

Towards Improving the Quality of the Strategy Process

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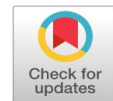
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Abstract: The paper analyzes numerous spectacular examples of how large, market-leading companies ceased to exist due to a flawed strategy process. The shortcomings of existing methods of tools are discussed in detail, and the relevance of disruptive innovation and multiple strategy sets are analyzed in depth. The paper explores how the quality of the strategy process can be increased in light of these changing market conditions. The author proposed a clear segmentation of the strategy process into a classic strategic part for linear markets and a disruptive strategic part for analyzing the far more complex disruptive space. A new framework comprising of seven distinct segments is provided and allows to operationalize the comprehensive analysis of the disruptive space in its entirety, resulting in an effective strategy process of increasingly liquid market condition. As disruption is evolving rapidly from an exceptional, i.e., infrequent event into a deliberate, frequently used strategic option, especially for reversely engineering start-ups above described concepts appear to be highly relevant for performing effective strategy processes in liquid markets.

Key Words: Improving strategic planning, Disruptive innovations, Multiple strategies

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INTRODUCTION

Irrespective of intensive and comprehensive scientific research and an ever larger body of publication, it becomes apparent that the process of strategic planning is facing a dilemma. While practitioners argue that due to a vastly accelerating change of external and competitive factors, the strategic future of a company becomes less and less manageable (Macharzina & Wolf, 2005), it is also clear that providing strategic directions is absolutely essential to ensure the successful development of a company in a competitive environment (Roventá, 1981).

Strategy making still tends to be strongly linked to systematic formulation of deliberate strategies, with a strong underlying concern on making the company and organization effective in the future. The traditional understanding of strategy as set of rational bundles of action derived from a strictly coordinated planning process, is becoming rapidly obsolete (Macharzina & Wolf, 2005). Mintzberg and McHugh, in contrast, defines the concept of strategy as the pattern in the stream of decisions and activities (Mintzberg & MacHugh, 1985). Importantly, Mintzberg points to the fact that a strategy can be developed entirely independent of a rational higher level of context to the existing organization, as long as it forms a consistent entity at a later point in time (Mintzberg, 1978). Overall, Mintzberg's understanding about strategy appears to be much more aligned with today's prevailing and strategic approach in practice.

While the discussion around the interpretation of the term strategy is certainly relevant, it appears to be far more important, however, to focus on the underlying and persistent quality problems inherent in the strategy process itself. Of particular importance is hereby the "purpose means" perspective. A variety of well-known key generic concepts such as Ansoff's Product-Market Strategies (Ansoff, 1965) later enhanced by Kotler (1999), BCG's Growth-Share matrix strategy as well as Porter's Competitive Strategies (Porter, 2010): have been developed and widely adopted. Macharzina and Wolf (2005) conclude correctly that despite the large number of existing models, the fundamental understanding of the strategy process remains rather superficial due to the largely descriptive focus of the strategy research.

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It appears indeed that the existing model applied in today's strategy process is outright insufficient to cope with the large and brisk market transformations witnessed in many industries and sectors. This makes it absolutely necessary to critically review and analyze the current level of strategy quality and identify areas for improvements. The need for this endeavor is further substantiated by an increasing publication focus concerning this area in the recent past (Jacobides, 2010).

At the beginning of the paper, a number of examples are given, how specific companies got into big difficulties by pursuing the wrong strategy. Based hereupon, a detailed analysis will be performed as to why existing strategy models are totally or largely insufficient in their strategic performance. Following this analysis, new approaches to improve strategy's quality are discussed and new model designed by the author is introduced.

ANALYSIS OF THE CONSEQUENCES OF SUBOPTIMAL STRATEGY PROCESSES

Following, a number of companies that faced big strategic challenges 5-10 years ago are analyzed with regard to their strategic reaction, of course, with the benefit of hindsight to how successful their reaction was. For the sake of transparency and simplicity, the stock market developments serves as the indicator for how successful/not successful the strategy process was performed back then.

Transformative challenges induced by external technology

Since the beginning of the 80s, one of the key long-term mega trends is the transition from an analog to a digital world. Companies like Microsoft, Intel as well as Dell and HP, were highly successful to realize a once radically bold vision: every person has his/her personal computer. Between 1990 and 2000, digitization process started to affect consumer products in areas such as music and photography. In the chart below, the stock market development of two large companies are charted that virtually held a monopoly in each respective market: Xerox in the copy machine and Kodak in the film business.

As can be derived from fig. 1, Kodak lost more than 95% and Xerox close to 70% of its respective share value in the time from 1999 to 2010. The value destruction process at Xerox of almost 80% of its value took approximately 1.5 years (1999-2001), while Kodak lost 60% of its value in 3 years. Despite the fact that the trend towards digital technology and products was definitely evident to both companies for more than 10 years, neither developed a successful strategy in the period of 1990-2000. The fast growing internet business witnessed around 1997/98, however, drastically revealed to world the two big weak spots of these companies: pictures did not require films any longer but SD-cards and documents could be transmitted between computers and printed using the PDF format.



Figure 1. Stock market development of Xerox (black) and Kodak (blue) between 8/1998 and 2/2011 (Source: Comdirect.de (2011))

In the following year, Kodak started to focus its efforts on the consumer electronics segment and started to produce printers and digital cameras. At the same time, Xerox tried to remain profitable by making new and more affordable products in the copy business segment. Over the years it became apparent that Kodak's strategy on competing head-on with very price aggressive consumer electronics

companies had no chance of succeeding, which resulted in another dramatic loss of stock value since 2008 (see green line in fig. 1). Xerox on the other hand, decided for a strategic shift away from hardware towards business process management (BPM). BPM encompasses the storage and retrieval of large amounts of documents for large customers like insurances, for example, and regained continuously stock value since 2009. Importantly, it can be concluded that both companies had no effective strategy process in place to deal with the challenges of digitization despite the fact that the trend was visible for more than 10 years.

Cross industry challenges induced by technology

Following the examination of external technological shocks and inadequate strategic response, a more recent example is given, which highlights how an ineffective strategy process can impact value distribution across industry players. In fig. 2 below, stock market price developments for Nokia as well as Apple for the period of 1999 and 2011 are charted. Both companies operated in entirely different market segments prior to 2008. While Apple focused on the development and production of consumer friendly PC with a market share of 10%, Nokia was world market leader for mobile phones with a market share above 40%.

In 2003, Apple was the first company that not only launched an mp3 portable music player, but developed a corresponding software platform (iTunes) that allowed users to purchase and download music onto the player. This strategic move allowed Apple to become the leading portable music player company. In fact, as can be derived from fig. 2, the disruptive strategic move led to a significant increase in the Apple enterprise value in the subsequent years as indicated by the space between the green and the red bar in the chart below. With the launch of the Apple iPhone in 2007, Apple started to attack the much larger market for mobile phones directly. It is interesting to note that prior to announcing its plans to the public, Nokia did not view Apple as a competitor at all (Lanzolla & Anderson, 2008).

According to traditional strategic thinking, it is very unlikely that a company starting with rather small quantities of mobile phones can gain a strategic edge against a competing world market leader. This raises the question of how Apple was capable of eventually surpassing Nokia and which key mistakes Nokia made. Clearly Nokia did not fully comprehend that the transition from the 2G voice centric (GSM) to the 3G (UMTS) data centric technology represents not a linear but a disruptive event. In the 2G world, data played no significant role. This changed with the introduction of the 3G technology. Nokia wanted to essentially engineer a mobile phone with improved data capabilities, while in sharp contrast hereto Apple defined 3G devices as a market for highly portable computing devices with add-on voice capabilities.



Figure 2. Stock market price development of Apple (blue) and Nokia (black) between 1999 and 2/2011 (Source: Comdirect.de (2011))

Interestingly, the effect of this profound strategic error and its consequences are comparable with the effect of external disruptive factors described in section 2.1.

In little less than 3 years between 2008 and 2011, Nokia's shares lost almost 2/3 of its total enterprise value, while Apples value almost quadrupled (see fig. 3).



Figure 3. Share price development of Apple and Nokia between 2008 and 2011 (Source: Comdirect.de (2011))

The above detailed examples are evidence to the fact that even large and competently managed companies have great deficits with the quality of their strategic process. One of the core reasons for this problem lies in the early recognition and proper analysis of disruptive factors, which can cause markets to transform in relatively short time periods. The following chapter reviews the current status of research into this topic.

CRITICAL REVIEW OF THE STRATEGY PROCESS

As outlined in the beginning, corporations characterize their strategic ecosystem as increasingly turbulent, non-linear and accelerating. Factors such as globalization as well as dynamic and broad based technological progress just to name a few will certainly make the strategy creation process even more complex and challenging in the future. In the light of these developments, traditional strategic tools as described above show substantial shortcomings to cope with rapidly changing environments adequately (McFarland, 2007; Jacobides, 2010). The methods used today are capable of defining the existing competitive landscape sufficiently well, but have a strong tendency to provide a more static perspective on the market forces (Jacobides, 2010).

In this context, even Porters famous “five forces” model has to be critically reviewed. Increasingly, the academic community takes note of the substantial gap in importance of the model between academic research on one hand and practical real world relevance on the other hand (Grundy, 2006).

Interestingly, Porter appears to become more critical of his model himself (Porter, 2010). In a Harvard Business Review in 2008, Porter points right at the beginning of article to the fact that “often, however, managers define competition too narrowly, as if it occurred only among today’s direct competitors. Yet competition for profits goes beyond established industry rivals to include four other competitive forces as well: Customers, suppliers, potential entrants, and substitute products” (Porter, 2008).

It is, however, highly questionable whether a simple modification of the scope of the concept is sufficient to provide the strategy creation platform for the 21st century. As can be derived from above example of Apple vs. Nokia, one of the key problems was the fact that Nokia identified Apple too late as a relevant competitor and subsequently started to change its product development focus. The academic literature explicitly includes the analysis of new market entrants in its concepts, but fails to provide methods on how to operationalize such demands.

These apparent limitations of the “five forces” model, require a deeper understanding of Porters arguments regarding the essential point of entry of new market players. In the above article, Porter highlights the importance of different types of entrance barriers. Regarding the non-equal access to distribution channels, Porter writes:

“Unequal access to distribution channels. The new entrant must, of course, secure distribution of its product or service. A new food item, for example, must displace others from the supermarket shelf via price breaks, promotions, intense selling efforts, or some other means. The more limited the

wholesale or retail channels are and the more that existing competitors have tied them up, the tougher entry into an industry will be. Sometimes access to distribution is so high a barrier that new entrants must bypass distribution channels altogether or create their own. Thus, upstart low-cost airlines have avoided distribution through travel agents (who tend to favor established higher-fare carriers) and have encouraged passengers to book their own flights on the internet” (Porter, 2008).

Porter gives the impression, as if the low cost carriers made a deliberate strategic choice when entering the market with regard to the internet distribution channel. Further research, however, reveals that this argument holds not true for the leading low-cost airline in the world. The following fig. 4 documents the development of passenger flying with the Europe’s leading low cost airline Ryanair.

It becomes apparent that Ryanair started to operate in Europe in 1986 and used the traditional sales and distribution channels for selling tickets, however, with very little success. This changed in 2000, when Ryanair became on the very first airline that truly understood the strategic significance of the internet. In other words, Ryanair’s phenomenal ascend from a smallish and insignificant airline to the largest low-cost carrier in Europe can be strictly attributed to the aggressive use of the internet to directly connect to the consumers thereby bypassing the traditional sales channels. All other elements of its business model have been in place before, without yielding any comparative advantage.

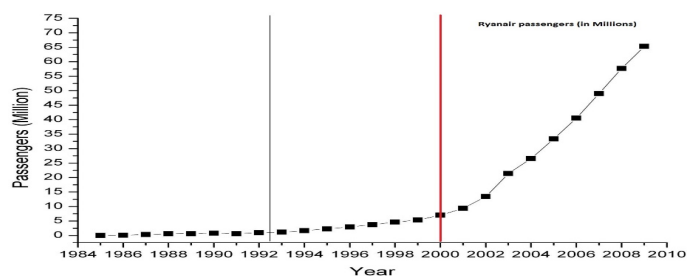


Figure 4. Development of passenger travelling with Ryanair between 1986 and 2010 (Source: Wikipedia.org (2010))

The following fig. 5 depicts the global growth of internet users, independent of the underlying technology for accessing the internet. It becomes apparent that the strong increase of internet users between 1998 and 2001 correlates highly with the growth of Ryanair’s passengers’ number.

The large incumbent European competitors reacted much later. Again, the specific tools employed in the strategy process were not able to adequately forecast the disruptive nature of this development, which led to complete transformation of the European airline market. In stark contrast hereto, Ryanair understood the strategic potential of the internet technology immediately and used the first-mover advantage to the fullest. By 2009, Ryanair overtook the leading German airline Lufthansa by number of passengers.



Figure 5. The development of worldwide internet users 1995-2010 (Source: Internetworldstats.com (2010))

The above example again demonstrates clearly the limits of Porter’s five forces model for strategy creation and formulation, especially in the age of the internet. Porter mainly focuses on “entrance barriers” and his five forces model works rather well in a stable competitive environment. Historically,

most companies have been in industry and/or service industry and their reaction time differs sharply from the fast and nimble new companies entering the world market. These new companies increasingly focus on deliberately disrupting existing business models and traditional tools for strategy creation fail, as has been illustrated in the examples above.

In reality it appears far more important for the strategy process of the 21st century to analyze in-depth all factors that tend to “dissolve” traditional competitive and/or market structures. This view is shared by Jacobides from the London School of Economics: “Most strategy frameworks are simplifying devices. When companies must compete by reshaping sectors as they increasingly have to today the old tools offer little insight because they implicitly or explicitly assume that industry boundaries remain constant” (Jacobides, 2010).

Another big problem of the existing strategy process lies in the fact that the various tools and concepts are more tuned towards prolonging or intensifying the s-curves of existing business segments, rather than discovering the disruptive threats and/or opportunities in their relevant markets (Nunes & Breene, 2011). Christensen from Harvard University focused his research since many years on the innovation process in general and role of disruptive technologies in particular. He clearly distinguishes between “sustainable technologies” on one hand and “disruptive technologies” on the other. The nature of sustainable technologies is to continuously improve products and services and subsequently sell them to the best customers (Christensen, 2001). In contrast, disruptive technologies lead to radically different products and services that did not previously exist thereby change the market landscape entirely (Christensen, 2001). Interestingly, Christian’s research shows that in contrast to the prevailing stereotype in academia and practice, large companies are capable indeed of producing fundamental innovations. In reality, it is however more likely that large companies analyze the disruptive technologies or factors quite well, but ignore them largely on the ground that the initial performance of the sustainable technology is superior and more profitable (Christensen, 2001). Over time however, the new products/services and business models prove to be superior. These important findings of Christiansen’s research are summarized in fig. 6.

The example of Nokia versus Apple provides a good understanding, why a new competitor attacking an incumbent market player in its traditional line of business, has virtually no chance. In such a scenario traditional strategic models such as economies of scale, etc. are fully effective and provide an almost inexorable advantage for the incumbent player.

As can be seen from fig. 6, Apple did not attack Nokia head on. Instead it started with a disruptive product as well as business model. The initial product was inferior in practically all relevant characteristics of a mobile phone such as camera resolution, stand-by and talk-time, data speed (GPRS and not 4G) to name a few. It only had one big advantage: its superior user interface and touch-sensitive all phone screens allowed for the first time for easy navigation and web browsing. Somewhat later, Apple launched its app portal that provided user with the opportunity to download small software programs thereby customizing the phone according to their needs and wants. The initial problem of “small volume” was overcome by charging right from the beginning a high price premium for the phone. Hence, Apple used a classic disruptive strategy to create an entirely new market and business model that eventually eclipsed the former world market leader Nokia.

Parameter	Sustaining Innovation	Low-end Disruption	New-market Disruption
Product performance	Improve performance of attributes valued by industry's most demanding customers	Good-enough in terms of traditional metrics at low-end of mainstream market	Lower performance in traditional attributes but improved performance in new attributes (eg. simplicity, convenience)
Market	The most profitable customers in the mainstream market willing to pay for improved performance	Overserved customers in the low end of the mainstream market	Nonconsumption: potential customers who lacked money/skill to buy & use the product
Business model	Exploit existing processes, cost structure, and competitive advantage to improve/maintain profit margins	New operating/financial approach: lower gross profits with higher asset utilization to earn attractive returns at discount pricing	Must be profitable at lower price per unit and low initial volumes

Figure 6. Overview sustainable and disruptive technologies Source: (Christensen & Raynor, 2003)

Based on above discussion and various research publications, several important conclusions regarding the improvement of the prevailing strategy process can be derived. Firstly, the existing models for strategy formulation work well in stable market and competitive environments. Secondly, terms such as “entrance barriers” and “new competitors” commonly used in strategy, suggest somehow that new competitors would enter the market space with identical or slightly modified business models.

A closer look, however, reveals that often much more existential threats to the existence of traditional players stem from disruptive factors that virtually dissolve existing market and competitive landscapes. Thirdly, it becomes apparent that identifying and analyzing disruptive factors very early on, also opens substantial chances for realizing first mover advantages in entirely new market or market segments, both for new as well as exiting market players. It becomes clear that the identification of disruptive threats and opportunities and their subsequent impact on existing or new business models, are easily becoming the most important tasks of the strategy creation and formulation process in the future.

METHODS OF IMPROVING THE STRATEGY PROCESS

In his publication “strategy tools for a shifting landscape”, Jacobides aptly outlines the need for change: “It’s time to reinvent the way companies develop strategies” (Jacobides, 2010).

In his work, he proposes to replace the traditional strategy process and instead develop “play scripts”, i.e. small storyboards. Within these storyboards, companies are so to speak the main actors and should explain their motivations, rules and procedures to retain or increase the value of the company (Jacobides, 2010).

Jacobides argues that words are more flexible and - in the end - also more powerful than value curves or financial scenarios by itself. This method would also ensure that companies are starting to identify necessary changes, for example, intensifying cooperation with new players, much faster as in the existing framework. Furthermore, Jacobides makes an important point, which is a direct critic on Porter’s model: Porter’s singular focus on new competitors, suppliers, etc., hides the fact that increasingly the role of suppliers and competitors starts to blur. Boss, for example, a leading fashion producer for premium men clothing traditionally distributed its products through multi-brand retailers. In recent years, however, Boss heavily invested in the build-up of its own mono-brand stores and franchise businesses and thereby increasingly became a direct competition to its former distribution system.

Jacobides distinguishes further between “corporate play scripts” and “business play scripts”. The corporate play scripts describe how, from a top management point of view, additional shareholder value can be generated. It comprises of the elements “synergy subplot” and “financial subplot”. According to Jacobides, the “business play scripts” are more relevant. It comprises of the main actors and their respective roles and motivations as well as the rules for steering the operational business and a value analysis of its activities.

The thoughts and ideas of Jacobides are in fact very relevant and will most certainly influence the academic discussion around the future of a better performing strategy process. It is particularly noteworthy that Jacobides accurately analyze the weak spots of the current strategy development process. However, his proposed methods fall short of solving the fundamental problems, which he so accurately

diagnosed.

Specifically, Jacobides proposes the deconstruction of a segmented view of categories such as competitors, suppliers, etc. in course of the strategy process and replaces instead with dozens of “business play scripts”. Many large companies would have to generate easily more than forty or fifty play scripts, which flags a fundamental problem with this concept: how should this method result in a consistent and coherent strategy, i.e. strategic focus for the company. Specifically, how should the relevance of each play script be weighted in the overall process. In other words, which play script is more realistic or more relevant and therefore of overriding priority to company, cannot be established with this method. In addition, it is not clear how this process should methodically help to identify new disruptive competitors, which by definition are operating entirely outside the visible competitive scope.

Improvement of the strategy process through explicit disruptive analysis

The above discussion allows for some important conclusions. The author proposes a clear segmentation of the future strategic process into two distinctive parts: A classic and a disruptive strategy process. The classic strategic process part deals with the in-scope perspective, while the disruptive part analyzes the out-of-scope perspective of the existing relevant market landscape. The classic strategy process uses the traditional strategy toolsets, which is relatively well suited to deal with a “visible” and - to a large extent - linear competitive environment, as it is the case in stable markets. Parallel hereto, a disruptive strategy part must be developed. As pointed out above, disruptive factors, which by definition are entirely outside the known competitive landscape, represent by far the largest disruptive threats and opportunities to existing companies. The scope and methods of analyzing potentially disruptive factors and players, differ fundamentally from the conventional, i.e. classic strategy process. Specifically, emerging trends and their underlying competence stream as well as potentially relevant start-ups are systematically analyzed. In order to further operationalize above outlined concept, a more differentiated view of the term “disruptive innovation” appears both necessary and helpful (Markides, 2006).

Markides explicitly criticizes Christensen’s non-differentiated use of the term disruptive innovation: “Although I agree that all of these innovations are disruptive to incumbents, treating the all as one and the same has actually confused matters considerably. A disruptive technological innovation is a fundamentally different phenomenon from a disruptive business-model innovation as well as a disruptive product innovation: These innovations arise in different ways, have different competitive effects, and require different responses from incumbents” (Markides, 2006).

In light of above discussion, an effective strategy process has to have three distinct pillars or areas of concentrations:

- Disruptive Technologies
- Disruptive Business Models
- Disruptive Product Innovations

Henceforth, disruptive technologies subsume all technological developments that are based on a predictable technological shift, which affects new as well as existing competitors. The digitization of the film industry (e.g. Kodak, Sony, etc.) would be an example for such a trend. Concerning the difference between disruptive product innovations and business models, fig. 6 provides some interesting insights. This distinction underscores again the importance of segmenting the strategy process space effectively in a classic area as well as a disruptive area, which as shown must be subdivided further in order to provide a fully effective view into the disruptive space.

Although academic research until now does not discuss the proposed differentiation between classic and a disruptive strategy process, some research was performed on the topic of plurality and diversity of strategy. It appears therefore helpful to discuss some of the research work.

In his article published in the MIT Sloan Review “Robust Adaptive Strategies”, Beinecker explicitly states that managers cannot follow “populations of strategies”, i.e. different sets of strategies at the same time (Beinhocker, 1999).

Specifically, Beinhocker believes that the allocation of enterprise resources onto various strategic goals, is suboptimal. Indeed, it is argued whether such a multi-target allocation is notwithstanding the

widely adopted principle of “core competencies” in business. Beinhocker, concludes that companies could profit from pursuing multiple strategy sets as long as the complexity appears manageable and real gains derive from such as course of action. Although the concept of multiple parallel strategy sets is clearly outlined, no operational framework is provided.

Remotely similar is the concept of “parallel strategic worlds”, which was developed by Eisenhardt from Stanford University in her article “Has Strategy Changed?” (Eisenhardt, 2002). She describes the two “strategic worlds” implicitly: “Complicated, intertwined activity systems or elaborately planned leveraging of core competencies make sense in slower more linear situations. On the new high-velocity playing field, they are cumbersome and glacially slow. Managers now must jump into uncertain situations because that is where the opportunities are most abundant. They must capture and exploit promising opportunities or drop them rapidly if they fail to develop” (Eisenhardt, 2001).

Interestingly, Eisenhardt distinguishes in her paper two strategic environments requiring varied strategies for linear and fast environments (Eisenhardt, 2007). While Eisenhardt like Beinhocker are both touching on multiple strategy problem, both are not providing a framework how to operationalize the two speed or multiple space strategy issue.

It can be summarized that many authors see a certain necessity with regard to the flexibility and diversity of the strategy process in their publications. However, none of them demands a clear separation into a classic and disruptive strategy process. One of the most successful concepts in marketing is segmentation. It allows to channel heterogeneous needs and cluster them into homogenous segments that allow for a much better and focused approach to build product or service for customers in each segment (Intan, 2016).

In the light of an increasingly challenging strategic space with a large amount of relevant factors, a clear segmentation into a classic as well as disruptive strategy process appears to be the logical path towards a more effective and holistic strategy process. It is important to point to the fact that the existence of a separate disruptive strategy does not necessarily imply a strategic response or action plan.

It is, however, paramount for companies to be fully aware of any threat and/or opportunity that may disseminate from identified disruptive factors. The following example should demonstrate the advantage of the segmented strategic approach.

EXEMPLIFYING THE ADVANTAGES OF AN EXPLICIT DISRUPTIVE STRATEGY PROCESS

The strategy development process in the car industry is marked by great complexity. Decisions have a large financial impact and are characterized by a high degree of uncertainty.

Important decisions involve, for example, geographic expansion plans, product development for niche markets, broadening of product ranges, etc. Though complex, the car manufacturers clearly developed the capabilities over the years, to address this classic strategy process in an effective manner (Luekveerawattana, 2016).

In contrast hereto, the strategy process for potentially disruptive market factors such as CO₂ emissions, massive pollution problems in megacities, a large array of new engine concepts (gas, electric, fuel cells) along with new competitors and competitive mobility concepts, appears far more challenging to the automobile industry.

It is interesting to observe; how various companies gain competitive advantages by using a superior strategic process. While analyzing the above described disruptive space, BMW identified the key success factors linking the existing business with tomorrow’s mass market reality: the weight of the car. It focused its R&D on substantially reducing the weight of the car by using carbon fiber material as key building component for the body of its new electric car series. The material, which is already used in racing cars and very advanced commercial airplanes as well as sailing yacht, for example, is not only expensive but rather complex in its underlying production process. It becomes apparent that the material possesses all key qualities to make it a disruptive technology as outlined in fig. 6. It has many disadvantages such price, production complexity and especially zero tolerance in the assembly process of cars and it has only one advantage its weight ten times lighter than aluminum but much more durable characteristics.

The largest shareholder of BMW the Quandt family which holds 49% of BMW - purchased in March 2009 - 25% of the leading German carbon manufacturer SGL Carbon (Manager Magazine, 2009).

Subsequently, SGL Carbon started to operate a carbon factory in the USA, which produces parts exclusively for BMW. BMW, therefore, is the first automobile manufacturer in the world that mastered the production and controls the knowhow for mass market carbon parts.

Meanwhile BMW started to produce critical components for traditional cars out of carbon fiber and builds them into their traditional cars to reduce the weight.

In contrast hereto, Daimler - BMW's direct competitor - signed an agreement with Japanese company Toray (Manager Magazine, 2011) only two years later and acquired a 44% stake. While BMW and SGL are both in Germany and close relations are easy to develop, Daimler has to manage various intercultural issues. Also noteworthy is the fact that its Japanese supplier has strong ties to Japanese rivals, and will provide most certainly with access to the same technologies.

Above example shows the importance of separating classic and disruptive strategy process work. There is a high risk that while discussing large, more well known strategic issues in the classic strategic space (e.g. geographic expansions, new factories, etc.) more remote, nonlinear disruptive factors are not getting appropriately recognized and valued. It also demonstrates that the early detection of such factors allows for a better first-mover strategic response.

ENHANCED DISRUPTIVE STRATEGY PROCESS

As outlined above, the disruptive strategy process comprises of the analysis of three important sub segments: disruptive technologies, disruptive business models and disruptive product innovation. As both, disruptive opportunities as well as threats are analyzed, the disruptive framework consists of a total of six segments as depicted in the following fig. 7.

Threats	Opportunities
Disruptive technological threats	Disruptive technological opportunities
Disruptive business model threats	Disruptive business model threats
Dis. Product innovation threats	Dis. Product innovation threats

Figure 7. Detailed disruptive strategy concept

Similar to the fact that different radar systems are developed for specific purposes, above outlined disruptive strategic process is designed to scan the market fully stand-alone - for threats and opportunities for very specific factors such as technology, business models and product innovation. This very focused and segmented approach allows for a much better method to identify relevant disruptive factors early on, thereby providing sufficient lead time for an effective strategic response. Future research can build on this model in order to further improve the explanatory power of disruption in a market where disruption becomes the norm not the exception. In this context, the deep analysis of venture capital financed start-ups for early identification of threats and opportunities could be a highly interesting research area.

CONCLUSION

The analysis of the strategic performance of former prominent market leading organizations such as Kodak, Xerox, Nokia and Apple revealed that a suboptimal, i.e. low quality strategy process can lead to existential problems for companies.

A critical review of existing strategy process tools revealed that traditional models increasingly fail in helping to build effective strategies for complex growing environments. Specifically, Porter's five forces model indicated that once perfectly isolated input factors such as, for example, suppliers and

competitors are starting to blur in a market landscape that could be best described as liquid. One of the central elements of such liquid markets, is the fact that new disruptive competitors and new disruptive technologies cannot be orderly boxed. Various authors are named and their positions outlined, who essentially agree to the fact that today's strategy models are too simplistic to adequately deal with rapidly liquidizing borders between industries, companies and disruptive innovations. An attempt by Porter to "verbally" extend his 20th century model to the 21st century reality, appears absolutely insufficient to adequately address a market landscape with a fundamentally different strategic complexity.

Christensen was one of the first authors who clearly pointed out the shortcomings of the strategy process in the context of changing markets. He introduced the important conceptual distinction between sustainable technologies and "disruptive technologies". His research showed furthermore that large companies essentially recognize new technologies appearing on the horizon, but fail to properly analyze their subsequent future impact. His detailed research into the patterns of how large companies overlook disruptive factors, is of profound importance. However, Christensen was not interested in developing a new strategic framework or model for improving the quality of the strategic process.

As can be derived from above outlined strategic failures of once leading companies, disruptive factors are by far the largest threat and/or opportunity companies are facing today. In light of these facts, the author proposed to segment the strategy process into two distinct parts – a classic and a disruptive strategy process, both employing separate tools for analyzing and scanning the environmental landscape. Academic literature and here especially Beinhocker and Eisenhardt, presented the concepts of multiple strategy, no operational framework has yet been defined.

While adequate tools are provided for effectively dealing with the classic strategy process, this is certainly not the case with regard to the disruptive part. A marked improvement comes from Markides where more focused concepts that differentiate Christensen's term "disruptive innovations" more clearly and distinguishes between disruptive technologies, disruptive business models and disruptive product innovation.

Based hereupon, the author proposed a new framework comprising of a classic strategy segment as well as six sub-segments for the disruptive strategy part in order to ensure a comprehensive analysis of the positive and negative disruption space in its entirety. This new approach has numerous advantages. Given the fundamentally different underlying level of visibility of a strategy process for existing linear market landscapes (existing players, "known rules", etc.) in comparison to the strategy process for disruptive factors (yet unknown players, "unknown rules", etc.) it is essential to clearly separate, i.e. segment the strategy process for both parts. As disruption is evolving rapidly from an exceptional, i.e. infrequent event into a deliberate, frequently used strategic option – especially for reversely engineering start-ups – above described concepts appear to be highly relevant for performing effective strategy processes in liquid markets.

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— This article does not have any appendix. —