. The value of knowledge exchange is confirmed by numerous interviewee statements: “The first thing we teach our employees is how to fly by themselves, and if they need directions, they can ask,” as the CTO stated. One employee confirmed this sentiment by saying: “I really appreciate that everybody was willing to help me when I started working for the company”, while another told: “Since I was employed here, I feel like my mentor gave me so much experience...”

3.5 Content-Oriented Communication

Focus on strategic, planned, diverse and constant communication with customers and sales network partners was seen as another vital factor in the success of Dewesoft’s BMT, according to the gathered information. A new period in communication began in early 2008 with the website redesign and the promotion of the company's first independent measurement instrument, which received the Nasa Tech Briefs prestigious Product of the Year 2009 award. That year, the company also opened its sales office in Austria and one of the cofounders remembers: “In 2009 we published our first catalogue which featured just a few HW pieces, but it was a necessary start to approaching the customers and sales networks”.

All these activities served to inform the customers, and some were also aimed at reinsuring them that Dewesoft was able to independently develop capable non-competing instruments which it was offering at the time. Once it was made clear that complete separation from the former strategic partner was unavoidable, the approach to communication with customers and the sales network was refocused on Dewesoft as an independent provider of quality hardware in combination with excellent SW for turn-key, easy-to-use measuring solutions.

Dewesoft also began organizing regular measurement conferences (taking place in 2011, 2013 and 2015) at the location of the company's head office where they invited their customers and business partners. The primary purpose of these conferences was to present new products and improvements, exchange experience and transfer expertise, in addition to reinforcing the status of a company that was growing and stable in the long-term in spite of its on-going separation from the strategic partner. Measuring conferences also provided the opportunity to directly showcase the company's research and development facilities, including remote ones, as one of the executives commented: “Buyers already visited us here on the hill where we make aluminium casings, and they can see first-hand it’s not a cheap product but rock solid”. Throughout this stage of model transformation, communication was supported by sales engineering and regular participation in established international trade and industry fairs, alongside the extensive dissemination of information via the company's website and digital channels.
3.6 Phased Separation Strategy

When one side in strategic partnerships feels the deal is no longer working in its favour, it will attempt to rearrange the cooperation conditions or cease partnership. In the latter case, the process of separation is a delicate one since partners have a limited time window to organize any capabilities they are now missing, and prove to customers that they are still worthy of trust even when operating as independent entities. In this context, respondents stated that the accurate interpretation and assessment of the business behaviour of the former partner was crucial in the process of decision-making and market positioning, as both executives agreed. The one of them stated: “We realized that our strategic partner was looking for ways to become more independent from Dewesoft, and that meant we had to become more independent, too. That was the breaking point in our cooperation.”

Knowing that they will compete on the same market, and initially for the same exact customers, Dewesoft chose to first offer similar products based on different technology, which were not directly competing with the range offered by the former partner, as illustrated by the following statement of the CEO: “When we started making instruments, we said we’d make something they don’t carry, so there would be no hard feelings.” When Dewesoft finally started competing with its former ally, it did not try to dump prices but instead offered superior products at the same price. The company’s capacity for rapid development then allowed it to quickly position itself in those technology fields that were still unoccupied by the former partner. As one senior engineer said: “We’re quite good when it comes to data acquisition, we have a lot of range there, and now we want to explore the controller side, data output. A completely new field that would really set us apart from our previous ally.”

In a strategic partnership, the most suitable strategy is agreement on a period of continued cooperation. Judging by the respondents’ statements, we were able to conclude the company first secured all the personnel deemed necessary for technologic development, and then focused on the establishment of its own sales framework. One of the cofounders stated the following: “Our next step was how to persuade and motivate the sales channels in the network of our ex strategic partner to start selling our hardware, initially still under the same name as before and then soon under the Dewesoft brand.”

To manage two business models simultaneously, the firm has to design a context that will allow it to achieve a delicate balance. In the case of Dewesoft, we recognised a slightly different approach. During the BMT, they used the new business model more and more; however, they never ceased using the first model for two pragmatic reasons. The first is that customers who use the product from the first business model could become their first tier customers in the future, and the second is that the revenue stream of the first business model was still substantial.
4 DISCUSSION

This exploratory research resulted in 6 drivers of successful BMT and 17 sub-categories. *Transformational Leadership.* Leadership theory affirms that there are two distinct but interrelated types of leadership: transactional and transformational (Yukl, 2010). Our study found that executives are the leading force of BMT, especially the CTO of the company and the main shareholder, who never works from a position of authority. They inspired co-workers or “members of the team”, as the CTO always expressed himself during interviews, and motivated them by personal behaviour, learning abilities and technological professionalism. Researchers in previous studies have not defined what types of leaders have led BMT, with few exceptions. Sosna et al. (2010) identified that the exploratory phase of the transformation of the business model was “strongly influenced” by the entrepreneur or owner-manager who was the main decision-maker and “was encouraging his team to learn and experiment by sharing information and was involving them in decision making”, which are all elements of transformational leadership.

*Discovery Driven Decision-Making.* In highly uncertain, complex and fast-moving environments, experimentation and, consequently, evolutionary learning are the “tools of choice” for how to discover the most effective business model, since they cannot be fully anticipated in advance (McGrath, 2010). Our study found that the business model was not exactly innovative and new to this world, but it was highly new to the firm. The research also confirmed that experimentation and effectuation was a “state of mind” in the company for learning and gaining relevant experience on how to adjust different aspects of the company to the emerging business model. We found that the researched company performed experiments and effectuation in very different fields, such as technology (new instruments), acquisition (an offer to buy the strategic partner), market access (web sales), human resource motivation (an incentive scheme) or even at the level of product name development. Not all experiments were successful (web sales, acquisition); however, within the company they were treated as failures rather than mistakes (Sosna et al., 2010). In our study, we found a close connection between discovering and deciding or taking action (Casadesus-Masanel & Ricart, 2011), such as: success with the first instrument (experiment) led to global web sales (decision); global web sales failure (experiment) led to opening the first sales office abroad (decision); acquisition of strategic partner failed (experiment), which led to a stronger HW development team in the company (decision).

*Industry Improvement - Customer Specific Orientation.* Our study’s findings confirm that Dewesoft’s customer value proposition was changed, adapted and improved during the process of BMT. It was especially important because Dewesoft was co-creating solutions with the customers who were simultaneously customers of their previous strategic partner. Dewesoft did not strive just to maximize shareholder wealth; in fact, it was just the opposite: they strove to find ways of maximising the use of technology which was locked into the initial business model and to develop new types of measuring instruments and solutions, all in line with their “world view”. They made sure that all users who already bought a licence, and with it access to the latest technology, had free access to the SW solutions developed for any specific customers. That means that all Dewesoft’s customers who work in a “virtual network”, unintentionally, but on the other hand consciously and with
formal consent, help each other and share best practices and knowledge, which embodies Dewesoft’s capabilities in its products. With such an approach, all customers from the same industry benefit and improvements quickly move the boundaries of an industry’s capabilities far ahead. Such cooperation is understood as an extension of customer value co-creation, where a supplier-customer relation is in the foreground (Galvagno & Dalli, 2014), compared to our findings, which put in the foreground the supplier–customer–industry relation. Such an approach is in line with calls for “creating shared values”, as in the case of Nike (Epstein, Buhovac, & Yuthas, 2010).

**Phased Separation Strategy.** Our study results confirmed that making a distinction between companies was an important characteristic of a phased separation strategy. A company should implement distinction in accordance with careful sensing and evaluating partner moves in the strategic alliance separation process (Peng & Shenkar, 2002). If both partners compete on the same market for the same customers, this is an even more sensible process. In our case, there was a very unique situation because Dewesoft was developing a new business model and simultaneously running the old one. That is a common situation when both partners depend on each other because they serve the same customers, and, during the separation process, assure relevant capabilities which are no more accessible from the previous partner. During the BMT, Dewesoft was in a position to run its first business model: selling its own SW solution to the strategic partner. Simultaneously, they started running another business model in which they were selling, at the beginning, their HW solutions via the partner’s sales network to the end users. The same approach was later adopted with selling complete solutions via their own sales network while keeping the original business model active the entire time. Spatial separation (Markides, 2013) of business models is not relevant in cases where the resources and capabilities needed to run both business model can synergize each other.

Besides confirming four already recognized drivers, our study revealed two additional BMT-related drivers which surfaced during the strategic alliance separation. The first one is self-initiative collaborators. BMT requires high flexibility not only among management but also among employees (Cummings & Worley, 2009), who should be self-motivated to change (Prahalad & Ramaswamy, 2000). Various study results suggest that distrust often motivates employees to hide knowledge from their colleagues (Connelly, Zweig, Webster, & Trougakos, 2012), which was not the case in our research. We found that a high degree of trust among employees correlated with transformational leadership, which resulted in employee participation in the internal transfer of knowledge, and in fast and innovative development and upgrade of existing solutions. An even greater challenge in organizations is how to prepare employees not only to change and adapt to the new business model, but also to encourage their creativity and active involvement during its transformation. A number of studies have investigated the relationship between leadership style and employee creativity (Amabile, Schatzel, Moneta, & Kramer, 2004; Zhang & Bartol, 2010). Both characteristics were influenced by the technological vision of the company and the capabilities of its employees, while taking into account the situational characteristics in the relationship with its strategic partner (agreed limited time frame for achieving product comparability) presented a huge challenge.
According to Biggemann's case study, information sharing plays an essential role in relationship development among business partners (Biggemann, 2012), and content-oriented communication is another driver which was revealed in our study. The importance of communication in the opposite situation is noted by Epstein in a study of drivers of successful post-merger integration (Epstein, 2004). Among the five drivers which Epstein recognised, a strong emphasis is placed on communication. We found a similar situation in our study, keeping in mind that the companies did not merge, but rather diverge. The executives at Dewesoft were aware that planned communication was vital to build trust for further continuous cooperation with the customers. During the process of dissolving the strategic partnership, they strengthened the relationship with the customers in such a way to ensure trust and long-term predictability related to future development, which was achieved by a multi-channel approach. For example: they implemented internal measuring conferences at the company's location, performed customer visits, were in online contact, attended international conferences, and implemented an online learning platform. A similar approach was established with the distributors' network, which did not exist under the name Dewesoft until mid-2010 when the first distributor was established.

5 CONCLUSION

Based on case study results, this paper aims to contribute to the understanding of critical drivers for successful BMT and to the knowledge of business models and their successful transformation. Moreover, it aims to supplement the set of clarified drivers of successful BMT. It also provides confirmation that previously recognized drivers are valid in the context of strategic alliance separation.

From the managerial perspective, it is important to understand that while transformational leadership has a pivotal role in the process of BMT, one should not neglect the role of other drivers which are considered to intermediate between transformational leadership and phased separation strategy. Since the final outcome of BMT is highly unpredictable, organisations have to be willing to discover new possibilities of doing business while effectively running the existing business. This is especially challenging when the organization carries out the BMT and, at the same time, separates itself from a long-term strategic partner to operate in the same market for the same customers. In such a situation, BMT should lead the organisation to position itself uniquely and be ready to explore the opportunities in different, not just technological directions. Thus, the information obtained from discovery driven experimentation is vital for the adoption of strategic decisions of top management.

Openness to exploring should not only be limited to top management, as it is also crucial in the technological sense because it encourages all employees to continuously discover new possibilities for further technological development and distinction from the former partner. If non-technological experimentation is associated with the question of how to enter the market and be different from competitors, technological experimentation should prompt cooperation with customers. For the establishment of such cooperation,
it is essential that there is some collaboration even before the introduction of BMT and that customers already have positive experience with it. Therefore, content-oriented communication is crucial to achieve customers’ confidence in cooperation and at the same time confidence in the longevity and reliability of co-created solutions. It is important that the substantive communication is multi-layered and includes technologically modern channels of communication, in addition to standard communication forms. Involving customers in the creation of solutions and also sharing these solutions between all existing customers is one of the most important building blocks of creating a relationship with the company and the willingness to walk together along an unknown route during the BMT.

An extremely important dimension of BMT are employees who should not only be willing to follow the management’s vision, but wish to proactively co-create transformation. In the researched company, it turned out that one of the main features of employees during the BMT was their readiness for learning and disseminating the knowledge and experience acquired. Without top managers and employees in key positions who demonstrated both personal characteristics—that is, acquiring and disseminating knowledge—BMT would hardly be likely.

An exploratory study has, in its nature, a number of limitations. We conducted research on a unique single case, which limits the observed variability and decreases the external validity. We are unable to generalize the findings to other types of companies because the business model under investigation relates to a medium-sized and innovative globally-oriented high-tech company. On the other hand, case studies are generalizable to theoretical propositions (Yin, 2003). This is the first study, to our knowledge, which research a BMT during the process of strategic alliance separation and we hope that our work will lead to more theory driven research. Another limitation is that the research was performed by a single investigator, which did not allow for investigator triangulation. To avoid subjective interpretation of the collected data, we regularly checked our findings with the key informants after each research sequence.

Careful examination of the business model suggests that this topic is in its early stages of development. Here, we provide suggestions on where the priorities for future model development might lie. The drivers we discovered are contextually conditioned, meaning there is a realistic possibility that other drivers in another research context exist, which could have a profound influence on successful BMT. Future research in another organizational setting may enrich the set of identified drivers. The characteristics of the identified drivers could be enlarged by research in other types of organizations. Based on the identified drivers, a multi-case study would be a great opportunity to check and confirm the replicability of the proposed drivers of successful BMT.

REFERENCES


**Appendix 1: Research sequences and guiding research questions**

<table>
<thead>
<tr>
<th>Research sequence 1</th>
<th>Research sequence 2</th>
<th>Research sequence 3</th>
</tr>
</thead>
</table>

**Guiding research questions in the first research sequence**
- What was the course of your BMT from the time of your company’s establishment up until now?
- Why did you decide to transform your business model and in what ways did you achieve this task?
- What were the characteristics of the BMT process?

**Guiding research questions in the second research sequence**
- Do the interviews and their data describe the process of BMT to a sufficient degree?
- Have we missed any significant factors or events that also affected the process of the model’s transformation?
- Which changes occurred during the past 8 months of BMT (9/2013 – 6/2014)?
- Which changes occurred during the past 4 months of BMT (8/2014 – 11/2014)?

**Guiding research questions in the third research sequence**
- How was the development and transformation of the Dewesoft business model perceived by the cofounders / senior engineers / employees / external partners of the company?
- How do the cofounders / senior engineers / employees / external partners of the company interpret the key characteristics of their BMT?

**Drivers of the tentative model 1**
- Technology Vision
- Industry Solution
- Customer Co-creation
- Experimenting
- Collaboration with Cofounders
- Scientific Orientation

**Drivers of the tentative model 2**
- Technology Envisioning
- Industry Improvement Solution
- Customer Co-creation
- Experimenting

**Drivers of the final model**
- Transformational Leadership
- Industry Improvement – Customer Specific Orientation
- Discovery Driven Decision Making
- Content-oriented Communication
- Self-initiative Collaborators
- Phased Separation Strategy

**Data sources:**
- CTO and CEO, external documentation
- CTO and CEO, external documentation, internal documentation
- CTO and CEO, external documentation, internal documentation, other informants (cofounders, engineers, employers, partners)
Appendix 2: Illustrative codes for one of the drivers (transformational leadership) at the end of the 3rd research sequence

<table>
<thead>
<tr>
<th>High quality focus</th>
<th>Technology vision</th>
<th>World view</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Orientation towards top-quality products with global demand - G1.1</td>
<td>1. Personal technology vision - G1.2</td>
<td>1. Employees own a stake in the company - G1.2</td>
</tr>
<tr>
<td>2. Improving and speeding up procedures - G3.3</td>
<td>2. Technological insight and understanding - G3.3</td>
<td>2. Jure has &quot;a big heart&quot; - G3.3</td>
</tr>
<tr>
<td>3. Focus on technological perfection - G1.1, G1.2</td>
<td>3. Knowledge of potential technology development avenues - G1.1</td>
<td>3. Staying open to cooperation with external parties - G1.1</td>
</tr>
<tr>
<td>4. Focus on the constant updating of successful products - G1.1</td>
<td>4. 5-year plan of future technology development - G1.1</td>
<td>4. Maintaining a &quot;go with the flow&quot; business culture - G1.1</td>
</tr>
<tr>
<td>5. Understanding that gradual development is an essential part of creating stable platforms - G1.1</td>
<td>5. Guiding the technological development of customers, too - G1.1</td>
<td>5. Ensuring financial independence - G1.1</td>
</tr>
<tr>
<td>6. Optimum vs. maximum - G1.1</td>
<td>6. Technological management alongside technology vision - G1.1</td>
<td>6. Maintaining ownership independence - G1.1</td>
</tr>
<tr>
<td>7. Simple yet high performance products - G4.3</td>
<td>7. Strive to be “cutting edge” in the technology sense - G1.1</td>
<td>7. Applicative research entrepreneurship culture - G1.1</td>
</tr>
<tr>
<td>8. “Apple” quality - G4.3</td>
<td>8. Personal vision of company development - G1.2</td>
<td>8. Freedom to make decisions - G1.1</td>
</tr>
<tr>
<td>9. Cancelling projects or manufacture when quality is subpar - G4.3</td>
<td>9. Development of the vision in harmony with the needs of customers and the direction of the industry's trends - G3.3</td>
<td>9. Organic growth - G1.1</td>
</tr>
<tr>
<td>10. Awareness of things that need change and how to go about it - G4.3</td>
<td>10. New technology vision - G3.3</td>
<td>10. Co-operative and co-ownership models involving employees - G1.1</td>
</tr>
<tr>
<td>11. Looking two or even three steps ahead - G4.3</td>
<td>11. Cooperating in the vision’s implementation - G3.3</td>
<td>11. Sensitivity to the progress of broader society - G1.1</td>
</tr>
<tr>
<td>12. Ability to maintain high productivity in stressful situations - G4.3</td>
<td>12. Global reach and availability - G3.3</td>
<td>12. Helping develop the industry - G1.1</td>
</tr>
<tr>
<td>13. Identifying and addressing any recurring errors in the work process - G4.3</td>
<td>13. Focus on the connection between SW and HW - G3.3</td>
<td>13. Avoiding the inverse effect of stagnant capital - G1.1</td>
</tr>
<tr>
<td></td>
<td>15. Co-creating the company vision - G3.3</td>
<td>15. Research and applicative freedom - G1.2</td>
</tr>
<tr>
<td></td>
<td>16. Vision that brings employees together - G3.3</td>
<td>16. Making money is not the primary focus - G1.2</td>
</tr>
<tr>
<td></td>
<td>17. Jure’s vision is our prime directive - G3.3</td>
<td>17. Technology-driven development - G1.2</td>
</tr>
<tr>
<td></td>
<td>18. The power of technological aspirations - G5.3</td>
<td>18. Helping make the world a better place - G1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19. Calm and respectful pose - G1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20. Professional transformation - G2.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21. Separation but staying on good and productive terms - G2.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22. Personal respect and consideration - G3.3, G4.3</td>
</tr>
</tbody>
</table>

Legend: G1.1 – Interviews conducted with group G1 during the first research sequence; G1.2 – Interviews conducted with group G1 during the second research sequence; G3.3, G4.3, G5.3 – Interviews conducted with groups G3, G4 or G5 during the third research sequence.
### Appendix 3: Illustrative quotes, observations and excerpts for transformational leadership at the end of the 3rd research sequence

<table>
<thead>
<tr>
<th>High Quality Focus</th>
<th>Technology Vision</th>
<th>World View</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orientation towards top end quality and globally useful products</strong>: &quot;Our motto was always to make one thing but make it incredibly well, then try to sell it in as many geographical regions and application fields as possible.&quot; G1.1</td>
<td><strong>Personal technology vision</strong>: &quot;Our long-term plans are always, personally up to me. That's something I reserve for myself, it's just how it is. Back when we were aligned, I felt we lacked a solid long-term vision, in the sense of knowing exactly where we wanted to be, say, three years down the line. It's something that was missing.&quot; G1.2</td>
<td><strong>Employee co-ownership</strong>: &quot;My goal is to run a company whose success benefits everyone involved, which means employees should have a stake in the company. I also want them to keep running the company when it's time for me to step back...&quot; G1.2</td>
</tr>
<tr>
<td><strong>Make even better products even faster</strong>: &quot;It's an everyday thing for us, thinking how to increase the quality and pace of production. These two are constant questions.&quot; G3.3</td>
<td><strong>Technological visionary</strong>: &quot;If I had to compare Jure to Franz and Herbert, I'd say the two of them are more like salesmen-entrepreneurs while he is more of a technological visionary.&quot; G3.3</td>
<td><strong>Jure has &quot;a big heart&quot;</strong>: &quot;Our CTO has tons of hands-on experience in addition to being well versed in theoretical concepts, and he's able to develop a clear vision for the future, like a Steve Jobs for example, only that Jure has a really big heart ... which maybe wasn't that true for Jobs as far as I understood from the book.&quot; G3.3</td>
</tr>
<tr>
<td><strong>Direct observation</strong></td>
<td><strong>During my first tour of the company, the CEO led me from product to product and explained why each one performs well and how it had been improved from its previous version. (observation during site walk)</strong></td>
<td><strong>Dewesoftware supports young entrepreneurs in a similar way to the support they received from the Austrian cofounders. They have launched a startup accelerator, provided entrepreneurs with know-how, and allow them to use Dewesoftware facilities and test equipment. (observation during informal conversation and site walk)</strong></td>
</tr>
<tr>
<td><strong>Documents - excerpts</strong></td>
<td>&quot;If we compare the program solution DeweSoft X1 to X2, the reaction time of output vs input decreased a lot. This is allowing almost real time command execution and is possible only because we are developing both hardware and software in-house which enables us to push the limits of our solution.&quot;</td>
<td>&quot;SIRIUS is not just a new measurement instrument, it's the first in a brand new generation on the market. By developing our own sales network, we aim to become a fully independent global provider of high-end solutions in measuring technology.&quot;</td>
</tr>
</tbody>
</table>
| | "Capital and companies owned by financial conglomerates stagnate, as they are subject to the inverse effect of focusing on capital – if your fundamental goal is just to make money, you will generally be less successful in the long term, and ultimately make less money, too." | }