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Exploring the Coevolution of Traditional and Sustainable Business Models: A Paradox Perspective

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Abstract

Purpose: This paper rectifies a dearth in current research and investigates the coevolution of traditional and sustainable business models under one corporate roof. By taking on a paradox perspective, firms' solutions, and mechanisms to cope with the paradoxical tensions that arise throughout the coevolution are determined and analyzed.

Design/Methodology/Implications: This is executed by conducting seven case studies of Western-European firms, consulting firms, and governmentally-owned consulting institutions.

Findings: Findings display the array of responses firms deploy to address paradoxical areas of competing demands of economic, social, and environmental foci, organizational culture and mindset, training and staffing, resource allocation, and the stakeholder environment during the coevolution of traditional and sustainable business models. Furthermore, four coping strategies firms utilize are derived from the data, namely splitters, operational perfectionists, strategic mandators, and transformers.

Research limitations: All cases under investigation resemble Western-European firms, which limits the generalizability of the findings at hand. Furthermore, the sample size and the mixed industries cases have been selected from stipulate a limitation.

Practical implications: This paper outlines four pathways firms deploy to address paradoxical tensions arising during the coevolution of traditional and sustainable business models under one corporate roof.

Originality/Value: This study contributes to the discussion related to the integration of traditional and sustainable business model research, as it sheds light onto a previously largely unresearched phenomenon: a situation where both business models coevolve under one corporate roof. Utilizing the paradox view as a theoretical lens, underlying dynamics and arrays of solutions are uncovered.

Keywords: Traditional business models, sustainable business models, coevolution, paradox lens, sustainability

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Introduction

In light of a rapidly and radically changing planet, which has exposed long-term challenges such as climate change and pollution (Montalvo et al., 2006), the development of new logics regarding the conduct of social and environmental affairs in the field of business models is more crucial than ever before. Whilst the predominant logic of a firm rests upon neo-classical theory (Stormer, 2003), current developments have raised awareness that firms indeed may have an obligation to move beyond mere economic value creation, and the literature on Sustainable Business Models (SBMs) has experienced a surge of interest (Dentchev et al., 2018). SBMs assimilate three pillars, namely (i) a sustainable value proposition not only to a firm's customers, but spanning all stakeholders, (ii) value creation that includes all stakeholders, and distributes benefits accordingly, and (iii) an economic value capture that, at the least, maintains social, environmental, and economic value throughout the spheres of organizations' operations (Lüdeke-Freund & Dembek, 2017; Schaltegger et al., 2016).

SBMs, hence, inherit the potential to facilitate the development of solutions to face the long-term challenges identified by our society. Nonetheless, Dentchev et al. (2018) outline a dearth of literature concerning the coevolution of Traditional Business Models (TBMs) and SBMs. Ergo, the coevolutionary process and interrelations between TBMs and SBMs remain unexplored (Dentchev et al., 2018). In order to bridge this gap, this paper investigates the following research question:

How do traditional and sustainable business models coevolve within firms?

In order to answer this research question, a paradox lens is adopted. The paradox view stipulates that organizations must, throughout the course of their existence, overcome situations where apparently opposing goals and demands seem to be incongruent. Representing "persistent contradiction[s] between interdependent elements" (Schad, 2016: 6), and therefore the definition of a paradox, TBMs and SBMs, stemming from their opposing foci, resemble opposing poles on a continuum (Biloslavo et al., 2018). Throughout the coevolution of TBMs and SBMs, the interrelated nature gives rise to several paradoxical tensions (Vladimirova et al., 2017). These paradoxical tensions need to be bridged with coping strategies that firms develop to navigate their way around paradoxical waters.

By addressing the dearth in the literature and using case studies, the contribution of this paper is threefold. Firstly, insights into the coevolution of TBMs and SBMs within a firm are generated. We hope these aid further developments in the integration of the fragmented research fields on TBMs and SBMs by analyzing the coevolution through a fresh perspective: a paradox lens (Biloslavo et al., 2018; Dentchev et al., 2018). Secondly, this paper uncovers four coping strategies to overcome paradoxes during the coevolution. And lastly, it informs practitioners of best practices on the management of both TBMs and SBMs under one corporate roof.

Theoretical Background

The Concept of a Traditional Business Model

The concept of the traditional business model started to emerge in the late 1990s (Alt & Zimmerman, 2014), with a logic of the firm resting upon neoclassical theory (Stormer, 2003). Neoclassical theory mandates the firm to maximize economic profits, and hence, success is defined by profit maximization only. Reforms would only be engaged in if it serves the organization's own agenda (Purser, Park, & Montouri, 1995). Consequently, this dictates that externalities like waste or pollution are disregarded, encouraging firms to engage in make-to-throw-away approaches instead of sustainable resource utilization (Shrivastava, 1995). Indeed, in the neoclassical view, corporate ambitions to pursue sustainable goals are seen to be inferior to the principal aim of economic profit maximization (Freeman & Gilbert Jr., 1992).

Due to the different usage of the concept of a TBM, and hence the different contexts it has been applied to, three major stances have been identified by Wirtz (2011, Wirtz et al., 2016). These are the technology driven approach (e.g. Gambardella & McGahan, 2010; Ghaziani & Ventresca, 2005), organizational theory (e.g. Tikkanen et al., 2005), and the strategy-oriented approach (e.g. Chesbrough, 2010; Mitchell & Coles, 2003). Overarching of these streams, Boons et al. (2013) have identified three distinct elements a TBM encompasses. Firstly, a value proposition, referring to the interconnection of exchange between an organization and its customers. Secondly, it must clarify the process of value creation, spanning the organization's spheres of operations. Lastly, a business model identifies the value capture component. In a

similar fashion, Boons and Lüdeke-Freund (2013) identify four areas a business model portrays. By extending the work of Osterwalder (2004) and Doganova & Eyquem-Renault (2009), they have identified (i) a value proposition, (ii) a specification on the arrangement of the supply chain, (iii) a clarification on customer relationships, and (iv) a financial model stipulating the distribution of costs and revenues.

More recently, Wirtz et al. (2016) highlighted a convergence of all three major stances regarding the business model concept. They identified a more homogenous comprehension of the business model concept materializing with contemporary authors increasingly defining it as an abstraction of the organization in its entirety. Thus, after a revaluation of the dominant literature concerning the business model, Wirtz et al. (2016) defined a business model as follows, and this definition shall serve as a conceptualization for this paper:

"A business model is a simplified and aggregated representation of the relevant activities of a company. It describes how marketable information, products, and/or services are generated by means of a company's value-added component. In addition to the architecture of value creation, strategic as well as customer and market components are taken into consideration, in order to achieve the superordinate goal of generating, or rather, securing the competitive advantage (Wirtz et al., 2016: 41)."

The Concept of a Sustainable Business Model

The shift away from economic-focused business models by including social and environmental values has paved the way for sustainable business models (Schaltegger et al., 2012). Lit by Elkington's (1997) early approach of a triple bottom line entailing people, planet and profit combined, and Lovins' et al. (1999) fourfold set of actions incorporating environmental needs in firms' operations, the spark of sustainable infusion of TBMs started to glow. Elkington's (1997) triple bottom line has earned its places in the majority of corporate CSR reports, and is commonly acknowledged as a guiding principle in SBMs (cf. Breuer et al., 2018). The concept of an SBM has begun to emerge (Schaltegger et al., 2012). Similarly to TBMs, SBMs display a fragmented nature and the literature has progressed in several ways. Lüdeke-Freund & Dembek (2017: 1674) present evidence that "SBM research and practice show blankial traits of an emerging field, or at least sufficient momentum to become a field in the very near future." Following their findings of a review on the contemporary state of the field, five core beliefs and concepts have been presented to hold true among all streams of literature, based on Ehrenfeld's (2004) criteria on the evaluation of a research field. They identified (i) an explicit orientation towards sustainability, comprising ecological, social, and economic elements, (ii) a redefinition of the traditional notion of value creation, (iii) an extended comprehension of value capture in terms of actors considered, (iv) a replacement of customer focus with stakeholder focus, and (v) an embeddedness of the organization's surrounding within its sustainable business and beyond. In light of these five core principles, the definition of Schaltegger et al. (2016) embodies the best reflection of these constituents, and shall thus serve as this paper's definition:

"A business model for sustainability helps describing, analyzing, managing, and communicating (i) a company's sustainable value proposition to its customers, and all other stakeholders, (ii) how it creates and delivers value, (iii) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries (Schaltegger et al., 2016: 6)."

The Co-Evolution of Traditional and Sustainable Business Models

The evolution from TBMs to SBMs, hence, involves a threefold set of economic, social, and environmental components, leading to multi-value creation and multiple actors across the firm's operational chain (Pennink, 2014). When introducing a new SBM, it will co-exist and co-evolve with the firm's incumbent TBM (Graf, 2005; Moingeon & Lehmann-Ortega, 2010). Similarly, Sabatier, Mangematin, & Rousselle (2010) find that new firms may entertain a BM portfolio, defined as "a portfolio of business models as the range of different ways a firm delivers value to its customers" (Sabatier, Mangematin, & Rouselle, 2010: 432). The relationship between TBMs and SBMs, thus, ought to be seen as two opposing yet mutually influencing poles along a continuum rather than a linear relationship (Boons & Lüdeke-Freund, 2013; Moingeon & Lehmann-Ortega, 2010). Hence, the situation considering the BMs in this paper is the following. The cases investigated for this paper have had TBMs established first, and (co-established) their SBMs

afterwards. The moment of investigation is from that time onwards, so after both have been established and are operating alongside one another.

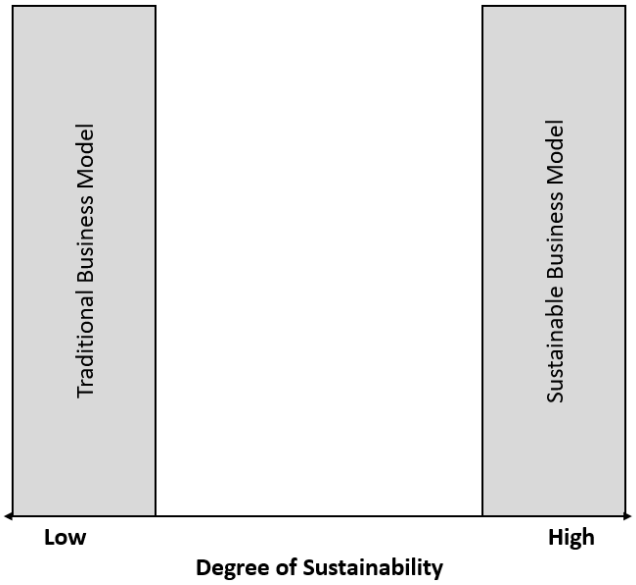

Figure 1: TBMs and SBMs.

Combining Opposites: A Paradox Perspective

Following the paradox view, corporations have to face and resolve apparently opposing goals and demands along the course of their existence (Smith & Lewis, 2011). TBMs and SBMs are to be seen as opposing poles on a continuum, thereby reflecting the definition of a paradox, or a "persistent contradiction between interdependent elements" (Schad, 2016: 6). Paradoxes originate in the unique history of organizations, cultural context, and the strategic settings utilized along their existence. Paradoxes may be occurring across several time and space levels (Biloslavo et al., 2018). Paradoxes, such as the coevolution of TBMs and SBMs, inherit paradoxical tensions. Tensions are defined as "elements that seem logical individually but inconsistent and even absurd when juxtaposed" (Smith & Lewis, 2011: 382). Paradoxical tensions that occur during the co-evolution of TBMs and SBMs will be discussed below.

Paradoxical Tensions and Coping-Strategies in the Co-Evolution of Traditional and Sustainable Business Models

Paradoxical tensions arise throughout the process of organizing, when two opposing poles manifest within a given context (Smith & Lewis, 2011). An orientation in the direction of sustainability implies constant friction and challenges that materializes between internal and external stakeholders and their respective set of interests (Biloslavo et al., 2018). Indeed, the co-evolution of TBMs and SBMs sets free potential for paradoxical tensions (Vladimirova et al., 2017), which we have summarized below after consulting relevant literature.

Concerning a first area of paradoxical tension, namely the ***competing demands*** of TBMs and SBMs, Hart & Millstein (2003) corroborate how sustainability, although often described as being incompatible with economic value creation, may be integrated and balanced. Similarly, Stubbs & Cocklin (2008) pinpoint the challenges of balancing the neoclassical and the ecological modernization perspective within organizations, whilst Schaltegger et al. (2012) underscore the battle to balance economic fitness and social and environmental sustainability. To remedy this, Rangan, Karim, and Chase (2015) present three theaters that embellish our understanding of the degree sustainability is embedded in companies' BMs and how reporting is undertaken. The first theater takes a philanthropic approach, the second theater opts for operational improvements to enhance sustainability, and the third theater is concerned with a complete business model transformation. Regarding a possible cannibalization of profit margins between TBMs and SBMs, Schaltegger et al. (2012) highlight three possible reaction-types to address this. Firstly, the defensive type, involving adaption of products and product communication to reduce risks of profit margin loss. Second, the accommodative type, recognizing customer segments targeted at sustainability, and serving them with specific products, next to pre-existing TBMs. And thirdly, the proactive type, strategically establishing a competitive advantage with an SBM becoming the dominant element in the business portfolio.

The second area of paradoxical tension concerns the ***organizational culture and mindset*** of an organization. Barquet et al. (2013) illustrate the time- and resource intensity required to (re-)craft and harmonize culture and mindset during BM innovation. Similarly, the tension between incumbent and sustainable mindsets is highlighted by Schaltegger et al. (2012). As avenues for harmonization, the following paths to rectify these paradoxical tensions are found in the literature. Barquet et al. (2013) and Stubbs & Cocklin (2008)

identify strong (top-)leadership as a key factor, while value-aligned and inclusive corporate strategies are also highlighted by Stubbs & Cocklin (2008).

Regarding ***training and staffing,*** Barquet et al. (2013) pinpoint the necessity to maintain capabilities at the highest standards through adequate training, and the possible urgency to recruit new talent in the event of change. In a similar fashion, Kianto, Sáenz, & Aramburu (2017) corroborate the concepts of knowledge-based training and knowledge-based recruitment, to ease the achievement of an adequate human resource stock necessary to sail through the waters of co-evolution. Thus, knowledge-based training and hiring display two alternatives to rectify the paradox concerning staffing and training.

Resource allocation, the fourth area of paradoxical tension, requires a critical consideration of a firm's resource allocation among its BMs (Barquet et al., 2013). Björkdahl & Holmén (2013) further accentuate this circumstance, stressing the frictions regarding resource allocation between new and old BMs, as the incumbent BM is generating the majority of the firm's profits. More extremely, Chesbrough (2010) pinpoints the hazard of starvation of new BMs for that reason. Avenues for rectification are (i) an allocation of resources that enables both BMs to run independently and self-sufficient, and (ii) a gradual shift in resources from TBMs to SBMs to boost growth (Björkdahl & Holmén, 2013).

The ***stakeholder environment*** stipulates a fifth area of paradoxical tension. Boons & Lüdeke-Freund (2013) pinpoint the increased involvement of stakeholders and communities in organizations' socioeconomic environment when SBMs have advanced. Schaltegger, Lüdeke-Freund, & Hansen (2016) corroborate the different roles that stakeholders inherit within TBM and SBM settings, where the stakeholders are more involved and rewards are more equally distributed than in TBMs, where economic value maximization for the focal firm is the main goal. This notion is underscored by Stubbs & Cocklin (2008), who found the same challenging role differences of stakeholders between the two models. Thus, an increase in collaboration and involvement with stakeholders, and a balance of perks are avenues to rectify the paradox in the stakeholder environment (Schaltegger, Lüdeke-Freund, & Hansen, 2012; Stubbs & Cocklin, 2008).

We have summarized the areas of paradoxical tensions found in the literature in Table 1.

No. of Paradox	Paradox Name	Short Explanation	Authors
1	Competing demands	Competing demands of economic, social, and ecological foci within one organization	Hart & Milstein (2003) Rangan, Chase, & Karim (2015) Stubbs & Cocklin (2008) Schaltegger et al. (2012)
2	Organizational culture and mindset	Competing organizational mindsets per business model and tensions for organizational culture	Barquet et al. (2013) Boons & Lüdeke-Freund (2013) Yu & Hang (2010)
3	Training and staffing	Different requirements related to the workforce engaged with the different business models	Barquet et al. (2013) Kianto, Sáenz, & Aramburu (2017)
4	Resource allocation	The allocation of different resources between traditional and sustainable business models	Barquet et al. (2013) Björkdahl & Holmén (2013) Chesbrough (2010)
5	Stakeholder environment	The impact of the coevolution on and of both the internal and external stakeholder environment surrounding the corporation	Boons & Lüdeke-Freund (2013) Schaltegger, Lüdeke-Freud, & Hansen (2016) Stubbs & Cocklin (2008)

Table 1: Different paradoxes occurring during coevolution.

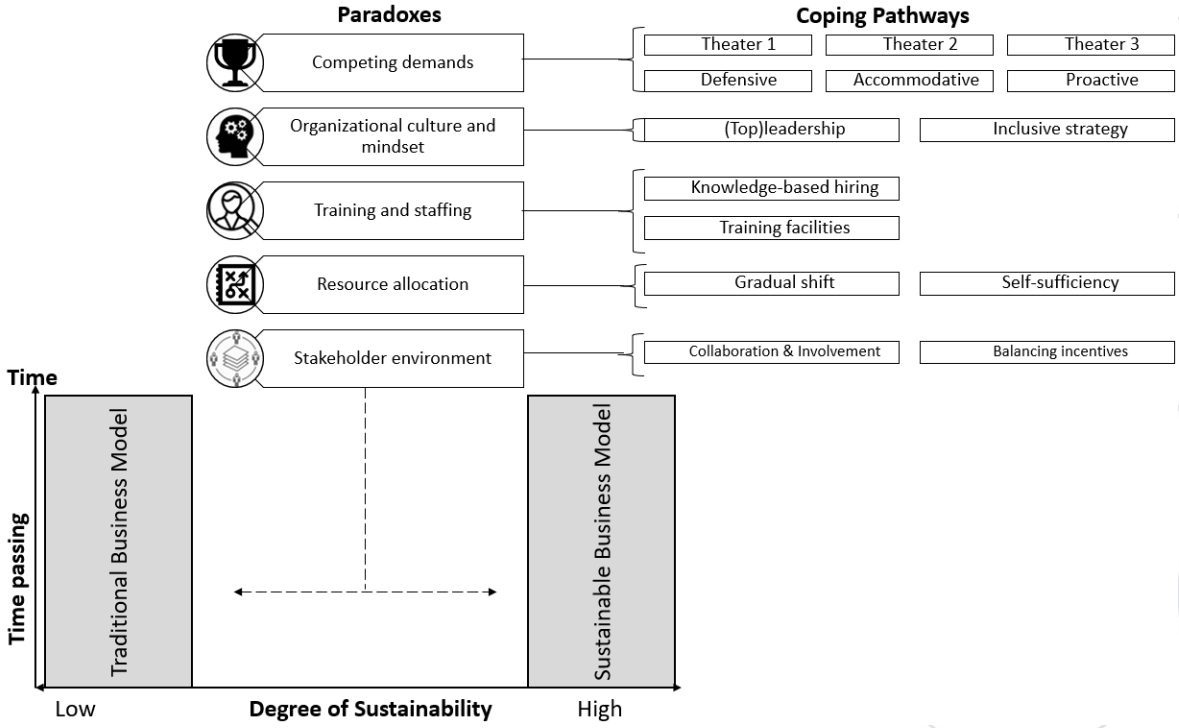

Figure 2: The Five Paradoxical Tensions and Coping Pathways.

The Conceptual Model

The above-discussed areas of paradoxical tension may occur in different moments in time and reappear throughout the process of coevolution. Figure 2 visualizes the five areas of paradoxical tension along with the solutions identified above. The process here refers to the time passing whilst the TBM and SBM are simultaneously managed under a single corporate roof.

Methodology

Given the aim of this research, namely, to provide coping strategies associated with the paradoxes unearthed by the coevolution of TBMs and SBMs, an inductive, qualitative design is chosen. Derived from the interest of this research and given the fact that the research question resembles a 'how' or 'why' question, a multiple case study design is chosen (Yin, 2003). Moreover, this paper investigates a contemporary event, which resembles another criterion in favor of a case study design (Yin, 2014: 9).

Case Selection

Case selection was undertaken based on theoretical sampling (Eisenhardt, 1989). The purpose of this study is the extension of an emerging field. Thus, cases have been selected based on the notion that organizations are undertaking a coevolution of TBMs and SBMs. Hence, potential cases had been approached via LinkedIn or email, and been asked whether a coevolution of TBMs and SBMs was currently taking place under their roof. If this condition was met, or if they were directly involved in advising a firm undertaking such a coevolution, they were considered feasible for the analysis. The selection resembles a literal replication aimed at gaining and validating crucial insights that can answer the research question (Yin, 2014). To determine the optimal number of cases, saturation is chosen as a cut-off criterion (Jonker & Pennink, 2010). A list of the seven selected cases can be found in Appendix 1. Moreover, cases have been chosen from the following three groups of companies. The differences in groups are related to the theoretical sampling: in the three groups we expect to find differences in the process of coevolution of TBMs and SBMs.

1. Businesses directly experiencing a coevolution of traditional and sustainable business models under their corporate roof. This group provides us with direct in-house experience, thereby validating our answers to refine our conceptual model.

2. Private consulting firms, which are involved in advising firms who are experiencing a coevolution of traditional and sustainable business models. This group will infuse a birds-eye perspective, thereby enhancing reliability of our answers.
3. Public research and innovation entities, who are involved in advising firms, but may not be as concerned with economic viability of their consulting style as group 2. The third group is chosen to check whether the answers will differ due to economic success pressures.

This has resulted in a sample of seven cases. Two cases are from the Netherlands, the five others from countries in Europe (UK, France, Belgium, Norway and Sweden). Two cases were energy producers, one case a consumer good producer and four consulting firms.

Data Collection

Phone interviews serve as a data collection method to obtain information from participants of the cases selected. To extract the full potential of information from participants, interviews have been conducted in a rather closed fashion in conjunction with a semi-structured interview approach with the utilization of probing to clarify ambiguous answers. The interview guide can be found in Appendix 2. All interviews were conducted by the same researcher, which may limit the search for answers on our research question.

Data Analysis

This research is guided by Dey's (1993) analytical spiral. In accordance with this spiral, textual analysis is utilized to gain information from gathered data, also referred to as coding (Strauss & Corbin, 1990). Data is organized into codes, which are explained and defined in their initial context, and then compared and categorized to develop theory (Hennink, Hutter, & Bailey, 2011). This process is also referred to as open, axial, and selective coding. Open coding encompasses the initial organization into chunks of data and being labeled with codes. These codes are then grouped into overarching categories, which is called axial coding. Selective coding, then, involves the organization of axial codes into core variables. Selective coding is provided in Appendix 3, whilst open and axial coding as well as the thick description of codes are available upon request. The coding procedure was done by the same researcher to ensure consistency, which was the same researcher conducting the interviews. An overview of the analyzed transcripts is found in Table 2 below.

Research Criteria

Data triangulation, ergo the utilization of a multitude of data sources in order to ensure a strong weight of evidence, has been chosen to strengthen this paper, combined with a closed chain of evidence (Guion, 2002; Jonker & Pennink, 2010; Yin, 2014). These are resembled by the three distinct groups outlined earlier. Moreover, the selection of different European cases improves the external validity, as findings stem from an inter-European level. Additionally, a case study data base was established, comprising transcripts, recordings, and other related documents, which improves reliability (Yin, 2014). To account for controllability and transparency, transcripts, interview guide, and coding procedure are available upon request for the assessing entities (Jonker & Pennink, 2010). In this article we

Case	Label	Time Interviewed	Pages of Interview Transcript Analyzed	Month Interview Conducted
Case 1	Business 1 (B1)	35:33	20	November 2019
Case 2	Business 2 (B2)	43:25	19	November 2019
Case 3	Business 3 (B3)	32:21	12	November 2019
Case 4	Consulting Firm 1 (CF1)	38:01	19	November 2019
Case 5	Consulting Firm 2 (CF2)	40:01	15	November 2019
Case 6	Consulting Firm 3 (CF3)	32:24	12	November 2019
Case 7	Government Consulting Firm 1 (GCF1)	39:38	16	November 2019

Table 2: Overview of Interview and Transcript Length.

have used the cases in an illustrative way to build up our arguments for the answer. Whilst this may evoke the feeling we are testing this is not the case.

Results & Discussion

How Do Firms Address the Paradoxical Tensions of Competing Demands?

Competing demands of economic, social, and economic foci

The tension of the competing demands of economic, social, and environmental foci between TBMs and SBMs have been addressed in several ways. B1, B2 and B3 have balanced these foci through integration of sustainability into their overall strategy. Both TBMs and SBMs have to fulfill sustainability standards, with B2 even making sustainability a mandatory part of doing business. CF1 similarly aligns these foci through the added value that sustainability is offering, such as cost reduction and satisfaction of customer demands for more sustainability. CF2, on the contrary, reported a distinct separation of the foci per BM, where the TBM funds sustainable operations through donation of its earnings. CF3 and GCF1 both acknowledge the competitive treatment of sustainability, and the integration via a long-term strategic perspective.

Hence, results show that firms rectify this paradoxical tension through integration. Rangan, Chase, and Karim's (2015) three "theaters" are found in solving these foci. Consulting Firm 2 embodies Theater 1, where TBM's profits are being used to fund the SBM. Theater 2 manifests in operational improvements to integrate social and environmental issues, and is embodied in B1 and B3, CF1, CF3, and GCF1, who also report business cases for sustainability introduced by Schaltegger et al. (2012) and Hart & Milstein (2003) identified to align the competing foci during the co-evolution. Theater 3, hence, a transformation of BMs through engraining sustainability as a mandatory aspect of every BM, manifests in B2.

Comparability of performance metrics

To establish comparability of endeavors throughout the corporation, the following possibilities have been reported. B2, CF1, CF2, CF3, and GCF1 have integrated sustainable and traditional reporting structures into all operations. GCF1 further adopted a triple bottom line canvas to ensure comparability of operations. B3 implemented a strategic mandate to manage future expectations for the SBM, and to prevent a bias for decisions based on return on investment only. B1 and CF1, however, adopted a translation approach to metrics, where all metrics are being translated into a higher-order performance indicator, such as translating emissions into Euro, or other objective key results. CF2 indicated a clear separation of metrics per business model, meaning that the TBM is measured against traditional performance metrics, whilst the SBM utilizes indicators that are in congruence with its purpose. Therefore, a comparison between the two is willingly not made.

Stubbs & Cocklin (2008) underscored the necessity of having a reporting structure that meaningfully reflects economic, social, and ecological impacts a firm has. As GCF1 exemplifies, Elkington's (1999) triple-bottom-line approach is mirrored in a triple-bottom-line-canvas (TBLC), which maps out economic, social, and environmental aspects of an organization's operations (Joyce & Paquin, 2016). Most cases opted for a combined reporting structure of traditional and sustainable metrics, although different options than the TBLC were chosen. B3 opted for a strategic mandate to counterbalance a bias towards economic metrics (Stubbs & Cocklin, 2008). CF2, on the contrary, highlighted a clear separation of metrics per BM, which reflects Rangan, Chase, and Karim's (2015) reporting structures in Theater 1.

Cannibalization of profit margins

With respect to addressing profit margin cannibalization, two different options have been reported. Cannibalization of profit margins of the TBM by the SBM has been reported to be accepted in the long-term if not strategically mandated by most cases. B2, however as a second option, handles the cannibalization issue based on a global-local strategic consideration. Whilst sustainability is a mandatory pillar in these decisions, profit cannibalization dilemmas are dependent on economic and strategic factors only.

Schaltegger et al. (2012) highlighted three different types, of which two types have been found in the data analyzed. The accommodative type, where customer segments concerned with sustainability are recognized and served with specific products, besides existing

TBMs, is embodied by most cases, who have been entertaining an SBM next to a TBM. B2, as the second recognized type, mirrors the proactive type, as BMs have been transformed to accommodate sustainable components as a mandatory part across the corporation. Noteworthy is the acceptance of profit margin cannibalization by all interviewed cases.

How Do Firms Address the Paradoxical Tensions of Organizational Culture and Mindset?

Organizational culture and mindset

To address the tension of cultural and mindset difficulties between TBMs and SBMs, B2, B3, CF1, CF2, CF3, and GCF1 have outlined strong leadership as a key component to harmonize culture and mindset. B1 deploys a participation-based corporate strategy coupled within an inclusive corporate purpose, which is continuously communicated internally. B2, CF1, and CF2 established a strong and values-based corporate vision and philosophy which resonates with the staff's own value set. B2 further deploys champions for sustainability that are constantly advocating for sustainable change within the organization, a practice that is also acknowledged by CF1 and CF2. B3, however, highlights the cruciality of external market developments confirming a necessary switch onto SBMs alongside the TBM to aid cultural harmonization.

Yu & Hang (2010) and Boons & Lüdeke-Freund (2013) highlight the pivotal role culture and mindset play during the co-evolution of BMs. Successful adaptation of culture requires leadership (Barquet et al., 2013; Stubbs & Cocklin, 2008). Moreover, B2, CF1, and CF2, advocate for strong, values-based corporate visions and philosophies that resonate with staff's own values, and B1 reports a participative, inclusive strategy to motivate cultural harmonization. These values-related and inclusive corporate vision and strategy is also highlighted by Stubbs & Cocklin (2008) and Lleo, Viles, Jurburg, & Lomas (2017). B3, instead, underscored the notion of Hockerts & Wüstenhagen's (2010) market development fostering adjustment of corporate mindset. B3, thus, opted for an organic approach to cultural adjustment and harmonization. Moreover, increased communication of values and purpose has been introduced, as well as different programs to standardize processes and boost growth based on common value sets. Zerfass & Viertmann (2016) describe a similar approach in their values-based communication paradigm, where corporate value communication to internal stakeholders is key.

Behavioral rules, norms, and regulations

B1 established a stage-gate model that ensures the involvement of all relevant stakeholders at each step of the design process of a product or service, which enables joint agreement and inhibits cultural conflicts internally. Moreover, an in-house program is in place, establishing a common mindset for the workforce by stressing the importance of operational optimization. The organization set two different strategic objectives per BM, which aids expectation management of relevant stakeholders. B2 reported a code of principles that has to be signed by every employee semi-annually, clearly underscoring the importance of values such as sustainability, respect, authenticity. A further powerful mechanism is the firm's innovation and corporate development process, giving each brand its own purpose and commitment to shape strategy in accordance. CF1, similarly, highlights the importance of continuous communication of values and purpose. CF3 and GCF1 reported HR involvement and leadership as crucial mechanisms, whilst B3 opted for organic cultural growth instead.

How Do Firms Address the Paradoxical Tensions of Training and Staffing?

Regarding the training of staff, B1, B2, CF2, and GCF1 established training centers and programs to enable continuous learning. Employees receive training on different matters reaching from basic skill development onto more complex, sustainability-related topics. B2 additionally introduced a purpose-led self-development program. B1 has introduced training programs for everyday improvements and understanding the weighted impact of IT development per business model, which enhances transparency on how IT resources are being devoted. CF2 deploys training courses to improve collaborative management. GCF1 reported the utilization of an in-house academy to facilitate skill development. In addition to these physical training opportunities, B2, B3, and GCF1 also utilized online training facilities and platforms to train employees, and other relevant stakeholders.

In terms of accommodating the workforce into the process of the coevolution, values-based hiring has been introduced by Business 2, Business 3, Consulting Firm 1, Consulting Firm 2, and Government Consulting

Firm 1. This matches with the slightly confusing term in this context, 'knowledge-based recruiting', which "involves a strong and explicit focus on choosing candidates with relevant knowledge, learning and networking capabilities" (Kianto et al., 2017: 12). In the context of the coevolution of business models, the ability to properly learn and network hinges on the understanding of the common corporate values. Furthermore, Kianto et al. (2017: 13) highlight the necessity to "regularly developing the depth and breadth of employees' knowledge and expertise, personalizing training to fit particular needs and, finally, ensuring continuous employee development". Virtually all cases entertain either physical or online training facilities, or both.

Concerning staffing, most cases reported a values-based hiring process to find the best match. B2 and B3 state that recruitment efforts move toward specialized talent to satisfy the needs for the sustainable business model. Similarly, CF1, CF2, and GCF1 report this development.

How Do Firms Address the Paradoxical Tensions of Resource Allocation?

B1, B3, CF1, CF2, CF3, and GCF1 confirmed that resources are increasingly reallocated towards the SBM. CF2, on the other hand, reported that there are dedicated resources for each BM, and no resources flow from one to another. B2 highlighted that resources are allocated based on strategic growth decisions and performance, based on quarterly agile-performance-reviews, so that resources may flow quickly to where they are needed the most.

In line with Björkdahl & Holmén (2013) and Chesbrough (2010), almost all cases indicated a gradual shift of resources from the TBM to the SBM. B2 highlighted that the allocation of resources was dependent on an agile-performance-review in order to allocate resource most efficiently, a trend gauged by Cappelli & Travis (2016). Lastly, CF2 reported no resource shift between TBM and SBM, but a fixed allocation of resources per model, a notion indicated by Björkdahl & Holmén (2013).

How Do Firms Address the Paradoxical Tensions Arising in the Stakeholder Environment?

External stakeholders

All cases have reported an increase in collaboration, communication, and interaction with stakeholders. CF1 highlights stakeholders' increased emphasis on transparency and involvement, whilst GCF1 underscores the cruciality in increased communication to maintain close ties and credible relationships with stakeholders. B3, CF2 and CF3 report an increase in interaction, but also in the number of stakeholders involved. B1 highlights further the increase in collaboration with local governments and other industries, whilst B2 highlights more inter-industry partnerships and collaborations, as well as partnerships with NGOs and governments.

In line with Schaltegger, Lüdeke-Freund, & Hansen (2016) and Stubbs & Cocklin (2008), all cases reported an increase in collaboration, communication, and interaction with stakeholders. CF1 and CF3 further note an increase in the number of stakeholders involved, a notion indicated by Pennink (2014). Furthermore, B1 and B2 highlight an increase in inter- and intra-industry collaborations, as well as partnerships with governments and NGOs. Schaltegger, Lüdeke-Freund, & Hansen (2016) highlight similarly an increased collaboration with NGOs, retailers, and other relevant stakeholder groups, whilst Boons and Lüdeke-Freund (2013) stress the need for inter-organizational clusters even beyond firm actors and an embracement of stakeholder's expectations.

Resistance throughout the value chain

Whilst B1 outlined no frictions during the coevolution, most cases highlighted issues along their value chains. B2 reported cynics and critics along the value chain but overcame the resistance by demonstrating the potential of sustainable business conduct and strong leadership. By now, supplier who wish to work with B2 must sign a code of principles, subscribing to the adherence to sustainable practices. B3 also reported frictions in the value chain, especially with the financial industry, which were tackled via collaboration with partners that were willing to change. CF1 and CF2 concur this notion, and advocate for supplier screening and co-creation of value with suitable partners. CF3 and GCF1 highlight the necessity for strong leadership and effective change management to combat resistance, as well as advocating for risk reduction through more sustainable business conduct.

Regarding possible difficulties throughout the value chain, B1 did not encounter any frictions. The remainder of cases have addressed supplier reluctance through

supplier screening and alignment of interests via demonstration, which according to Stubbs & Cocklin (2008) is crucial to overcoming these difficulties. CF1 further outlines the co-creation of value with suppliers as a crucial mechanism to manage supplier friction, which is in line with Sheth (2019).

Internal stakeholders

To overcome issues in the internal stakeholder environment, CF1, CF2, and CF3, and GCF1 address this with strong leadership and increased collaboration and communication. This is achieved by establishing a clear corporate vision and strategy. B1 and B2 confirm this notion, and also highlight the need for a unified processes and transparency. B3 overcame competing interests of internal stakeholders with patience and strategic consequence. While exercising the coevolution continuously, stakeholders that resisted gradually diminished by natural turnover, and opted for an organic approach.

With respect to the internal stakeholder environment, competing interests have been addressed in several ways. Strong leadership and collaboration have been reported as a key strategy to remedy competing interests (Boons & Lüdeke-Freund, 2013; Stubbs & Cocklin, 2008). Along the argumentation of Lleo, Viles, Jurburg, & Lomas (2017) and Stubbs & Cocklin (2008), B1, B2, CF2, CF3, and GCF1 report the cruciality of a strong corporate vision and strategy in conjunction with internal stakeholder involvement. B3, on the contrary, has opted for an organic approach to rectify competing interests, whereby organic turnover diminished incompatible stakeholders, an approach enabled through strong leadership and strategy (Stubbs & Cocklin, 2008).

Conclusive Findings: Four Coping Strategies

This paper's objective is to explore and identify the coping pathways and mechanisms of businesses that encounter paradoxical tensions during the coevolution of traditional and sustainable business models. Therefore, the following research question has been formulated based on literature and current developments:
How do traditional and sustainable business models coevolve within firms?

Through the adoption of a paradox lens, we have been able to view TBMs and SBMs as opposing poles, that are yet interrelated and interdependent (Smith & Lewis, 2011). Thus, we could identify several areas of paradoxical tensions that must be addressed as they occur during the coevolution. After reviewing a map of uncovered responses, the empirical data revealed four fruitful coping strategies to address the five areas of paradoxical tension during the coevolution, which are presented below. Coping strategies, in the spirit of Lazarus and Folkman (1984), refer to the behavior and endeavors undertaken to address different internal and external demands, in this research context, the five areas of paradoxical tension occurring during the coevolution of TBMs and SBMs. The four coping strategies range from separation of TBMs and SBMs, to narrowing of TBMs and SBMs via operational improvements or strategic mandates, to a complete transformation from TBMs to SBMs. The results suggest, however, a predominant shift from TBMs onto SBMs in the long run.

1. ***Type 1 "Splitter",*** splits TBMs and SBMs, and displays a philanthropic approach, where reporting structures remain separate per business model, profit margin cannibalization is accommodated in the operations with respect to competing demands. Strong leadership and an inclusive, participatory strategy are chosen to harmonize organizational mindset and culture. Values-based hiring and the utilization of training facilities are used to address the paradox in staffing and training. Regarding resource allocation, a self-sufficiency of business models is opted for, with no gradual shift in resource allocation over time. The external stakeholder environment is included through increased stakeholder involvement, whilst competing interests in the internal stakeholder environment were addressed with strong leadership, and a participatory internal management approach.

2. ***Type 2 "Operational Perfectionist"***, focuses on operational excellence, ergo exhibits operational improvements in the traditional business model, while entertaining an SBM to combine competing demands. Traditional and sustainable metrics are jointly reported throughout the corporation, and profit margin cannibalization is accommodated. For organizational mindsets and cultures, strong

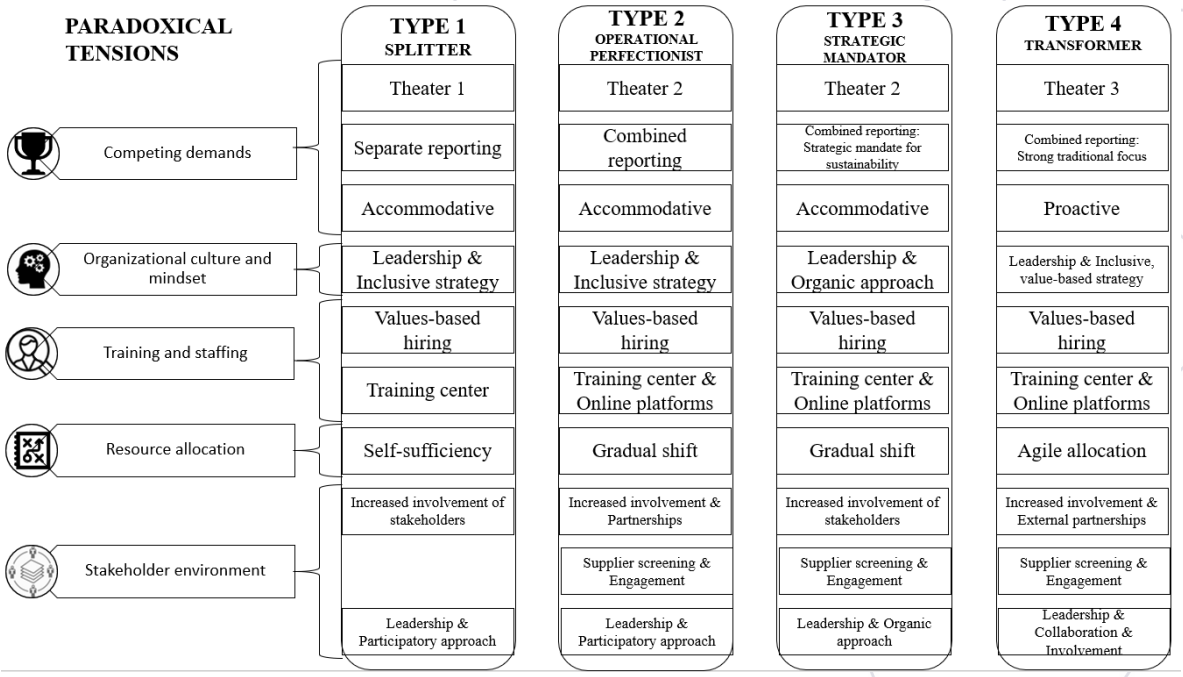

Figure 3: Four Coping Strategies: From Splitters to Transformers.

leadership and an inclusive strategy are used. Regarding staffing and training, values-based recruitment as well as physical training facilities and online platforms are established. Resources shift gradually from the TBM to the SBM. Furthermore, more interaction in the external stakeholder environment and partnerships with other industries and governmental actors is observed. Along the value chain, suppliers are screened for fit, closer collaboration initiated, and value jointly created. Competing interests in the stakeholder environment are addressed through strong leadership, increased collaboration, and involvement of all relevant internal actors.

3. ***Type 3 "Strategic Mandator"***, strategically mandates the SBM's development. A strategic mandator undertakes operational improvements in the TBM whilst entertaining an SBM to combine competing demands. TBMs and SBMs are jointly reported, although a strategic mandate has been established to counterbalance a bias towards traditional metrics. Profit margin cannibalization has been accommodated. Regarding organizational mindset and culture, strong leadership paired with an organic approach was chosen, with market trends providing the stimulus for harmonization. Training and staffing have been approached via values-based recruitment, and the utilization of training facilities and online platforms. Resources are gradually shifted from the TBM toward the SBM. Furthermore, increased involvement of external stakeholders as well as supplier screening and collaboration is observed. Competing interests in the internal stakeholder environment are addressed through strong leadership, and an organic approach where the number of incompatible internal stakeholders diminishes over time.

4. ***Type 4: "Transformer"*** resembles a transformation of BMs to satisfy competing demands of economic, social, and environmental foci. Sustainable and traditional metrics are jointly reported, although the focus on traditional metrics such as return on investment remains the crucial set of metrics. Profit margin cannibalization was addressed in a proactive manner, as BMs were transformed to be sustainable and become one of the main drivers of the organization. For organizational mindset and culture, strong leadership paired with an inclusive, values-based strategy were deployed. As for training and staffing, values-based recruitment, as well as physical training centers and online platforms are utilized. Resource allocation is based on an agile,

performance-based allocation mechanism to channel resources fast and efficiently. The external stakeholder environment is addressed through increased involvement and external partnerships with actors from different industries and governmental entities. Suppliers are screened for fit based on capabilities and values. Competing interests in the internal stakeholder environment are approached through strong leadership paired with involvement and collaborative value-alignment programs.

The coevolution of TBMs and SBMs creates paradoxical tensions. These five areas of paradoxical tension, specifically competing demands, organizational culture and mindset, training and staffing, resource allocation, and the stakeholder environment, necessitated firms to develop strategies. By identifying an array of firms' responses and four coping strategies, this research contributes to existing literature in the following ways. Firstly, it infuses the field of TBM and SBM research with a paradox lens and highlights four coping reactions firms have developed that might help them to address the paradoxical tensions. Secondly, it points out current best practices on the synchronistic management of TBMs and SBMs under one roof.

Limitations

Nevertheless, this research has inherent limitations. As is clearly indicated this is an inductive oriented case illustration with the main purpose to develop new theoretical insights. Our four coping strategies and the five areas of paradox are as we hope new theoretical insights. Furthermore, our case selection was based on theoretical sampling, ergo the selection hinged on relevant criteria to the issue under investigation, which might have limited our inductive search process as also our choice of only western European cases could have done that. Additionally, the relatively small number of cases and their mixed industries may contribute accordingly. Lastly, the scope of this paper limits the detail of the outcome. This research concentrates on five areas of paradoxical tension, however, there may be smaller, nonetheless still significant, paradoxical areas that may remain unaccounted for.

Avenues for Future Research

Future research may explore the phenomenon of the coevolution of TBM and SBM in a context beyond West-Europe. Secondly, as sub-groups of cases do not exhibit equal numbers, this offers the opportunity to investigate whether findings would diverge in case of equal distribution of sub-groups. Lastly, due to the limited scope of this paper, a rather complex phenomenon was explored with a single interview per case. A longitudinal case study with multiple interviews over time would may enable a more nuanced capture of the coevolution, with more data points over time (Yin, 2014).

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Appendix

Appendix 1: List of Interviewed Cases

Case	Industry	Location	Label	Firm Size (No. Employees)
Case 1	Energy/Power Producer	Netherlands	Business 1 (B1)	> 40,000
Case 2	Consumer Goods	United Kingdom	Business 2 (B2)	> 150,000
Case 3	Energy/Power Producer	France	Business 3 (B3)	> 150,000
Case 4	Consulting	Netherlands	Consulting Firm 1 (CF1)	> 150,000
Case 5	Consulting	Belgium	Consulting Firm 2 (CF2)	< 100
Case 6	Consulting	Sweden	Consulting Firm 3 (CF3)	< 100
Case 7	Governmentally-owned Consulting	Norway	Government Consulting Firm 1 (GCF1)	> 500

Appendix 2: Interview Guide

Section	Question	Literature	Expectation
Introduction	(...)	N.A.	N.A.
General information	What is your current position and how does your experience with both traditional and sustainable business models look like?	N.A.	N.A.
Competing demands	1. How do you deal with competing demands of economic, social, and environmental foci?	Hart & Milstein (2003) Stubbs & Cocklin (2008) Rangan, Chase, & Karim (2015)	To explore pathways for rectifying competing foci.
	2. How do you ensure comparability of projects with respect to performance metrics?	Schaltegger et al. (2012) Stubbs & Cocklin (2008) Rangan, Chase, & Karim (2015)	To explore pathways for rectifying comparability of endeavors.
	3. How do you address the potential issue of cannibalization of profit margins between the two models?	Hart & Milstein (2003) Schaltegger et al. (2012)	To explore pathways for rectifying cannibalization of profit margins.
Organizational mindset and culture	4. Have you experienced any difficulties with respect to organizational culture? How did you overcome this?	Barquet et al. (2013) Stubbs & Cocklin (2008)	To explore pathways for rectifying competing mindsets/ cultures.
	5. Have you introduced new internal behavioral norms or rules to harmonize the co-evolution within the firm?	Barquet et al. (2013) Stubbs & Cocklin (2008)	To explore pathways for rectifying competing mindsets/ cultures.

Appendix 2: Interview Guide *(Continued)*

Section	Question	Literature	Expectation
Training and staffing	6. How is staffing and the workforce affected by the coevolution?	Barquet et al. (2013) Kianto, Sáenz, & & Aramburu (2017)	To explore pathways for rectifying competing interests in and demands from the workforce.
	7. Have you introduced a learning platform, such as a training center?	Barquet et al. (2013) Kianto, Sáenz, & & Aramburu (2017)	To explore pathways for rectifying competing skill requirements.
Resource allocation	8. In terms of resource allocation, how is this managed between the two models?	Barquet et al. (2013) Björkdahl & Holmén (2013) Chesbrough (2010)	To explore pathways for rectifying competing resource demands.
Stakeholder environment	9. How has the co-evolution affected the external stakeholder environment?	Boons & Lüdeke-Freund (2013) Schaltegger, Lüdeke-Freund, & Hansen (2013) Stubbs & Cocklin (2008)	To explore pathways for addressing competing interests in the external stakeholder environment.
	10. Have you faced any resistance throughout your value chain throughout the process? How have you addressed potentially competing interests?	Boons & Lüdeke-Freund (2013) Schaltegger, Lüdeke-Freund, & Hansen (2013) Stubbs & Cocklin (2008)	To explore pathways for addressing competing interests in the external stakeholder environment, specifically along the value chain.
	11. How has the coevolution affected the internal stakeholder environment? How have you addressed potentially competing interests?	Boons & Lüdeke-Freund (2013) Schaltegger, Lüdeke-Freund, & Hansen (2013) Stubbs & Cocklin (2008)	To explore pathways for addressing competing interests in the internal stakeholder environment.

Appendix 3: Selective Coding

Paradox	Codes
Competing demands	All businesses integrate economic, social and environmental foci (B1, B2, B3) as well as most consulting firms (CF1, CF2, CF3, GC1) by engraining sustainable and economic requirements in both traditional and sustainable business models (B1, B2, B3, CF1, CF3, GC1), through cost reduction (CF1) Another option to balance the competing demands is by generating profits with the traditional business model and donate them to a social business model (CF2) Translation of different KPIs onto a common level (B1, CF1) Integration of both sustainable and traditional metrics across all operations (B2, CF1, CF2, CF3, GC1) and expectation management for lower returns of sustainable business models (B3) Separate set of metrics per business model's emphasis (CF2) Acceptance of cannibalization of profit margins from traditional model by sustainable model (B1, B3, CF1, CF2, CF3, GC1) Direction of strategic narrative guides cannibalization acceptance, unrelated to sustainability (B2) Future legislation favors focus on sustainability (CF1, GC1)
Organizational mindset and culture	Participation-based corporate strategy (B1) with inclusive organizational purpose that is continuously communicated to overcome cultural difficulties Top leadership (B2, B3, CF1, CF2, CF3, GC1) Strong, values-based corporate vision and philosophy (B2, CF2, CF3) with champions for sustainability in the ranks (B2, CF1, CF2) Market development proving the right direction (B3) Mechanisms used are HR involvement and leadership (B1, GC1, CF3), increased communication of values (CF1, B2), and organic cultural growth (B3)
Training and staffing	Values-based hiring to find the best match (B2, B3, CF1, CF2, GC1) Online platforms to enable continuous learning (B2, B3, GC1) Training centers and programs to facilitate learning (B1, B2, CF2, GC1) Collaborative management, communication, and leadership (B2, CF1, CF2, CF3, GC1)
Resource allocation	Resources are increasingly being re-allocated from traditional to sustainable business models (B1, B3, CF1, CF2, CF3, GC1) Resources are being allocated based on strategy and performance, without taking sustainability into consideration (B2) Resources are distinctly allocated per business model, and all business models are functioning self-sufficiently (CF2)
Stakeholder environment	Increased collaboration, communication, and interaction with stakeholders (B1, B2, B3, CF1, CF2, CF3, GC1) Increased partnerships with governmental entities (B1, B2) Increased inter- and intra-industry partnerships (B1, B2) To address and overcome resistance from the value chain, suppliers are being screened and engaged if they share the same values (B2, B3, CF1, CF2, CF3) To address and overcome resistance from the value chain, effective risk management is being advocated (GC1) To overcome internal stakeholder issues, leadership (CF1, CF3, GC1), as well as collaboration and participation of these internal stakeholders in the process is key (B2, CF1, CF2, CF3) To overcome competing interests of internal stakeholders, unified processes and transparency are vital (B1, B2) Organic outgrowing of incumbent resistance (B3)

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