UNIVERSITY OF CAMBRIDGE
Cambridge Service Alliance

Managing Decision-Making and Cannibalization for Parallel Business Models

Chander Velu and Philip Stiles

This is a working paper

Why this paper might be of interest to Alliance Partners:

The study examines the process of strategic decision making when adopting a new business model that can disrupt the existing business model. In particular, the paper presents an in-depth longitudinal case study of a major bank in the US corporate bond trading market by focusing on the process of managing the cannibalization of one business model with another. The study shows how the firm conducting a staged decision making process that balanced procedural rationality and political expediency facilitates and helped resolve the paradoxes involved in running conflicting business models. This paper offers a framework to help firms manage the decision-making and cannibalization processes when a new and an existing business model need to be run in parallel.

July 2013

Find out more about the Cambridge Service Alliance:
Linkedin Group: Cambridge Service Alliance
www.cambridgeservicealliance.org

The papers included in this series have been selected from a number of sources, in order to highlight the variety of service related research currently being undertaken within the Cambridge Service Alliance and more broadly within the University of Cambridge as a whole.

UNIVERSITY OF CAMBRIDGE
Cambridge Service Alliance

Managing Decision-Making and Cannibalization for Parallel Business Models

Chander Velu, Institute for Manufacturing, Department of Engineering, University of Cambridge
Philip Stiles, Cambridge Judge Business School, University of Cambridge,

Abstract

This paper examines how a firm can manage the decision-making and cannibalization processes when a new and an existing business model need to be run in parallel. We present an in-depth longitudinal case study of a major bank in the US corporate bond trading market that launched a disruptive business model and ran it alongside its existing well-established and successful business model. The study shows how the firm conducting a staged decision making process that balanced procedural rationality and political expediency facilitates and helped resolve the paradoxes involved in running conflicting business models. We contribute to the decision making literature by showing how the mechanisms for balancing procedural rationality and politics facilitated the management of the decision-making and cannibalization processes and so enable existing and disruptive business models to run in parallel.

1. Introduction

A business model summarizes the architecture and logic of a business (Baden-Fuller and Morgan, 2010), and several recent studies have found that competitive pressures have pushed business model innovation to the top of CEOs' priorities (IBM Global CEO Study, 2008; GE Global Innovation Barometer, 2013) not least because a firm's choice of which business model to adopt has been shown to be an important determinant of its performance. But incumbent firms often face challenges when trying to innovate their business models. In particular, there has been a long discussion in the academic and practice based literature about whether a firm can run two business models simultaneously. This paper aims to show how a firm can successfully change its business model and run two such models simultaneously, with the intention of one cannibalizing the other.

Consider a canonical example, in which an incumbent (such as Enterprise Rent-A-Car) is forced to wrestle with how to defend its market share in the face of the emergence of new competitors such as Zipcar, whose business model innovation enables customers to pay an annual subscription and then rent cars by the hour. Zipcars are stationed around cities and near residential neighbourhoods, and the firm charges lower prices (with gas and insurance included) than conventional car rental firms. Eventually, Enterprise was forced to launch WeCar, which also allowed customers to rent cars by the hour (The Wall Street Journal, 2008) – but then faced the possibility that this new business model might cannibalize its traditional car rental business (based on day-rental). Should Enterprise try to run the two business models in parallel? – or to manage a process whereby the newer model eventually displaced the older?

Logically, it is clear that if a firm cannot run two business models in parallel, changing its existing business model - while possible - is potentially very problematic. This point has been emphasized by a number of scholars (e.g. Chesbrough, 2010) and was reinforced by Sosna et al.'s (2010) study of business model change, which emphasized that experimentation and leadership of organizational transformation are required in order to alter an existing business model and assemble a new one. However, the question of how to run two business models that conflict with each other simultaneously has not been fully resolved. Some scholars (e.g., Magretta, 2002; Teece, 2010) have emphasized the need to choose one model over the other, while others (including Casadesus-Masanell and Tarzijan, 2012; Markides and Oyon, 2010) have found that it is possible to run two business models in parallel – but the conditions that would be conducive for making a success of parallel activities are not well spelled out, particularly in the context of business model change. Given that firms are often reluctant to replace an existing business model until a new one has shown itself to be a viable alternative, the challenge for the top management team is how to run two business models in parallel when that situation involves the cannibalization of the older model, and thus how to manage the process of cannibalization.

Cannibalization occurs when the adoption of a new proposition - in the form of a product, service or business model - reduces the value of a firm's existing assets and organizational routines (Chandy and Tellis 1998). Assets can be in the form of tangibles, such as equipment for creating a product or service, or intangibles, such as the firm's knowledge and skills (Henderson and Clark 1990), while organizational routines are the established procedures it uses to deliver its day-to-day activities (Nelson and Winter 1982). The rate of cannibalization is usually measured in terms of loss of sales or market share of the old model over time due to the adoption of the new proposition (Srinivasan and Dekimpe 2010): such losses are taken as being accounted for by changes in the primary demand for the new product or service proposition and switching within and between categories.

One of the barriers to business model innovation comes from the challenge of managing this cannibalization process, when firms find themselves unable to reconfigure their assets to support the new business model due to conflicts with the existing business model (Chesbrough 2010). The challenges of business model change which involves running two models in parallel are both cognitive and economic. It is cognitive because the business model is a cognitive conception (Doz and Kosonen 2010; McGrath, 2010; Teece, 2010) and so management has to hold two seemingly opposing conceptions of the world simultaneously. But it is also economic because the business model is a description of the underlying routines and architecture of the business (Casadesus-Masanell and Ricart, 2010; Zott and Amit 2010), and when there are two opposing business models these routines and architectures are likely to be in conflict. Firms transitioning from an existing to a new business model need to develop a strategy to manage such conflicts and, hence, the process of cannibalization. The literature on business model innovation emphasizes the advantages of replicating a business model, the benefits of experimentation, the need for ambidexterity and the importance of the leadership of senior management in effecting such transformations (Dunford, Palmer and Benveniste, 2010; McGrath 2010; Raisch and Birkinshaw, 2008; Smith, Binns and Tushman, 2010; Doz and Kosonen, 2010) – but the extant business model literature has not addressed how to manage the process of

cannibalization when a new and an existing business model need to run in parallel.

Managing the process of cannibalization has implications for change management that begin with the strategic decision making process and continue through to implementation. Although the change management literature discusses ways of managing conflict, it is relatively silent on how to manage the cannibalization of an existing business in business model innovation (Sosna *et al*., 2010). The strategic decision making literature also discusses the need to manage paradoxes, for example by balancing the competing perspectives of procedural rationality - where decision making reflects the best interests of the organization - and politics, where individuals try to protect their own material interests and positions (Dean and Sharfman, 1993; Elbanna and Child, 2007; Pettigrew, 1973). However, the extant literature on strategic decision making is silent on which mechanisms can facilitate business model change when a new and existing business models conflict with one another, but when they need to be run in parallel. This study examines the strategic decision making process in the context of business model innovation to address the following research question: *'How should a firm take decisions to manage the process of cannibalization of an existing business model in order to change to a new model when both serve the same customers?'*

We present a longitudinal and in-depth single case study (based on over 40 interviews with senior management) of a well-known (but anonymous) banking firm (hereafter 'the bank') that was an industry leader in the US corporate bond trading market. In particular, the case study examines how this large dealer bank innovated its business model to implement a new business model - for trading bonds on the Internet - that was disruptive of its traditional phone-based model, and how it managed the process of cannibalizing the latter. The study describes how the bank successfully changed its business model by first recognizing the need for change, and second creating a new parallel business model for the same customers which ran alongside the old one for a significant period, but with the eventual intention of rendering the old one obsolete. It explicates the bank's staged decision making process that balanced procedural rationality and political expediency to facilitate this outcome, and proposes that it was this approach that enabled the paradoxes and tensions between the two opposing business models to be resolved both cognitively and economically, allowing the firm to change a well-established and successful business model. We explain how this balancing of procedural rationality and political expediency also challenges some well-known preconceptions in the decision making literature about how these two tensions should be managed.

The study makes two contributions. First, it sheds light on some of the conditions that can facilitate a firm in changing an extant, once successful but now threatened business model to a new one that was more likely to be acceptable to its future customers, and how it can integrate two very differently configured models that serve the same customers simultaneously. As noted, those conditions relate to management's approach to balancing procedural rationality and political expediency in the decision making process. Second, the study contributes to the literature on decision making generally and on the management of the tensions between rationality and politics in particular, suggesting that these disparate forces can be managed rather than seen as incompatible opposites. We do so by showing the mechanisms that act as levers for duality, and so render stability and change compatible. Such mechanisms help ensure differentiation of

the new business model while simultaneously leveraging synergies with the existing model which facilitate the management of the cannibalization process by enabling the two to be run in parallel.

The next section reviews the relevant literature, while section 3 describes the data and method adopted for the case study and uses the empirical evidence to extend the theory on strategic decision making. Section 4 discusses the managerial and theoretical implications and section 5 concludes.

2. Literature Review and Theoretical Framework

2.1 Business Model Innovation and Change

A business model summarizes the architecture and logic of a business (Baden-Fuller and Morgan, 2010), and defines the organization's value proposition and its approach to value creation and value capture (Teece, 2010). This combination of value approaches represents how the activities of the firm work together to execute its strategy (Casadesus-Masanell and Ricart, 2010), and hence choosing a particular business model means choosing a particular way to compete.

Business model innovation involves the discovery and adoption of fundamentally different modes of value proposition, value capture and/or value creation in an existing business (Markides, 2006) – so business model innovation redefines what an existing product or service is, and how it is provided to the customer. Business model innovations can be disruptive when they change the bases of competition by altering the performance metrics along which firms compete (Daneels, 2004). A new business model which has different performance metrics to an existing model requires the firm to tailor its activities into a novel combination, which might be incompatible with its existing activity set, causing conflicts between the two ways of doing business which may necessitate various trade-offs. Herein lies the dilemma for established firms: business model innovations are inevitably disruptive of the existing business model – so the new business model conflicts with the old - making it difficult to run them in parallel.

Studies on business models have focused on innovation as the basis for transformation and change (Demil and Lecocq, 2010; Desyllas and Sako, 2013; Johnson et al., 2008; Sosna et al, 2010). For example, Demil and Lecocq (2010) discuss how management can use the business model concept as a tool to address change and innovation through a dynamic process of experimentation, refinement and reinvention; Sosna et al. (2010) emphasize the importance of trial and error learning as a basis for business model innovation; Desyllas and Sako (2013) show how intellectual property protection can act as a means to build specialized complementary assets in order to transform the business model, and Johnson et al. (2008) argue that successful business model transformation follows from a new understanding and redefinition of the customer value proposition. While these studies have shown the transformative effects of business model on organizations, less is known about how an organization can introduce a new business model and make it work in parallel with the existing business model – and, in particular, how conflicts between the two should best be managed.

Since business model innovation can be disruptive, shifting from an existing business model to a new one involves a series of transitions that link past, present and future. There have been some attempts to describe mechanisms to facilitate such transitions - such as 'patching', 'stitching', localized experimentation, and the use of alliances - but these have typically been discussed within the context of non-disruptive changes (Birkinshaw and Mol, 2006; Brown and Eisenhardt, 1999). Further, the behaviours and activities managers ought to engage in to ensure an effective transition when adopting a disruptive change and to retain successful linkages to existing arrangements have been largely underexplored.

An exception is the process model of change based on dialectics or conflictive change proposed by Van de Ven and Poole (1995; 2011). In this dialectic model, stability and change are the result of the balance of power between opposing entities. While the role of stability in managing change is acknowledged as crucial to business model innovation (Moshe, 2010), the dialectics model - in concert with much of the change literature - views stability and change as a *dualism* of two conceptually distinct and opposing dimensions. However, recent change management work has suggested, rather, that stability and change are best identified as a *duality*, in which these dimensions - while still conceptually distinct - are no longer seen as separate; but rather as interdependent and potentially compatible (Moshe, 2010). A number of authors have argued for this approach, most notably in terms of hybrid structures and ambidexterity (Brown and Eisenhartdt, 1999), but while this notion has been identified, the process by which the two can be integrated has been seldom explicated.

With regards to business model innovation, the process of cannibalization clearly highlights this notion of the duality of change. Chandy and Tellis (1998) have defined a firm's willingness to cannibalize as the extent to which it is prepared to reduce the actual or potential value of its investments in assets and organizational routines. If a firm is wedded to its current resource base, and is only willing to pursue new directions that fit with its existing resources - and consequently avoids initiatives that could affect them adversely - it will curtail the range of its exploration. To pursue exploration more fully, it needs to be willing to shed commitments to its existing resources, even if that renders some of its investments in existing resources obsolete (Chandy, Prabhu and Antia, 2003; Daneels, 2004). Willingness to cannibalize reflects an organizational culture that recognizes that pursuing new opportunities may involve shifting the focus from exploiting current resources to exploring new ones, even if this means sacrificing current sources of profit (Levinthal and March, 1993; March, 1991).

Studies have shown that firms might have both economic or cognitive reasons for not cannibalizing their existing business model: the first driven by their desire not to reduce the value of a profitable existing business to explore a new and uncertain profit stream or an initially less profitable business model (see Henderson, 1993), and the second to avoid management's cognitive frames embedded in the existing business model being inappropriately imposed on a new one (see Henderson and Clark, 1990; Tripsas and Gavetti, 2000). Although a willingness to cannibalize can be seen as a desirable trait that can promote business model innovation, and thus the firm's long-term success, the existing literature remains underdeveloped on how firms can go about overcoming these economic and cognitive constraints.

Rather than one business model offsetting the other, one view - which is supported by the general theoretical tradition that combining divergent action plans can foster innovation (Gebert, Boerner and Kearney, 2010; Lewis, 2000) – holds that combining two seemingly conflicting business approaches promises to yield rich benefits in terms of innovation. Research in paradox theory, conflict theory, and innovation theory has also highlighted the potential for innovation through harnessing the complementary benefits of different business approaches simultaneously (Alper et al., 2000; Dougherty, 2001; Quinn and Cameron, 1988). However, how this is achieved has seldom been explicated in empirical terms: in particular, there has been a scarcity of studies on how firms' strategic decision-making processes influence the process of cannibalization. We next review the relevant literature on strategic decision making processes.

2.2 Strategic Decision Making

Strategic decisions are those choices made by managers that commit resources, set precedents, and/or direct firm level actions that have important implications. Strategic decision making can be broadly classified into three phases: intelligence - involving the identification of opportunities, perhaps highlighted as a result of problems; design - which relates to the development of solutions and choice – choosing between possible alternatives (Mintzberg et.al, 1976). These three elements are at the heart of all staged decision-making models.

In the case of business model cannibalization, we argue that balancing two key dimensions - procedural rationality and politics – is crucial. Procedural rationality is concerned with the extent to which the decision making process reflects the intention to make the best decision possible for the organization under the given conditions, while politics refers to the impact of individuals or groups who try to influence decision making to enhance or protect their interests above those of the organization. Researchers have argued that decision making can be either rational or political but not both - or that the two represent opposite ends of a single continuum, so that an increase in one element necessarily implies the decrease of the other. However, other authors have proposed that procedural rationality and political behaviours should not be seen as distinct dimensions, and that the complex nature of strategic decision-making provides ample opportunity for both rational and political factors to coexist. For example, managers who are politically inclined might increase their likelihood of success by engaging in rational methods to develop their political approach (Dean and Sharfman, 1993; Elbanna and Child, 2007; Pettigrew, 1973).

It is widely accepted that both procedural rationality and politics are critical elements of the strategic decision making process but, although the literature has shown that they can co-exist, it fails to explain how they are complementary, and what characterises their coexistence. In particular, the literature fails to capture how combining procedural rationality and politics in strategic decision-making can help to manage conflicts in order to achieve desired outcomes. This issue is particularly vexing in the case of a decision to adopt a business model innovation because of the need to manage the process of cannibalization and the conflicts arising from running an existing and a new business model concurrently. Effective and efficient decisions will be called for to manage and reconcile the potentially conflicting demands of the two models.

In order to better understand how a firm can manage the process of cannibalizing an existing business model with a view to changing to a new one that serves the same customers simultaneously, we study the decision making process behind a major investment bank's adoption of electronic trading in the bond markets. In doing so, we integrate the stage model of decision-making – intelligence, design and choice – with the two modes of decision-making – procedural rationality and politics. We next describe our data and empirical content.

3. Empirical Section

Our primary case study setting is the adoption of a business model innovation by a major investment bank in the US bond market in the years 1999–2002, and uses extensive qualitative data drawn from interviews to explore the issues discussed above. This business model innovation offered a particularly suitable setting for an in-depth case study of the central research question for several reasons. First, the industry considered the bank's innovation to be disruptive; second, senior members of the organization disagreed about whether to adopt it; third, the business model innovation was likely to have consequences for the model run by another connected business; and fourth, business model innovation threatened to contribute to a lack of alignment between the existing and new business strategy as a result of the decision to run both business models in parallel.

Our data about the bank's innovation decisions came from both semi-structured interviews and secondary data sources. (We detail our approach to sampling and quality of data in Appendix 1A.) We interviewed forty senior executives from a prominent Wall Street bank that was the lead bank in a major consortium: they came from a cross section of bank functions, including fixed income, e-commerce, strategy, technology and operations, and from various levels of seniority (as summarized in Table 1) The interviews took place during two visits to New York between September to December 2003 and 2004, the latter being the period immediately after the implementation of the new business model. The interviews were semi-structured (interviewees were provided with a list of questions beforehand but were not constrained by them during the interviews) and examined how the decisions associated with the business model innovation were made. Most lasted between 60 and 90 minutes and, while they were not recorded for confidentiality reasons, the interviewer took extensive notes following the interviews which were then typed up immediately. The interviews covered the history and background of electronic trading, innovation in the industry, competition, the network of relationships between industry firms, and the managerial processes by which the firms adopted the new business model and managed the cannibalization process.

Table 1: Interviews Conducted

Function	Junior Management	Middle Management	Senior Management	Total
Fixed Income	4	5	6	15
E-commerce strategy	2	4	4	10
Technology	2	4	3	9
Operations	1	3	2	6
Total	9	16	15	40

Junior management is Associate and equivalent
Middle management is Vice President and equivalent
Senior management is Managing Director and equivalent

A qualitative case study approach is appropriate for answering research questions that call for rich process orientated analysis (Yin, 2003). However, there are possible disadvantages associated with this method, as retrospective bias and an 'official firm line' might exist. To overcome some of these shortcomings, we interviewed several executives from each department to cross-check the validity of their evidence, as well as asking many to provide contact details of other individuals within the firm who could either confirm their evidence or provide alternative perspectives. We further corroborated our interview data from archival and other secondary material - including press reports (e.g., Factiva), financial databases (e.g., Thomson Financial) and industry reports (e.g., Bond Markets Association reports, Financial Insights, broker reports, etc.), and used a combination of coding, grouping, triangulation and discussion to analyse our interview data. (Our approach to data analysis and refinement is detailed in Appendix 1B.) The next section outlines the industry and case context in more detail.

3.1. Electronic Trading Platform in the US Corporate Bond Market

The US bond market is the largest securities market in the world – at the end of 2000, over US$ 17trn-worth of bonds were outstanding, with over US$ 2trn being issued in that year alone. Government agencies and corporations raise funds by issuing securities directly in such capital markets (known as primary markets), which are normally bought by institutional investors such as asset management firms, pension funds and insurance companies, which then change their portfolios of securities by buying and selling them in the secondary market. The US corporate bond market is highly concentrated, with 12 dealer banks having a total market share of over 90% between them. The institutional investors' market is more fragmented, but again consists of some very large as well as some smaller investors.

Bond trading is traditionally carried out by dealer banks via a telephone-based business model. They act as intermediaries, matching buyers with sellers, and so are able to price these securities, generating their revenues from the spread between the purchase and sale prices. The dealer banks can make such charges because they match buyers and

sellers in a market where neither really knows who the others are. In addition, dealer banks often buy securities and hold them in inventory before selling them to other investors, during which time they assume the risk of price fluctuations, which requires economic risk capital. The telephone based trading business model is shown on the left in Figure 1.

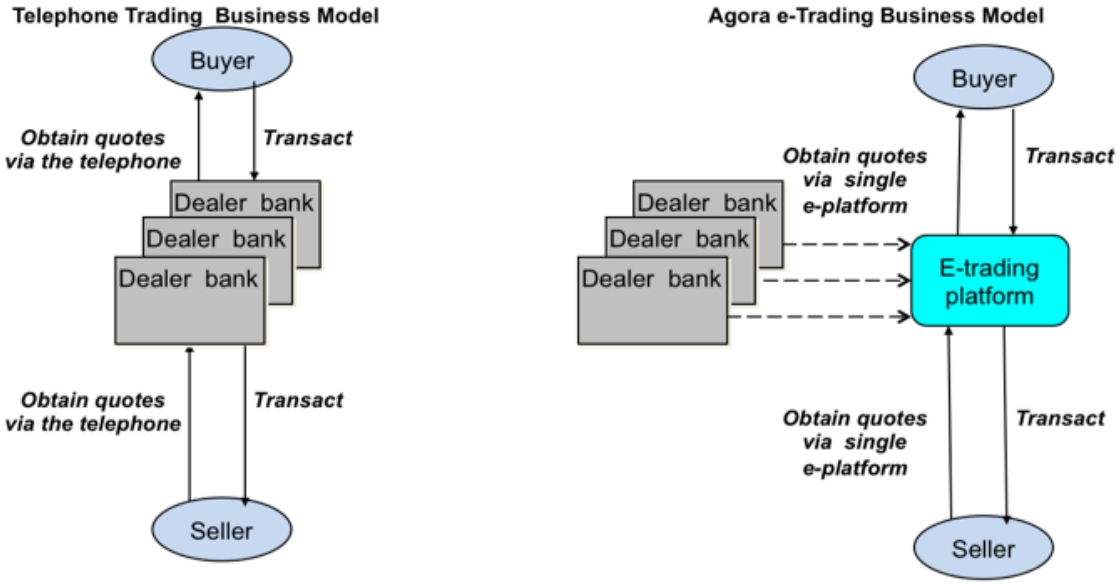

Figure 1: Telephone Trading and e-Trading Business Models

The link between primary and secondary markets reflects dealers' customary practice of allocating new issues in the primary new issue market to institutional investors, based on the volume of secondary market business a particular investor conducts with the dealer: the higher the volume of business, the greater proportion of such issues the dealer will allocate to that institutional investor. These new issue allocations in the primary market tend to favour institutional investors, as they are often priced marginally below the market price. In turn, the dealer banks generate revenues from the primary issue market by underwriting such securities, thus guaranteeing the issuer the funds they need to raise in return for a fee paid to the banks. Matching buyers and sellers by telephone is relatively slow and inefficient, as neither party can view the full liquidity of the markets (the total number of buy and sell orders for the various securities being traded) at any point in time.

Our case study bank was one of the dominant firms in the industry – and had the largest market share - identified that its secondary trading business was becoming increasingly less profitable, and thus needed transformation via business model innovation. It made the choice (via a process we describe in more detail below) to adopt a new and disruptive Internet-based business model - called Agora (name changed) - which was launched in April 1999. The Agora innovation (shown on the right in Figure 1) entailed a disruptive change to the bank's traditional business model, and enabled buyers and sellers to execute trades directly between themselves, so involving a major systemic change to the bank's customer value proposition, as well as in its value creation and value capture mechanisms. Specifically, it involved major changes to the product delivery (from a telephone to an e-trading platform), distribution (from a model in which the dealer bank acted as an intermediary to one in which buyers and sellers traded directly with each

other), price (from prices based on a spread to lower costs to buyers based on transaction fees) and promotion (from an active, dealer-led approach to a more passive approach in which buyers themselves gathered information via the electronic platform). Further, the cost of the bank's capital commitment was lower in this business model, as it no longer acted as a market-making intermediary by holding an inventory of securities. The bank's intention behind launching Agora was first to change the model for trading bonds on the secondary market, and subsequently to use the electronic trading platform to distribute primary issues: so the ultimate objective was to transform the business models of both the primary and secondary US corporate bond markets. This study focuses on the decisions taken at the bank which led to the adoption of the Agora business model innovation - although having taken its decision, the bank then invited two other dominant banks to join it in a consortium to launch the platform.

As part of its strategic decision making process, the bank also considered two other less disruptive business models. The first of these - Zamore - translated the telephone based business model to single multi-bank electronic platform (as illustrated on the right of Figure 2). During the decision-making process, the bank also developed a second, simpler model for consideration - OneTrade –which was a single dealer electronic system that would be specific to each bank, but which maintained the telephone based business approach of the traditional model (as illustrated on the left of Figure 2). In both the Zamore and OneTrade models dealer banks would continue to act as intermediaries and so generate revenues via the spread (i.e., difference between the buy/sell prices). Hence, compared to Agora, both these alternatives can be considered 'sustaining' (rather than disruptive) innovations, as they enhanced the existing business model. (We discuss them further in section 3.2.3.)

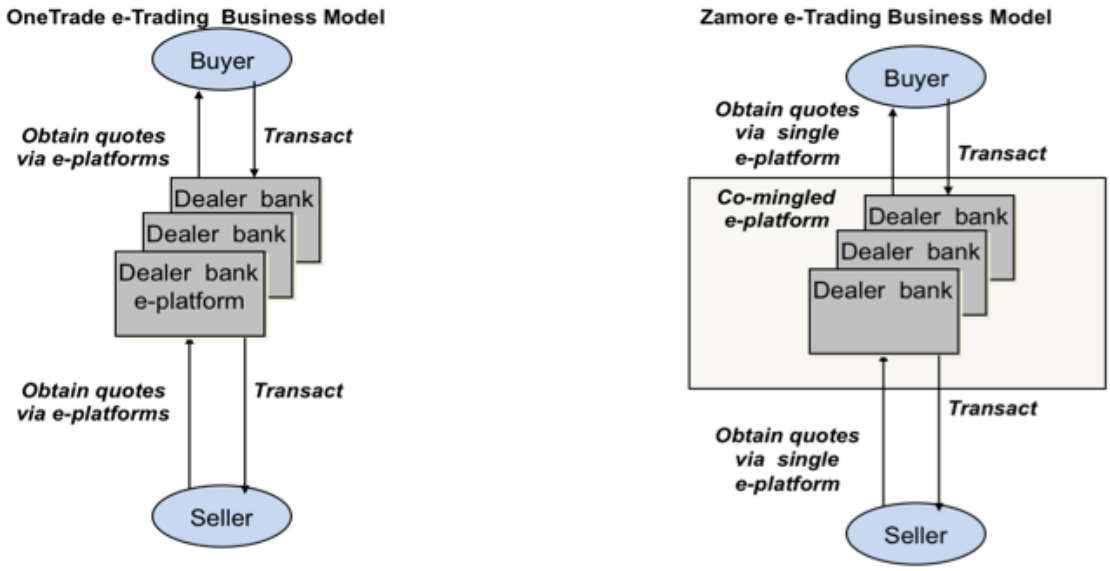

Figure 2: Alternative e-Trading Business Models

The next section analyses the empirical evidence from the case study. In light of the insights developed from the Section 2 literature review, we use the case study to extend our understanding of how to manage the process of cannibalization when a new disruptive business model is run in parallel with an existing business model.

3.2. Case Analysis

This research reveals how organizations manage the process of cannibalization in business model innovations, which progresses along the three phases of strategic decision making: intelligence, design and choice. We also identify the two major elements affecting the process: procedural rationality and politics. In this case, the strategic decision making phase lasted 6 months which was followed by a press release after which the implementation took another 10 months before the platform was fully launched (the timeline is shown in Figure 3). We also describe (in section 3.2.4) the running of the existing and new business models in parallel for a 12 month period.

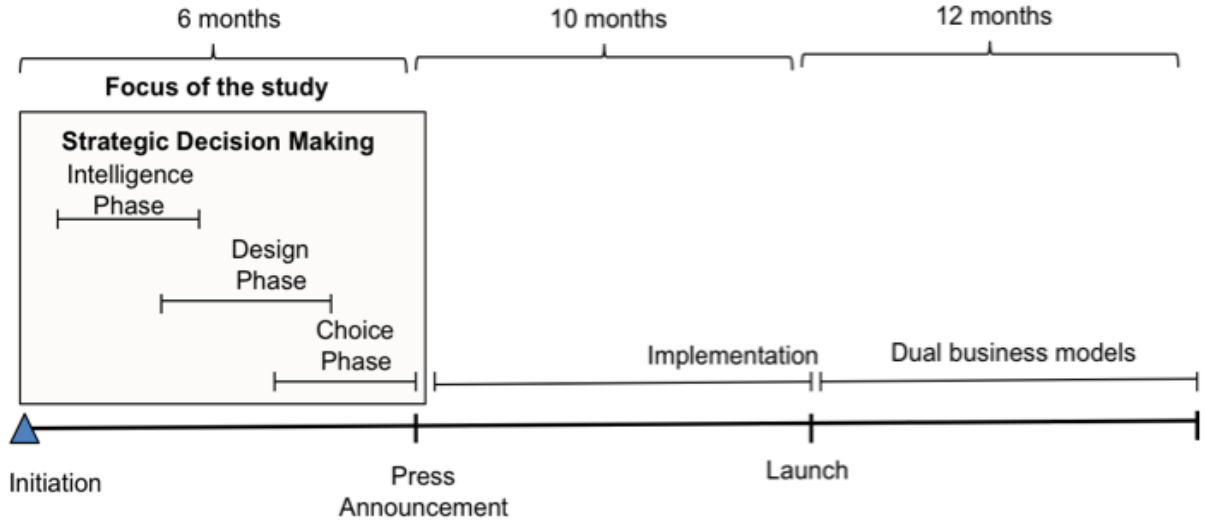

Figure 3: Timeline for the Disruptive Business Model Innovation

3.2.1 Intelligence Phase

In the intelligence phase of the decision making process, senior management identify problems associated with their current business in the firm's emerging trading environment, and/or opportunities that might flow from innovation. This section provides an analysis of this phase at our case-study bank from the dual perspectives outlined above – i.e., procedural rationality and politics.

Procedural Rationality. It is widely recognized that managing the decision-making process associated with business model innovation is not easy. As one senior executive said, *"Change is often not going to benefit all persons. Therefore, an organization can often be in denial for extraordinarily long periods and can be defensive."* To support the identification and design phases of decision-making, a firm needs to gather different perspectives about the problem or opportunities at hand from alternative sources, which the team-orientated nature of the case-study organization enabled it to do effectively. As a senior executive noted, *"We were particularly good at synthesizing information from customers and other stakeholders from all levels of the organization from the sales person in the weeds to the most senior management in order to have a discussion about where we see our business heading. This consultative process often creates 'structured conflict' which in turn enables the momentum for change."* The ability to see things from different perspectives also enabled

the use of analogies and metaphors to drive change, which was a necessary part of the strategic decision-making process in this case. A senior banker articulated this effectively: *"We often used analogies and metaphors from other sectors to drive business model change. For example, we observed several years back that the business model of equity trading changed dramatically when it went electronic with the Electronic Communications Networks (ECN). These ECNs were driven by organizations external to the industry and … we reasoned that if this could happen to equities it could easily happen to bond trading too. So we used this analogy to convince senior management that if anyone were to make a boat load of money as a result of business model innovation in bond trading it should either be us or we should have a share in it or influence it."*

Moreover, in order to encourage intra-organizational co-ordination, the bank consulted widely across the spectrum of organizational stakeholders - covering various areas from technology, back office (clearing and settlement), middle office (risk management and support) to the front office operations (trading activities) - which helped ensure they understood all aspects of the innovation and its impact on the bank. Senior managers also realized that the support staff, as well as revenue-generating staff would have to accept the innovation if the proposition was to be successfully implemented – as one said: *"No senior manager just told people what to do…We have a very consensus-building culture in making decisions where support staff such as operations, technology and legal are not treated as second-class citizens and, therefore, we believe that we make less mistakes."* This collective decision making ensured that the firm generally made the right decisions, as a senior executive confirmed: *"Team orientated decision making at the bank enables coordination in difficult parts across business, functional lines as well as geographically. This is particularly valued at the bank as the firm holds itself to very high standards"*.

Politics. The management team also felt that it was important that the relevant people were involved in the process to ensure the innovation was successfully implemented. One banker explained: *"We needed to get everyone bought into the process by making them feel that they were part of the success or failure. It is a collective culture that we embrace. In fact we do not have such thing as a star in our firm … everyone is a star"* – as an executive put it: *"Invariably different colleagues bring different perspectives to the innovation adoption issue based on their respective experiences. We needed to get them to cultivate the best of these experiences in helping formulate our innovation"*. In order to smooth the ebb and flow of sentiments, a member of the central e-commerce team was appointed as the business representative to the fixed income business division to act as an innovation 'champion'. The person's role was to maintain a clear channel of communication between the centre and the business division, to liaise, resolve issues and help negotiate a collective view of the innovation proposition. The innovation champion helped further strengthen the bank's consultative approach. One executive said, *"Our approach not only enabled a sense of ownership which drove the efficient adoption of the business model innovation. Ownership of the business model change was key to getting it implemented",* while another likened the bank to: *... a big Jewish family where everyone argues with everyone else and it is relatively chaotic but it kind of works. After what seems like eternal arguing and discussions when a decision is made to do something the implementation happens very quickly ….. because people feel that they have aired their views and there is buy-in to get it done"*.

In summary, the case illustrates how managing the intelligence phase of decision-making

calls for reframing tensions about the decision into a new perspective. From both rational and political perspectives, a collective decision-making system which can thoroughly air the conflicts that arise from the various frames of people holding different interests allows senior managers to defuse dichotomies and tensions by reframing them into new perspectives and so foster ownership. The literature on paradoxes and contradictions suggests *transcendence* as a way to manage conflicts (Seo *et al*., 2004), which is consistent with this kind of reframing. The case analysis shows how transcendence was achieved in this case by a collective system of decision making which accounted for both procedural rationality and politics in managing the decision-making process.

3.2.2 Design Phase

In the design phase of decision making, senior management develops alternative solutions to promote business model innovation. Again, we analyse this phase from the two perspectives of procedural rationality and politics.

Procedural Rationality. One of the principal challenges for the Agora business model innovation was to gain management buy-in for an innovation that could potentially cannibalize the conventional revenue stream the bank gained from acting as an intermediary in the secondary market, while the potential transformation of the primary issue market could also radically change the business model for the underwriting business. These innovations would necessitate major changes to the firm's skills and capabilities, and could be potentially threaten the jobs of current secondary trading desk staff as well as those involved in the primary business: so management needed to be precise about which aspects of the innovation to emphasize and which to downplay.

Although, in principle, the Agora business model had the potential to transform both the secondary and primary bond markets, the bank's senior management decided to frame its business model transformation to emphasize its effects on the secondary market first, and down-play the future changes it planned for its primary market operation. This was designed to reduce the tension associated with the process of cannibalization due to running Agora in parallel with the existing telephone based business in the secondary market. As one senior executive said: *"It is important for us to break up the selling of an innovation into chunks so that we do not have to get all potential future changes that are dependent on the current innovation brought in immediately"*. Another explained the reasoning behind this approach: *"Since there was so much uncertainty with new business models emerging, the senior management team wanted to buy itself an option to transform the primary market only if the secondary market business model is successfully transformed"*, while a senior executive noted that this approach enabled management to focus on the current decision before deciding on subsequent ones, *"Sometimes the investment was seen to be in direct conflict with existing businesses. However, we invested in both enterprise value and management time while managing the conflict which enabled us to buy the optionality"*.

Politics. The transformation of the primary market was intended to be undertaken once the new business model had been successfully launched in the secondary market, so senior management decided not to highlight this aspect of the innovation to the capital markets team at the dealer bank, so Agora could be launched with only minimal opposition from them. The business model innovation was framed as being only a

marginal change from the existing business in order to manage the decision-making process more systematically, highlighting the bank's ability to continue operating as an intermediary under the new business model (at least initially) - as a senior executive reported: *"It appears that allowing direct trading between customers on Agora disintermediates the banks. However, we positioned the Agora proposition as a relatively small change initially, as it was still possible for the banks to trade on the platform as a buyer or seller and effectively act as an intermediary….We often plant a small seed and water with resources to let it grow"*. This intelligent crafting of the innovation proposition meant that the stakeholders in the bank's existing business units would be less likely to oppose it. Senior management framed the innovation in incremental terms, initially highlighting the change to the secondary trading business and throwing the potential change to the primary issue market into the shadows, to try to ensure that the trading division bought into the innovation and supported Agora first, before raising the potential changes to the primary issue business. Agora's initiators tried to 'chunk' the change into a series of small moves rather than lumping together a lot of changes that could build up staff resistance to the whole innovation.

In summary, the case illustrates how managing the design phase of the decision-making process called for separation in time to keep different elements of the tension apart. From a rational perspective, this time separation offered the bank the opportunity to buy an option to decide on the change incrementally – and from a political perspective, incremental change was more palatable. The literature on paradoxes and contradictions suggests *separation* as a way to manage conflicts. Separation involves keeping discrete elements of the tension apart via a temporal processes (Seo *et al*., 2004). In this case, our analysis shows that separation was achieved by ensuring the change was implemented incrementally to account for both procedural rationality and politics in the management of the decision-making process.

3.2.3 Choice Phase

In the choice phase of decision-making, senior management choose between different alternatives. Our case analysis of the choice phase of the decision making at the bank details the alternatives the bank proposed.

Procedural Rationality. When the proposal for the radical Agora business model innovation was being considered, an alternative business model was also put up for consideration, which enabled compromises between opposing points of view. As discussed earlier, the alternative business model first proposed (Zamore) translated the telephone based business model over to a single electronic platform designed to serve all the consortia's banks (as illustrated on the right of Figure 2). Zamore was significantly different from the Agora business model - in the former the bank still acted as an intermediary while in the latter it did not, and the pricing and promotion methods under Zamore would have remained the same as in the telephone based trading business model. Thus, compared to Agora, the Zamore business model would have retained many of the firm's assets and organizational routines, and was seen as an innovation that sustained and enhanced the existing business model.

There was much discussion within the bank as to which of the two business models

should be adopted. Some heads of the Fixed Income business team were keen to adopt the Zamore business model as it was less disruptive and retained many of the bank's traditional capabilities, thus providing job security, at least in the short-term. However, compared to Agora, the Zamore business model did not provide the bank's customers with a significantly different value proposition, as they would still trade via the bank as an intermediary rather than directly between themselves. Other senior management team members thought the bank's business model needed a major change which would create competitive advantage in the long-run. This was partly driven by their awareness of the gradual erosion of margins of the dealer based trading model due to the emergence of Internet technology. Moreover, continuing to act as an intermediary meant the bank would require a capital commitment of about $2bn to buy and hold its inventory of securities. The Agora business model involved different economics to those of the existing business – it was estimated that direct trading between buyers and sellers would allow the bank to reduce its capital commitment by $1.5bn to just $0.5bn. The declining margins and large capital commitment involved meant that the existing business model was likely to become increasingly unattractive - and (as we discuss later), the increasing consolidation of the banking system meant that fewer banks would need to provide even greater amounts of capital. But the Agora business model was still unproven – it needed to be tested and experimented with, and its potentially superior economics demonstrated.

However, as one senior executive put it: *"Asking the heads of trading to vote for Agora was like asking turkeys to vote for Christmas. Why would they support a business model that could potentially cannibalize their core competencies, especially when they have big mortgages to pay off?"* Senior management reflected on this difference in views, but judged that the long-term survival and competitive advantage would probably lie in buying the option to adopt the Agora business model innovation. The management team came up with a plan that could pacify the opposition (which was staunch in some sections of the bank) and still gain approval for the Agora business model innovation – by introducing a third alternative that would be based on a single bank dealer system. A senior executive explained: *"We thought long and hard about what other alternatives to consider putting on the table to elucidate support keeping in mind the increasing need to experiment with Agora, the radical business model innovation"*. The alternative - called OneTrade - was similar to Zamore in being based on Internet technology, but this model was specific to the bank (and did not involve consortia partners): again it was a sustaining innovation with reference to the existing telephone based business model. However, both the Zamore and OneTrade alternatives left the bank facing large (and probably increasing) inventory costs. In its arguments in favour of Agora, management accentuated this distinction between the alternative business models, making the benefits of not committing significant amounts of capital as an intermediary in the Agora model more apparent.

Politics. The alternative OneTrade business model helped to pacify the heads of the Fixed income division, which in turn managed to reduce the opposition to Agora relative to Zamore. As one banker said, *"Our ability to provide an alternative that was less radical managed to get the executives who were opposed to the Agora business model to focus on the key differences. Adding an alternative that appeared to give the traders more control enabled the senior management team to gain support of the trading desk"*. To overcome this internal opposition, the bank needed to make the proposition attractive – as the member of the e-

commerce strategy team explained: *"The bank is essentially a collection of franchises with a binding philosophy. A guy on the corporate desk is first and foremost evaluated on the performance of the corporate desk. Therefore, sometimes it is necessary to put a 'stalking horse' option on the table to make an innovation palatable ….. Although the 'stalking horse' was a credible option for the bank to implement if chosen, [management] was felt unlikely that it [would] actually be chosen"*. Therefore, when the three proposals were put up for discussion, the Agora business model was chosen as the one the bank would adopt. As an executive said: *"Agora was not initially some managers' preferred solution as it would cannibalize the business. However, when we added another alternative Agora became relatively the most attractive"*.

In summary, the case illustrates how managing the choice phase of the decision-making process called for neutralization to resolve the tension. From a rational perspective, adding alternatives neutralized the tension by allowing minority interests to be seen to be taken into account – and from a political perspective, neutralization was achieved by the alternatives facilitating compromise between the parties. The literature on paradoxes and contradictions suggests *integration* as a way to manage conflicts, which principally involves neutralizing the tension so that opposing parties can compromise to resolve it (Seo *et al*., 2004). Our case analysis shows that adding alternatives provided the platform for opposing parties to compromise with each other, so accounting for both procedural rationality and politics in managing the decision-making process. Table 2 summarizes our key findings about the decision-making process.

Table 2: Business Model Innovation: Key Decision-making Elements

Strategic decision making phases	**Common pitfalls**	**Means of managing tension in decision-making**	**Procedural rationality**	**Politics**
Intelligence phase	Preference for a unilateral decision making system to gain speed in decision making	Transcendence – reframe a tension into a different perspective	Collective decision making takes into account more viewpoints which enables reframing and results in less mistakes	Collective decision making increases buy-in to help effective implementation
Design phase	Trying to implement all changes in one go	Separation – keeping apart the tension through a temporal process	Options based approach enables chunking as small changes	Positioning as small/incremental change is more palatable
Choice phase	Tendency to negotiate based only on the alternative under consideration	Integration – neutralization whereby the opposing parties compromise to resolve the tension	Adding alternatives enables interest of minorities to be considered	Adding alternatives reduces inter-personal conflict

3.2.4 The Alignment Dimension in Running Two Business Models in Parallel

In this section we provide a brief overview of how the bank ran its Agora and existing telephone based business models in parallel for the first 12 months. We discuss how the mechanisms that balanced procedural rationality and politics in the decision making process enabled paradoxes to be resolved, allowing the firm to manage changes to its well established and successful existing business model, as well as in its assets and organizational routines – and its market share - as a means of capturing the effects of the decision-making process. Our data analysis revealed how senior management managed this process by aligning the old and new business models to run them in parallel. In particular, the bank differentiated Agora's novel value proposition to the customer, but also ensured that it leveraged synergies from the assets and organizational routines of the existing business model, an approach which enabled change in both the cognitive and the economic aspects of the business model transformation. We examine how this dimension of alignment involved the three mechanisms - transcending, separating, and integrating - identified above in the decision making process.

Alignment via Transcendence. Reframing tensions into new perspectives can be achieved through transcendence. But how does transcendence help achieve alignment between old and new strategies and their associated business models? The analysis below sheds light on this question.

The bank recognised that demand for bonds as investments was growing – but at the same time, the industry was consolidating as a result of mergers and take-overs, so the resultant smaller number of bigger banks would each need to provide more capital to stay as dealers in the bonds market. This trend called for the bank to differentiate itself, and to offer a new customer value proposition. As one senior banker put it: *"The bond markets are prone to take a bath (make losses) every few years so holding inventory can result in a volatile income stream and potentially low return on invested capital. Therefore, we thought, why not let the investors, who are the natural owners of liquidity, trade among themselves which would lower [their] costs"*. As discussed earlier a new approach was needed to create value for customers, as an executive captured: *"We needed to transform credit risks rather than liquidity risks for our clients"*. However, the bank realized that investors would not want to take on each other's counterparty credit risks, so the management needed to provide credit guarantees for the market to work. Thus the new approach to value creation via credit risk transformation needed the expertise and skills the bank had developed under its existing business model (for example, in liquidity risk management) – so, as one banker said: *"Risk colleagues and the client relationship managers needed to work closely together to leverage the rich knowledge about the clients and the expertise on risk models existing within the bank"*.

The Agora business model initially enabled the migration of smaller transactions to the electronic platform as clients wanted to gain confidence that their credit risks were adequately covered – as one senior executives reported: "*The new electronic trading platform initially attracted the smaller sized transactions and gradually started attracting the transactions with a larger face value*". This migration of business from the telephone-based business model to the Agora electronic platform, allowed the bank to cut the number of telephone-based traders who predominantly handled smaller value trades – as one fixed

income division executive explained, *"The initial migration of business from telephone based trading to the electronic trading model enabled us to reduce headcount of traders and also to eliminate trading procedures and processes that were focused predominantly towards the smaller trades"*.

In summary, transcendence was achieved by demonstrating the change in the market structure for trading bonds, which led to a different customer value proposition, which thus required a new skill set in risk transformation. As the bank's existing skill sets were increasingly leveraged towards the new business model, the less relevant organizational routines were gradually reduced.

Alignment via Separation. Temporal separation can isolate the tensions involved in running conflicting business models side-by-side – but how does it help align old and new strategies and their associated business models? The analysis below sheds light on this question.

The bank urgently needed to persuade its many client relationship managers that the new business model was good for their clients. The new customer value proposition thus had to deliver as good or better value for those customers – and to do so, the bank needed to differentiate itself. One senior executive said: *"Enabling direct trading between the investors provides better value for our clients as it reduces their commission costs considerably and just as importantly they feel that they are not paying unnecessarily for the services of an intermediary. This applies to both the secondary trading market as well as the primary market"*. As discussed earlier, the bank wanted to transform both these markets – which meant it needed to leverage its existing skills in order to create synergies between its existing and new business models. The bank's core competence was creating value as a market making intermediary, so any synergy from this competence needed to be leveraged appropriately. One former trader captured an important aspect: *"The Agora business model allowed us to learn how to operate both as an intermediary and a facilitator of direct transactions between customers which enabled us to benefit from our strengths to provide a new type of service to our clients. We believed that what we learnt would then enable us to transform the primary issue market effectively sometime down the road"*. The skills of an intermediary were still needed in order to help build liquidity in the new Agora business model, so some traders were retrained to trade on the Agora system.

In summary, separation was achieved by focusing attention on change to the secondary trading business (as opposed to the primary issue business) so as to demonstrate the benefits of direct trading to the customer, which involved changing the bank's role as an intermediary. The existing skill set of acting as an intermediary were leveraged in support of the new business model, but its importance was gradually reduced.

Alignment via Integration. Integration principally involves neutralization that allows parties to resolve tension by compromising. But how does integration help achieve alignment between the old and new strategies and their associated business models? The analysis below sheds light on this question.

Although, conceptually, Agora was a major business model change, it was not immediately clear what the implications of the changes to the customer value proposition

and of the methods of value creation and value capture in bond trading were going to be. Senior management demanded clarity as to their different components, which meant the bank needed to differentiate itself more clearly. As one senior executive pointed out: *"Staff who were initially keen on the OneTrade, single dealer system were very supportive of the Agora model and went to great lengths to put their weight behind its implementation as they perceived the benefits more clearly"*. Moreover, the bank also needed to leverage its existing competencies in order to create synergies between the old and new business models. Consideration of an alternative which was favoured by some stakeholders also helped identify the synergies between the business models better in terms of the core elements of the value proposition, value creation and value capture, as opposition to the change came from the executives who had most to lose from the new business model. A senior executive commented: *"The effective implementation of Agora was also helped by leveraging the key areas where the essential resources of the existing business could be fully utilized in the new business....I think the support from staff was forthcoming during Agora's implementation because all parties appreciated the contrasts and synergies when alternatives were put forward for consideration"*.

This clearer articulation of the differences between the two business models brought into light the implications for how value would be captured in the new business model relative to the existing one. In particular, the migration of business from the telephone based trading system to the Agora electronic model resulted in the reduction in the former's market share, so that income from 'spreads' reduced as the bank no longer acted as an intermediary in the new business model. On the other hand, the Agora business model enabled a new source of income via transaction fees, as one senior executive noted: '*Initially the reduction income from the lost market share in our traditional telephone business was not compensated by the income generated by transaction fees as the margin was lower in the latter. However, when the new electronic-trading business model started attracting business from competitors and hence increased its market share, the income from transactions fees began to look healthier*.'

In summary, integration was achieved by enabling comparisons made across the options being considered more visible to management, which led to a more precise articulation of the synergies as well as areas as well as differences where resources could be reduced. The case illustrates the need to balance the tensions arising from the potential cannibalization of the existing business model by both differentiating the new proposition and by leveraging the synergies from the existing business. The case analysis shows that mechanisms such as transcendence, separation and integration facilitate differentiation and the leveraging of synergies that in turn enable the management of the cannibalization process and the parallel running of different business models. We call such management of conflict the *differentiation-synergy* dimension. Table 3 summarizes the key alignment issues and the key sources of cannibalization.

Table 3: Parallel Business Models: Alignment Issues and Sources of Cannibalization

Business Model Alignment mechanisms	Approach to achieve alignment	Differentiation in value proposition, value creation and value capture	Source of reduction in value of existing assets and organizational routines	Synergies in value proposition, value creation & value capture
Alignment via transcendence	Differentiate the reframed perspective with the existing proposition as well as find synergies with it	Value created by transforming credit risk and not liquidity risk as the customer is the natural owner of liquidity	Reduction in knowledge and assets (such as front office trading equipment e.g., telephone connections and price dissemination terminals) due to less number of traders especially for smaller trades.	Knowledge of client and risk models provide good understanding of managing counterparty credit risk
Alignment via separation	Differentiate the propositions between the new and old business models over time in order to also enable synergies between them to be leveraged	Direct trading between customers reduces costs compared to trading via an intermediary dealer	Removal of routines related to trading as an intermediary via the telephone.	Both direct and intermediary based trading to (a) enable liquidity to build up on the Agora business model and (b) enable learning to transform primary issue business in the future
Alignment via integration	Differentiate the proposition by using the added alternative as a means to do so while highlighting synergies with the existing proposition	Added alternative enables better articulation of the differences between the business models	Reduction in knowledge and assets related to spread based revenues generation for the telephone based-trading model	Added alternative enables better identification of the synergies between the business models

Finally, we consider the counterfactual possibility of how the bank's existing business model might have developed if the Agora business model had not been adopted. The bank's top management decided to adopt the Agora business model in response to declining returns to its secondary trading activities, and to new opportunities in the bond markets associated with advances in Internet technologies. But it could have chosen either the Zamore or OneTrade business models, which would have been less disruptive and more sustaining of its existing telephone based business model. However, although these would have cannibalized the telephone business model less, the business would

eventually have been less healthy financially, as operating as an intermediary under either of these options would have required greater capital commitment in a market context where the margins from spreads were decreasing.

4. Discussion

This paper explores business model innovation, in particular how the strategic decision-making process can be managed in the context of business model cannibalization. As noted at the outset, business model innovation is becoming increasingly important as a priority for executives and for organizational performance, but the process of managing the cannibalization which results from business model innovation – which creates conflicts and paradoxes for management - has been rarely discussed in the literature. The study makes two contributions to the literature. First, we shed light on the conditions that might be conducive for change by balancing procedural rationality and politics in strategic decision making to help manage the process of cannibalization when new and existing business models need to be run in parallel. In doing so, we show how a firm can cognitively and economically integrate two very differently configured models that serve the same customers simultaneously. Second, the study contributes to the literature on decision making generally, and more specifically to the management of the tensions between rationality and politics, by showing the mechanisms that act as levers of duality in situations where stability and change are compatible. We show that these mechanisms help ensure differentiation of the new business model, while simultaneously enabling the leveraging of synergies with the existing model, which facilitates the management of the cannibalization process to allow the two models to run in parallel.

Although the literature has shown procedural rationality and politics to be complementary, it fails to show how that complementarity comes about – and in particular, to capture how the mechanism of combining procedural rationality and politics helps to manage conflicts in order to achieve desired outcomes. This issue is particularly vexing in the case of the decision to adopt a business model innovation because of the need to manage the process of cannibalization due to conflicts arising between the existing and new business models. Our analysis uses the case study to show that management of such conflicts requires three key mechanisms - transcendence, separation and integration - across the three phases of the strategic decision making process, as well as how these mechanisms acts as levers for duality where stability and change are compatible and hence, facilitates the management of cannibalization. In the following section, we consider these three key mechanisms in more depth, and link them to the dimensions of the strategic decision making process and of managing the cannibalization process, and then draw out the study's major theoretical implications.

4.1 Key Mechanisms of the Strategic Decision Making Process

Transcendence. First, in the intelligence phase of decision making, a reframing of the business model is required to manage the subsequent process of cannibalization. A key attribute of business model innovation is the systemic nature of the change, which requires inter-organizational coordination, and thus calls for a collective decision making process which can enable contradictions to be identified as issues for senior management consideration. Moreover, the different viewpoints expressed during such collective

processes can enable the use of metaphors and analogies to help reframe the innovation under consideration. We term the reframing of the business model using multiple viewpoints and the consideration of alternatives as 'transcendence': it includes not only the ability to have foresight and vision for the business but also the awareness of how to link past, present and future, which our study shows can facilitate the integration of viewpoints across different levels of seniority as well as across organizational functional lines.

Separation. Second, the design phase of decision making calls for the temporal separation of the tensions inherent in the cannibalization process, which is important because a key feature of business model innovation is that it is likely to affect the innovation opportunities of related businesses. Such temporal separation can be achieved by dividing the innovation into small changes, allowing the firm to 'buy the option' to innovate in a related business model in the future. The costs and benefits of an innovation need to be presented appropriately for the desired outcomes, which studies have shown can be significantly affected by how a particular story is told. For managers to agree to adopt a disruptive innovation that can potentially cannibalize an existing business model, the story needs framing in a positive light, so that stakeholders are encouraged to embrace the change: dividing the innovation into small changes – allowing some aspects to be highlighting and others de-emphasized - is likely to lead to quicker buy-in.

Integration. Third, in the choice phase, integration is key to achieving neutralization whereby parties compromise to resolve the tension from the process of cannibalization. Lack of consensus is often a key feature in business decisions which entail systemic change, but - in itself - should not act as a barrier to wide consultation. In fact, our study shows that lack of consensus can act as a positive boost towards a particular business model innovation, as management can facilitate the choice of which model to adopt by increasing the set of alternatives for consideration to take into account the preferences of managers who are opposed to existing options. Adding further alternatives often pacifies dissenters and reduces inter-personal conflicts, as the choice is then seen as being less forced.

4.2. Dimensions of the Cannibalization and Managing Tensions

We have also highlighted a key strategic dimension in the alignment of parallel business models which we call 'differentiation-synergy'. We argue that this dimension is key to managing the tensions that arise from the cannibalization of an existing business model by allowing managers to balance between differentiating the new business model and leveraging the synergies between it and the old model. Business model innovation can lead to the lack of alignment between the existing strategy and the new business model: firms often try to deliver a new customer value proposition by only altering the existing business model marginally, an approach which can lead to misalignment between the two value propositions and their value creation and capture mechanisms, destroying the economics of the business and resulting in low performance. Managers can avoid such misalignment by, on the one hand, differentiating the new business model's value proposition from that of the existing model and, on the other, leveraging the synergies in assets and organizational routines between the two, and how the transcendence, separation and integration mechanisms can help both these efforts

Our empirical analysis is based on a single case where the two business models were run in parallel by the same unit to serve the same customer set. However, in other contexts the markets served may be very different, and the nature of the conflicts very severe, which might call for strategies in which the two business models are run as completely separate businesses. Such situations might call for modifications and enhancements to our proposed approach in order to manage the cannibalization process which we leave for future work.

4.3. Wider Theoretical Implications

We believe that our findings reveal a number of theoretical implications that build on and clarify prior research.

Back and forth iterations. We add to the literature on change management by showing how business model innovation is neither just a transformational shift, nor a set of incremental changes, but the result of a subtle series of `back and forth' iterations between the existing and new business models. A comprehensive framework of such a non-linear approach can be embedded in senior management's strategic processes promises to be a rich avenue for further development.

Goals and the means to reach them. Recent studies have shown that paying attention to both rationality and politics enables tensions to be managed to attain clarity in terms of both the goals to be achieved and how to achieving them (Royer and Langley, 2007). This is particularly important in the context of business model innovation where, due both to the complexity of the change and the potential for cannibalization, senior management may need to continuously and simultaneously redefine their business model innovation goals and the means of achieving them as new information becomes available from experimentation. Our study provides the building blocks to further investigate the unfolding these processes.

Tensions. Our findings show that a key consideration in business model innovation is the balancing of tensions, particularly between the new and existing business models, which is especially important in terms of the *relationship* between the new model (which is, to some extent the product of cannibalization) and the existing one. Aligning the requirements to ensure differentiation of the new business model while simultaneously leveraging synergies from the existing business model is an important dimension of managing business model change, but one which has received little attention. By detailing how differentiation and synergy action approaches can be combined, we contribute to the small but growing management literature which reframes opposing forces (which seem like dualism) as dualities, and sees them as complementary, thus contributing to the management of business model cannibalization (Lewis, 2000; Mintzberg and Westley, 1992).

5. Conclusion

Interest in business model innovation as a way of building competitive advantage has been increasing, but the business model and organizational change literatures have not addressed how to manage the process of cannibalization entailed in the transition from

one business model to another, especially when the two are run in parallel and serve the same set of clients. In particular, how management should take strategic decisions to manage business model innovation has received little attention in the literature.

While conclusions drawn from one case study inevitably require some caveats, our research highlights how senior management should be cognizant of the mechanisms to manage conflicts in the strategic decision making process so as to be able to run new and existing business models in parallel. In doing so, we provide insights into how organizations can make strategic decisions to adopt disruptive business models and can manage the process of cannibalizing existing models. First, we explicate the rationality-politics elements across the phases of the strategic decision making process, and show how they help manage that process. Second, we show the mechanisms that help the rationality-politics elements act as levers for duality, where stability and change are seen as compatible, to enable business models to run in parallel and the management of cannibalization. This framework may be useful as a tool to explore more generally how organizations can treat opposing forces as compatible dualities in order to enable business model innovation.

Two possible extensions of this study are to investigate first whether our results hold in other industry contexts, and second how the absence of one mechanism might affect the effectiveness of the others. Acknowledging these limitations, we argue that our study provides a useful framework for understanding how firms can innovate their business models while managing the process of cannibalization effectively.

Appendix 1 - Methods: Data collection

(A) Sampling

In choosing our interviewees, we followed the method of 'purposeful sampling'. We initially contacted informants we believed would be the most knowledgeable to inform us about our research question about the strategic decision making process behind the adoption of a radical business model innovation, and then asked each interviewee for recommendations as to who could best provide further detail on our question of interest. We followed this approach to create an ongoing sample of interviewees, focusing our data collection on emerging themes until further interviews yielded no substantial new information. To maintain consistency, one author conducted all the interviews, and managed our data collection meticulously to ensure its trustworthiness, writing up his notes within 24 hours to ensure reliability.

(B) Data Analysis

The data analysis for the case study consisted of three stages:

(i) The case study data was coded based on the theoretical classification developed around strategic decision as our initial analysis framework;

(ii) Our initial concepts were refined and iterated between emerging categories and the literature on change management to continuously revise our analysis framework;

(iii) We confirmed and refined the mapping of evidence to the revised framework by discussion between the interviewing author, the other author and another research associate.

We started the data analysis using open coding to identify initial concepts in the data and then grouping them into categories. We then examined and searched for relationships between and across these categories to gather them into higher order themes, and then grouped similar themes into several overarching dimensions to help develop some of the key constructs for our framework on strategic decision making. Where possible, secondary source material was also used to triangulate our data to increase its reliability. This was a recursive rather than a linear process, and was repeated until no new relationships were revealed. These themes formed our first order concepts. The second analysis stage involved refining our first order concepts by iterating between emerging categories and the change management and strategic decision making literatures. Attempts to map the evidence pointed to the paradox literature within change management as a basis for refining our framework to map our second order concepts, which resulted in the identification of the transcendence, separation and integration concepts, as well as the procedural rationality and politics dimensions from the strategic decision making literature. In the third analysis stage, we used peer debriefing, which involved the field researcher discussing with the other author (not involved directly in the field work) to get an independent outside view of the themes, which also enabled us to consider and eliminate alternative explanations.

References

Alper, S., Tjosvold, D., Law, K.S., 2000. Conflict management, efficacy and performance in organizational teams. Personnel Psychology 53 (3), 625-642.

Baden-Fuller, C., Morgan, M.S., 2010. Business models as models. Long Range Planning 43 (2-3), 156-171.

Birkinshaw, J.M. , Mol, M., 2006. How management innovation happens. Sloan Management Review 47(4), 81-88.

Brown, S., Eisenhardt, K., 1999. Patching: Restitching business portfolios in dynamic markets. Harvard Business Review May-June, 73-82.

Casadesus-Masanell, R., Ricart, J.E., 2010. From strategy to business models and onto tactics. Long Range Planning 43(2-3), 195-215.

Casadesus-Masanell, R., Tarzijan, J., 2012. When one business model isn't enough. Harvard Business Review. January-February, 132-137.

Chandy, R., Prabhu, J., Antia, K. 2003. What will the future bring? Dominance, technology expectations and radical innovation. Journal of Marketing 67 (3) 1-18.

Chandy, R., Tellis, G., 1998. Organizing for radical product innovation: The overlooked role of the willingness to cannibalize. Journal of Marketing Research 35, 474-487.

Chesbrough, H., 2010. Business model operation: Opportunities and barriers, Long Range Planning 43(2-3), 354-363.

Daneels, E., 2004. Disruptive technology reconsidered: A critique and research agenda, Journal of Product Innovation Management 21, 246-258.

Dean, J.W., Sharfman, M.P. 1993. Procedural rationality in the strategic decision-making process. Journal of Management Studies 30 (4), 587-610.

Demil, B., Lecocq, X., 2010. Business model evolution: In search of dynamic consistency. Long Range Planning 43 (2-3), 227-246.

Desyllas, P., Sako, M. 2013. Profiting from business model innovation: Evidence from Pay-As-You-Drive auto industry. Research Policy 42, 101-116.

Dougherty, D., 2001. Reimaging the differentiation and integration of work for sustained product innovation. Organization Science 12(5), 612-631.

Doz, Y.L., Kosonen, M., 2010. Embedding strategic agility: A leadership agenda for accelerating business model renewal, Long Range Planning 43(2-3), 370-382.

Dunford, R., Palmer, I., Benveniste, J., 2010. Business model replication for early and rapid internalization. Long Range Planning 43, 655-674.

Elbanna, S., Child, J., 2007. The Influence of decision, environmental and firm

characteristics on the rationality of strategic decision-making. Journal of Management Studies 44 (4), 561-591.

Gebert, D., Boerner, S., Kearney, E., 2010. Fostering team innovation: Why is it important to combine opposing action strategies? Organization Science 21(3), 593-608.

GE Global Innovation Barometer, 2013. Global Research and Findings Insight.

Henderson, R. 1993. Underinvestment and incompetence as responses to radical innovation: Evidence from Photolithographic Alignment Equipment Industry. Rand Journal of Economics, 24, 248-170.

Henderson, R., Clark, K.B., 1990. Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms, Administrative Science Quarterly, 35 (January), 9-30.

IBM, 2008. Global CEO study, The Enterprise of the Future, IBM Global Business Services.

Johnson, W., Christensen, C., Kagermann, H. 2008. Reinventing your business model. Harvard Business Review 86 (12), 50-59.

Levinthal, D., March, J.G. 1993. The myopia of learning. Strategic Management Journal 93(14), 95-112.

Lewis, M., 2000. Exploring paradox: Towards a more comprehensive guide. Academy of Management Review 25(4) 760-776.

March, J.G., 1991. Exploration and exploitation in organizational learning, Organization Science, 2(1) 71-87.

Magretta., J., 2002. Why business models matter? Harvard Business Review May, 86-92.

Markides, C., 2006. Disruptive innovation; In need of a better theory? Journal of Product Innovation Management, 23, 19-25.

Markides, C., Oyon, D., 2010. What to do against disruptive business models? When and how to play two games at once. Sloan Management Review 51 (4), 25-32.

McGrath, R.G. 2010. Business models: A discovery driven approach. Long Range Planning 43, (2-3) 247-261.

Mintzberg, H., Raisinghani, D., Theoret, A., 1976. The structure of "unstructured" decision processes. Administrative Science Quarterly 21 (2), 246-275.

Mintzberg, H., Westley, F., 1992. Cycles of organizational change. Strategic Management Journal 13 39-59.

Moshe, F. 2010. Beyond dualism: Stability and change as duality. Academy of Management Review 35(2), 202-225.

Nelson, R., Winter, S., 1982. An Evolutionary Theory of Economic Change. Cambridge, MA:

Belknap Press.

Pettigrew, A., 1973. The politics of organization decision making. London, Tavistock.

Quinn, R.E., Cameron, K.S., 1988. Paradox and transformation: Towards a theory of change in organization and management. Ballinger Publishing Co. Cambridge MA.

Raisch, S., Birkinshaw, J., 2008. Organizational ambidexterity: antecedents, outcomes and moderators. Journal of Management 34, 375.

Royer, I., Langley, A., 2007. Linking rationality, politics, and routines in organizational decision making. In the Oxford Handbook of Organizational Decision Making, Gerard P Hodgkinson et William H Starbuck (Eds)

Seo, M.G., Putnam, L.L., J.M. Bartunek., 2004. Dualities and tensions of planned organizational change in Handbook of Organizational Change and Innovation, Poole, eds. M.S.and A.H. Van de Ven, Oxford University Press, New York.

Smith, W.K., Binns, A., Tushman, M. L., 2010. Complex business models: managing strategic paradoxes simultaneously. Long Range Planning 43 (2-3), 448-461.

Sosna, M., Trevinyo-Rodriguez, R.N., Velamuri, S.M., 2010. Business model innovation through trial and error learning. Long Range Planning 43(2-3), 383-407.

Srinivasan, S., Dekimpe, M.G., 2010. Estimating cannibalization rates for pioneering innovations. Marketing Science 29(6), 1024-1039.

Teece, D., 2010. Business models, business strategy and innovation. Long Range Planning 43 (2-3), 172-194.

The Wall Street Journal, 2008. Car-Rental companies learn to share—Enterprise Rent-A-Car starts Zipcar-like offering; Hertz weighs its own program, February 7.

Tripsas, M., Gavetti, G., 2000. Capabilities, cognition and inertia: Evidence from digital imaging. Strategic Management Journal 21, 1147-1161.

Van de Ven, S., Poole, M.S., 1995. Explaining development and change in organizations, Academy of Management Review 20 (3), 510-540.

Van de Ven, S., Poole, M.S., 2011. Breakdowns in implementing models of organizational change, Academy of Management Perspectives 25 (3), 58-74.

Yin, R.K., 2003. Case study research: design and methods. Thousand Oaks, California.

Zott, C., Amit. R., 2010. Business model design: An activity system perspective. Long Range Planning 43, (2-3) 216-226.