Università degli studi di Udine

Cultivating business model agility through focused capabilities: A multiple case study

(Article begins on next page)

16 January 2025

CULTIVATING BUSINESS MODEL AGILITY THROUGH FOCUSED CAPABILITIES: A MULTIPLE CASE STUDY

Cinzia Battistella, Alberto F. De Toni, Giovanni De Zan, Elena Pessot

Abstract

Focusing on strategic agility and business model concepts, the present paper proposes a framework for recognising common strategies, activities and paths to business model reconfiguration developed through the activation of a set of micro-capabilities. We argue that successful companies nurture specific capabilities in order to act proactively and to reach strategic agility and direct these to specific key elements of the business model (building blocks), thus enabling the renewing of the entire business model.

The methodology is a multiple case study analysis of four successful companies in different industries. We identified three main classes of capabilities for strategic agility and we explored which ones are valid and how they can be activated in a company's business model through an in-depth within-case and cross-case analysis.

Results show that strategy innovation capabilities could be focused on motto and value offer, research and development and social responsibility building blocks; resource capitalisation capabilities on education and knowledge, management and human resource building blocks, and networking capabilities on branding and retail and network building blocks.

From a literature point of view, we contributed to the ongoing debate about business model change and critical capabilities, by investigating the "black box" of business models. From the practical point of view, the linkage between capabilities and the building blocks of the business model is important in order to capitalise on resources and time, focusing on specific actions and specific areas of the business model.

Keywords

Strategic agility, capabilities, business model, building blocks, case studies

1. Introduction

Competing in fast-changing environments requires being agile in perceiving and developing opportunities to create innovations (Afuah and Tucci, 2003), increasing the response to disruptions (Doz and Kosonen, 2010) and enhancing resilience against external threats (Demil and Lecocq, 2010). This is reflected in the condition that business models need to change over time if firms want to stay competitive in a complex world and achieve sustained value creation (Doz and Kosonen, 2010; Teece, 2010). Thus, the ability to reconfigure business models is essential for company survival and success, not only to take advantage of new value creating opportunities, but also as an approach to reducing the risk of inertia towards change which often occurs when a company has been successful with the same strategy over time (Wirtz *et al.*, 2010; Achtenhagen *et al.*, 2013; Basile and Faraci, 2015). While recent business model literature acknowledges this need for business model change, there is little conceptualisation and empirical evidence on what is needed or how to achieve this change (Teece, 2010; McGrath and MacMillan, 2009), i.e. what "actions" to take. In this paper, we follow:

(1) the call of Zott and Amit (2010) for investigation within the "black box" of business models by better understanding the micro-mechanisms for business model design and renewal;

(2) the future research directions of Achtenhagen *et al.* (2013) who ask for research on patterns of strategising actions, critical capabilities and activities for value creation that drive the development and change of business models;

(3) the recent calls of Schneider and Spieth (2013) and Spieth *et al.* (2014) for new insights into enabling conditions for business model innovation and in particular for deeper examinations of strategic agility and specific competitive capabilities that enable a firm to conduct business model innovation.

In particular, as regards capabilities, in the organisational literature, scholars agree that companies need to be proactive in order to sense, shape and capitalise on opportunities (Teece, 2007) and not lose value. To achieve this agility, firms have to effectively identify and arrange their bundle of

capabilities and avoid falling into the cognitive failure described as "*capability myopia*" (Johnston, 2009), that is, not recognising the need for developing capabilities and resources to create new value propositions. In this paper, we claim that companies need to address specific capabilities to reach strategic agility and reconfigure specific areas of their business model (the building blocks). Therefore, in order to capitalise on resources and time, strategic managers should focus specific actions on specific building blocks of the business model.

The methodology we followed is a literature review on strategic capabilities and business models and a multiple longitudinal case study of four companies. Therefore, the article is structured as follows: Section 2 concerns the theoretical background of capabilities and business model components, proposing the frameworks for analysis, followed by a discussion of the gap identified in the literature. Section 3 illustrates the choice of the case studies and the methodology of multiple case studies. Section 4 is the within-case analysis of the four cases and Section 5 is the cross-case analysis with discussion. Finally, Section 6 draws some conclusions.

2. Theoretical background

2.1 Business model components

A **business model** shows how strategy is concretely implemented (Casadesus-Masanell and Ricart, 2010). It describes the rationale of how an organisation creates, delivers and captures value – economic, social, or other (Magretta, 2002; Tikkanen *et al.*, 2005; Davenport *et al.*, 2006).

Many scholars agree that business models are composed of different elements merged together (Magretta, 2002; Morris *et al.*, 2005; Zott *et al.*, 2011). Wirtz *et al.* (2015) argue that "it becomes evident that a basic component-oriented view is present in many understandings" of the term business model. Firms need indeed to define, according to their business model's configuration approach, the main components which are able to generate value (Basile and Faraci, 2015). The literature has tried to build and develop a standard framework for characterising a business model and its core dimensions (Voelpel *et al.*, 2005). For example, Osterwalder *et al.* (2005) define and build a "business model ontology" that describes, in a structured way, elements and sub-elements of the business

model, called ***building blocks***. Starting from the different definitions and perspectives of the term "business model" in the literature, many other corresponding frameworks describing building blocks have been developed, for example the "activity system maps" by Porter (1996) and the "elements of a successful business model" (customer value proposition, profit formula, key resources and key processes) by Johnson *et al*. (2008). Shafer *et al*. (2005) carried out a review of business model components in established publications up to 2003, classifying them into four major categories (i.e. strategic choices, creating value, capturing value, value network) by means of an affinity diagram. Later, Wirtz *et al*. (2015) identified in their comprehensive literature review the most relevant business model components (i.e. where there was consensus among authors as to their importance) and then integrated them into a new business model consisting of strategic, customer and market and value creation components.

Concerning business model components, Siggelkow (2002) notes that "the advantage of an ex-ante specification of core elements is that changes in these elements can be measured consistently across firms. The disadvantage of this approach is that it assumes that the same elements are equally central or core in all the firms".

Moreover, Winter and Szulanski (2001) argue that: "The formula or business model, far from being a quantum of information that is revealed in a flash, is typically a complex set of interdependent routines that is discovered, adjusted and fine-tuned by doing". In this regard, Demil and Lecocq (2010) and Cavalcante (2014) suggest that it is important to look at the dynamics created by the interactions between building blocks, beyond just the coherence between them, in the process of business model change. In fact, the resources accumulated over an organisation's history continually react with each other and with other constituent parts of the firm's structure in unique combinations to determine the firm's key differential competences (Magretta, 2002).

2.2 Business model reconfiguration

"One secret to maintaining a thriving business is recognising when it needs a fundamental change" (Johnson *et al*., 2008) and developing alternative scenarios of radical and incremental changes

(Cavalcante, 2014). Firms also benefit from discovering new or applying different business models in order to remain innovative (Linder and Cantrell, 2000; Giesen *et al*., 2007; Markides, 2008; Carayannis *et al*., 2014), in other words, in doing a ***business model innovation*** or a ***business model reconfiguration***. Companies are required to continually develop and strengthen their ability and to modify their business model effectively and in a timely manner when an opportunity or threat arises (DaSilva and Trkman, 2014).

Along this line, the literature on business model innovation/reconfiguration has focused on two main areas: the positive and negative factors involved in changing the business model and the enablers or facilitators of this kind of innovation which must be taken into consideration.

Reasons and barriers for business model reconfiguration. Business model reconfiguration can be due to industry, revenue or enterprise model innovation (Giesen *et al*., 2007). In a positive perspective, Johnson *et al.* (2008) suggested ways to determine if the company should alter its business model, to take opportunities or satisfy a need, by determining the reasons for success of the present business model, watching for signals of change needs and deciding if the renewal is worth the effort. Taking opportunities means, for example, addressing the needs of large groups who find existing solutions too expensive or complicated or capitalising on new technology or leveraging existing technology in new markets or bringing a job-to-be-done focus where it does not exist; all of this while satisfying a need means, for example, fending off low-end disruptors or responding to shifts in competition (Demil and Lecocq, 2010). In a negative perspective, Bouchikhi and Kimberly (2003) and Chesbrough (2010) investigated the barriers to business model innovation in existing firms. The first barrier is the underlying configuration of assets and processes, since this kind of innovation requires changes in business management and consequently more costs, time and risks. The second barrier is cognitive: a challenge in business model innovation means overcoming the dominant logic (Chesbrough and Rosenbloom, 2002), because it acts as a filter preventing managers from seeing opportunities.

Enablers and facilitators of business model reconfiguration. Calia *et al.* (2007) show both how technological innovation can result in changes in the company's operational and commercial

activities, influencing business model reconfiguration and how networks can provide the resources necessary for business model reconfiguration. Smith *et al.* (2010) underlined the importance of leadership in dynamic decision making, commitment building and learning for managing complex business model renewal. Santos *et al.* (2009) emphasised the behavioural aspects involved in business model innovation arguing that formal structural aspects are connected to the informal relational dynamics. Along this line, Doz and Kosonen (2010) proposed that companies should have a strategic agility capability.

Moreover, the success of a business model is naturally dependent on numerous factors such as market conditions, strategic synergies (or conflicts), competencies and assets, financial arrangements (pricing policy, revenue-sharing schemes), robust technological infrastructure, effective governance mechanisms and organisational design (Pateli and Giaglis, 2004; Kun-Huang, 2013; Carayannis *et al.*, 2014; Cavalcante, 2014; Fleury and Fleury, 2014).

2.3 Capabilities for dealing with changing times

The strategic reconfiguration of business models is associated with many difficulties which need to be overcome, such as: (1) identifying change needs, (2) overcoming inertia, (3) accepting new structures and choosing adequate approaches to renovation (Wirtz *et al.*, 2010). Being unable to adapt the firm's business model successfully and efficiently in the face of unexpected and significant environmental breakthroughs can cause a decrease in the market share or even business failure (Ganguly *et al.*, 2009; Wirtz *et al.*, 2010; Kotter, 2012). Thus, today, possessing a distinct set of capabilities for responding to changes in the business environment (Dosi *et al.*, 2000; Gebauer *et al.*, 2012) and for delivering strategic agility (Morgan and Page, 2008) is a necessary requisite for a firm's survival.

Strategic Agility is defined as "the ability to dynamically revise or reinvent the company and its strategy" (Fartash *et al.*, 2012), by adapting to unforeseen changes in the business environment, moving quickly and also, in an easy fashion (Ganguly *et al.*, 2009). Agility can be described as a dynamic process of anticipating or adjusting to trends and customer needs without diverging from the

company vision (Fartash *et al.*, 2012); all this plus the final aim of remaining competitive in a rapidly changing environment (Dove, 1999; Grant, 1996). Strategically agile companies indeed are able to maintain focus and preserve the momentum as they follow ambitious objectives, while at the same time remaining flexible enough to quickly and cost-effectively respond to breakthrough innovation opportunities (Di Minin *et al.*, 2014). Different authors have reported a set of capabilities for creating strategic agility. For Gandossy (2003) for example, fast and agile organisations share five basic characteristics: they have a clear purpose, an engaging climate (that permits dialogue), a small unit accountability (keeping things small), outside-in focusing (keeping in touch with customers) and a collective will. To be strategically agile, Doz and Kosonen (2008b; 2010) argue that companies should enhance strategic sensitivity, build leadership unity and ensure sufficient resource fluidity to increase responsiveness towards emerging change. A firm that does not perceive itself as a bundle of capabilities that can be generatively reconfigured is constrained in its ability to create new value propositions (Teece *et al.*, 1997; Helfat *et al.*, 2007). As mentioned above, this cognitive failure is described as "capability myopia" (Johnston, 2009).

Table 1 provides a list of all the capabilities for strategic agility that we found in the literature and references authors that have investigated and proposed such lists of firms' capabilities.

Table 1 – Capabilities for strategic agility in the literature

We then identified the main classes of capabilities based on their underlying similarity for strategic change. Table 2 shows the set of capabilities included in each class and their definitions. The three main classes are:

- **Strategy innovation capabilities:** this class includes capabilities focused on being adaptive, absorptive and innovative (Wang and Ahmed, 2007) by consistently perceiving, interpreting and proactively reacting to change (Hamel and Valikangas, 2003), as well as overcoming limitations of perception (Day and Schoemaker, 2004; Winter, 2004) and becoming conscious of change and its effects on business (Hamel and Valikangas, 2003). They can be further

subdivided into capabilities to actually *realise* strategy innovation in different ways and capabilities that allow us to *anticipate* and *look for* strategy innovation. The first ones are, for example, "adapting" (the ability to capitalise on emerging market opportunities – Wang and Ahmed, 2007), "autonomy" (the ability to encourage and tolerate risky, ambiguous and unsuccessful radical ideas – Chang *et al.*, 2012) and "reconfiguration" (the ability to change asset structure in a continuously changing environment – Protogerou, 2005). The second ones are, for example, "acuity" (the ability to see the competitive environment clearly and thus to anticipate it – Stalk *et al.*, 1992) and similarly "seizing and sensing opportunities" (abilities for the identification and calibration of technological and market opportunities and for being in constant search and exploration across technologies and markets – Teece, 2007);

- **Resource capitalisation capabilities:** these include the abilities for an organisation to acquire, develop, deploy its resources and capitalise on them to achieve rapidly competitive advantage relative to other firms (Lado and Wilson, 1994; Boonpattarakan, 2012). This class extends the idea of "resource fluidity" capability conceptualised in Doz and Kosonen (2010). Resource fluidity means redeploying resources rapidly by merging capabilities strictly linked to human resources with capabilities referring to key intangible assets. Capabilities linked to human resources are for example "teamwork" (which ensures the sharing of knowledge and staff assets that have strategic potential – Kaplan and Norton, 2004). Capabilities referring to key intangible assets are for example "technological competences" (the ability to generate, as well as assimilate, transform and exploit the acquired knowledge – Lokshin *et al.*, 2009). This class also includes, for example "culture" that, according to Kaplan and Norton (2004), is the ability to foster the awareness and internalisation of a company's mission, vision and core values; "leadership", the ability to embed leaders throughout the organisation (Ulrich and Smallwood, 2004); "shared mind-set" and "strategic unity" by Ulrich and Smallwood (2004);

- **Networking capabilities**: these are focused on specific abilities in connecting and creating interdependences both inside organisational boundaries and between the organisations' internal and external system particularly in regard to the firms' stakeholders. Thus, this group

merges capabilities such as "coordination" (Protogerou, 2005), "customer connectivity" (creation of relationships of trust with targeted customers – Ulrich and Smallwood, 2004), "stakeholder integration" (Sharma and Vredenburg, 1998) and "interconnectivity" (the ability to create networks which are able to exploit the small-world effect – De Toni *et al.*, 2011).

Table 2 – Classes of capabilities for strategic agility

2.4 Strategic agility and business models

Business model reconfiguration can benefit from strategic agility (Ganguly *et al*., 2009; Battistella *et al*., 2012) since it is defined as "the ability to continuously adjust and adapt strategic direction in core business, as a function of strategic ambitions and changing circumstances and create not just new products and services, but also new business models and innovative ways to create value for a company". Being strategically agile means gaining the ability to dynamically revise or reinvent the company and its strategy, to think and to act differently, leading to new business model innovations, as the business environment changes (Morgan and Page, 2008*;* Doz and Kosonen, 2008a; Fartash *et al.,* 2012).

While some works (e.g. Chesbrough, 2007) identify how the innovation/reconfiguration of the business model can generate new value in a sector (in terms of value proposition, target market, value chain, revenue mechanisms, value network or ecosystem, competitive strategy), there is little research yet on *how capabilities influence the reconfiguration of the building blocks of the business model*. Demil and Lecocq (2010) identify the static and the transformational views of the business model. The static view concerns the building of typologies and studying the relationship between a given business model and performance. It gives a consistent picture of the different components involved but is often unable to describe the process of business model evolution. The transformational view can help managers reflect on how they can change their business models but tends to discuss change rather than looking at how business models change themselves (e.g. Raff (2000) on the evolution of capabilities, Winter and Szulanski (2001) on the role of routines and Johnson *et al.* (2008*)* on the

change in value propositions). Demil and Lecocq (2010) themselves discuss how a change in one component influences change in another, but do not discuss the *specific capabilities that a company should have for enabling this change and its effects on components*. Therefore, none of these views discusses components and change in an integrated way.

Recently, Achtenhagen *et al*. (2013) studied business model dynamics to achieve sustained value creation. They have proposed a framework including strategising actions, critical capabilities and activities that enable companies to successfully manage business model change. They illustrate how the capabilities are supported by different sets of specific organisational and strategic activities and how companies employ these in unique and context-specific combinations, but they do not discuss *where (i.e. in the entire business model or only in specific parts) these capabilities have to be used in order to achieve sustained strategic agility.*

In Table 3 we analyse papers proposing capabilities and strategic actions for business model innovation/reconfiguration, identifying gaps in regards to the two research directions. On the one hand, it emerges that literature on business models includes few contributions that analyse the business model differently from capabilities (and in particular the strategic agility) perspective. On the other hand, the literature on capabilities for performing changes and on strategic agility does not focus on the specific building blocks of the business model. This means that a research that investigates the most suitable capability for each building block of the business model, with the aim of making the whole business model more agile, is still missing. Moreover, only a few studies provide a multiple case study methodology. Within them, only papers by Achtenhagen *et al.* (2013) – with a longitudinal study of 25 SMEs –, Doz and Kosonen (2010) – with the cases of Nokia and 3M – and Mezger (2014) – with an explorative study of six German companies from one specific industry – demonstrate how capabilities are addressed for business model innovation at the business model level (but still they do not deal with single components).

Table 3 – Papers dealing with business model innovation and capabilities, with evidence of the literature gap

In this paper, we follow a recent call from Zott and Amit (2010) for investigation into the "black box" of the business model; the future research directions of Achtenhagen *et al*. (2013) that ask for research on patterns of strategising actions, critical capabilities and activities that drive the development and change of business models; and the recent calls of Schneider and Spieth (2013) and Spieth *et al*. (2014) for new insights into business model innovation, organisational processes and the competitive capabilities that enable them. In the following analysis, we therefore employ a capability-based view and building block-based view to reconfigure the business model. We explore how firms actually create unique combinations of the business model elements, detailing them in a specific and recognisable manner in order to create an exclusive value offer and to understand how firms use specific capabilities in dealing with business model innovation.

3. Research method

3.1 Design

Starting from the literature review and the understanding of the importance of linking the strategic agility with business modelling approaches, the present work aims to investigate the capabilities that are worth using in specific areas of the business model. In particular, we have formulated the following research question:

> *What capabilities should companies activate and where should they apply them in order to rapidly and successfully reconfigure their business model*?

We conducted two different literature reviews, the first with a focus on the business model and its components (building blocks) and the second with a focus on strategic agility and related capabilities. Then, we tried to understand the importance of linking the two approaches in relation to business model reconfiguration and to verify the gaps.

The research design is a multiple case study. We chose this approach as we wanted to observe the phenomenon in its complexity (McCutcheon and Meredith, 1993) and to study the business model reconfiguration as a process with a dynamic nature and where "not-considered" events play an important role in building explanations (Pettigrew, 1992). Using multiple cases allows one to do holistic and contextualised research, thus collecting a wide array of data (Hartley, 1994) and permits cross-case comparisons in order to recognise emerging patterns of relationships among constructs that lead to important theoretical insights (Eisenhardt and Graebner, 2007; Flynn *et al.*, 1990). Moreover, case studies are particularly appropriate for investigating contextual questions like the one guiding the research in this study (Yin, 2003).

Multiple cases permit a replication logic in which the cases are treated as a series of experiments that confirm or negate emerging conceptual insights (Eisenhardt and Graebner, 2007). Emergent theory from multiple case research is typically more generalisable and better grounded than theory from single case studies, making it more amenable to extension and validation with other methods (Davis *et al.*, 2007). As suggested by Eisenhardt (1989) and Voss *et al.* (2002), theory building aims to identify and describe the key variables, the links among them and why these relationships exist.

3.2 Research setting

For the multiple-case study, we selected from among enterprises that demonstrated strategic agility by:

- a significant business model reconfiguration;
- innovativeness in creating value in their business model.

Moreover, we preferred companies that were successful, in order to prove the efficacy of their strategic agility and therefore gain better insights from them.

We selected different companies in terms of size and kind of industry, aiming to do an in-depth analysis and to make a better comparison. The research setting is neither linked to a specific industry nor to a specific size of company because we considered that this choice was independent of the locus of capabilities. We studied business model reconfiguration in established organisations because such

organisations are likely to have experienced a reconfiguration, enabling us to focus on specific building blocks of the business model without any complicating variation. The motivations for the choice were fitness, distinctiveness and revelatory nature (Eisenhardt, 1989; Siggelkow, 2007; Yin, 2003), in particular as regards complementarity and the completeness of combinations of building blocks involved in the reconfiguration. The set of cases with evidence of the variation of criteria is presented in Table 4.

Table 4 – The case studies

3.3 Data Sources

We used several data sources: qualitative and quantitative data from primary sources (semi-structured interviews) and secondary sources (publicly available and private data from press reviews, websites and official company documents such as website and archival documents, corporate intranets, business publications and materials provided by informants).

Multiple data collection methods were adopted to acquire a deeper understanding of the dynamics involved. The aim was twofold: to increase the information base and to diversify data in order to reduce biases (Patton, 2002; Yin, 2003).

Interviews. We conducted 40 semi-structured interviews of 60-90 minutes over 36 months, interviewing informants at multiple times and from multiple levels of both organisations. Informants included the strategic managers and the managers of the single areas of the business model (i.e. R&D directors for the product, marketing directors for the relationship with customers, financial officers for revenues/costs, etc.). Interviewing multiple informants at multiple levels and at different times leads to richer and more reliable emergent theory (Eisenhardt, 1989; Miller *et al*., 1997).

To assure coherence and consistency, a standard interview protocol was developed to check and guide the interviews:

- description of the strategy and of the general business model;

- description of the main building blocks of the business model;

- description of the change / disruption events;

- description of the capabilities that permitted an overcoming of the event;

- description of the locus where capability was by far the most needed and why.

Informants' biases. Our triangulated, longitudinal data from primary sources in the field provide a rich view of the capabilities and of the areas of the business model where they have been used. To mitigate informant bias, we followed interview guides (which focused informants on relating chronologies of objective events, behaviours and facts of the business model reconfiguration) and we gathered secondary data both on site and from the media about these changes to triangulate our interview data (Golden, 1992; Miller *et al*., 1997).

Longitudinal study. For some of the changes, we were able to collect data in real-time as the reconfiguration progressed and we returned multiple times to conduct site visits. This generated both real-time data to mitigate bias and retrospective data to enable efficient data collection (Leonard-Barton, 1990).

3.4 Data collection

The unit of analysis was the entire business model, with a focus on single components (building blocks). Specifically, we have investigated the locus and the capabilities used in the process of reconfiguration of the business model. To handle the research question, for each case:

1. we first identified the business model's building blocks and their capabilities in renewing them,

2. then we identified, for each case, the link between each capability and each building block (investigating if and how the capability was used during the reconfiguration) and

3. finally, with a cross-case analysis, we deduced how the capabilities are used and connected them to the business model's building blocks.

3.5 Data Analysis

We began by writing the chronological case histories of the reconfigurations. We analysed the chronologies using both within-case and cross-case techniques (Eisenhardt, 1989; Miles and Huberman, 1994). We iterated between the cases and emergent theory and then weaved in relevant literature, focusing on decision making, changes in objectives and behavioural patterns. The building blocks were not determined a priori but were labelled after the interviews for each case and, after the cross-case analysis, we tried to give them a general name in order to facilitate comparison.

4. Case studies

In the following within-case analysis we explore in detail how firms actually create unique combinations of the business model elements (building blocks), detailing them in a specific and recognisable manner in order to create an exclusive value offer. We then describe the capabilities activated by managers along the line of the specific building blocks of the business model to develop and nurture strategic agility in their organisations. All the four companies based their successful business model reconfiguration on different sets of capabilities for:

- perceiving opportunities and quickly responding to them (*strategy innovation*);

- acquiring, developing and integrating key resources (*resource capitalisation*);

- connecting the internal and external organisational environment (*networking*).

4.1 Nice

Established in the early 90s by Lauro Buoro in Oderzo (TV), Nice S.p.A. is one of the leading international companies in the Home Automation field. It is the key player in a group of 36 companies around the world. The Group offers a wide range of integrated automation systems for gates, garage doors, road barriers and parking systems, awnings and blinds, for residential, commercial and industrial buildings, as well as wireless alarm systems (www.niceforyou.com). With consolidated revenues of over 270 million Euros in 2014, it markets its products in over 100 countries, covering

areas from Italy to Western and Eastern Europe and also non–European markets such as China, the United States, South America, the Middle East and Africa.

Nice's strategic vision consists of becoming the main player in the Home Automation field through market expansion at an international level, product range extension and continuous investment in research and innovation. Along this line, the company created the "Nice world", by acquiring different partners and fostering the sharing of external expertise through the creation of a new integrated informative system (and thus renewing the *knowledge management* building blocks). This enabled them to develop a wide range of products, monitor and eventually gain the entrance into different and international markets, and design multiple business models for each different country. For example, the Group business was expanded into the lighting and furniture sector through the acquisition of FontanaArte in December 2010. Another change in *network* building blocks resulted from the acquisition of Peccinin Group in June 2011, allowing entry into the South American market. In the same year (August 2011), the company created a joint venture with Linix Motor, laying the foundations for future expansion into the Chinese market, and acquired KINGgates, strengthening its technological competences in the core business of automation systems for gates and garage doors.

It has demonstrated ability in both adapting simultaneously to many different business environments as well as sharing goals and common interests among its partners thanks to a strong brand identity (*motto and value offer*). The motto "Be Nice, think different, be reliable" has underpinned its strategic goals of superior design and technology, a wider product range, innovation and brand loyalty. In this regard, it has based its relationship with clients on non-conventional communication, from the first Nice fair stand, composed only of a painting by a Venetian painter, to the "DIY (Do It Yourself)" model for the final users of the automation systems.

Moreover, it has rethought the *social responsibility* block of its business by introducing radical – compared to its core business – ideas and initiatives, such as: "Nice meets art", where product and processes usage concepts such as sustainability and "green" are conveyed through pictures; "Nice F.e.e.l." (For everyone everywhere liberty) which promotes activities that give people with motor difficulties – such as the disabled and the elderly – greater freedom of movement and more individual

autonomy; and the "Nice Sailing Team", which participates in different sailing competitions (among which the "Extreme Sailing Series").

Table 5 and Table 6 show how Nice successfully designed and renewed its business model highlighting single building blocks and the micro-capabilities activated in each of them.

Table 5 – Business model and building blocks in Nice

Table 6 – Building blocks and capabilities in Nice

4.2 Lago

Lago S.p.A. was established in 1980 by the entrepreneur Giuseppe Lago near Padua (Italy). Nowadays the company is a key player in the furniture industry, in particular, in the field of design furnishing. In 2006, due to a rapid growth rate, it became a publicly-listed company, with internal processes reconfigured and arranged to face international market challenges. In the last five years, revenue has increased from 5 to 50 million € and the number of employees from 50 to 180. Today Lago is a world-wide company with more than 400 selected retailers located in prestigious cities (among them Rome, Milan, Paris and London). Its mission has three main facets: design, caring for human resources and sustainability.

The strategic approach to design is holistic, starting from the renewal of the *research and development* building block, aimed at designing new unconventional products. This was achieved also thanks to the collaboration of famous international designers and to exploiting the ideas generated in "Lagostudio", the creative centre that attracts students and graduates from round the world and from different backgrounds. The acquisition of external knowledge was then integrated with the Lean principle of continuous improvement that aims to simplify product architecture according to modularity (all the product models are then collected in the software pCon.planner, which is open to customers). Besides the development of its unique *value offer*, the company has constantly sought to link design, sustainable development and artistic significance in products and, accordingly, in its business model, conveying artistic meanings in the *social responsibility* building

block by carrying out lateral projects such as the "Art Waiting Room" – a company waiting room transformed into an art gallery through which Lago can convey its values. In this way the company also defined its *branding and retail* block in the corporate strategy with examples of new distribution concepts such as the "Lago Flat" (a flat with display functions), the "tenant" (a flat where an ordinary tenant is given the right to use Lago's furniture but must let customers visit it so it becomes a "living house", with real people living inside), Lago Stores and "shops in a shop". The creation of a strong brand identity was also extended outside the company's boundaries, on the one hand through a close partnership with the network of suppliers that best fit the design of the products, on the other hand with the creation of blogs and a social platform (named "Olga") for knowledge sharing and decision making between Lago's stockholders.

Another key building block is *human resources*, since Lago has declared that people are its main resource. Thus, the company headquarters has the feel of a home, a fact that stimulate constant creation of new ideas on the part of the employees. The central focus of the business has been its people from the very beginning, when the entrepreneur and art director Daniele Lago was able to skilfully foster awareness of the company mission and thereby obtain a high level of involvement and personal identification with the organisation among the employees. This was further encouraged by going out into the territory with promotion of economic and cultural development through creativity presented in an intelligent manner: "after all, the man who creates is also the man who uses" (www.lago.it).

Table 7 and table 8 show how Lago successfully designed and renewed its business model highlighting single building blocks and the micro-capabilities activated in each of them.

Table 7 – Business model and building blocks in Lago

Table 8 – Building blocks and capabilities in Lago

4.3 Loccioni

The "Loccioni Group" was officially established in 2006, but its history had already begun in 1968 with the foundation of their first company, ICIE, by Enrico Loccioni. In 1974, ICIE became "General Impianti" and over the following years a generation of new business units were established – such as AEA in 1980 and Summa Srl in 1992. Today the Group has five main business units: Loccioni Energy, Loccioni Environment, Loccioni Home, Loccioni Humancare and Loccioni Mobility, which generate revenues of 70 million euros, employ more than 400 people and operate in more than 40 countries.

The company tests solutions to improve the quality of products and processes for the manufacturing and service industry. Its mission is to "…integrate ideas, people and technologies to transform data into values", with the aim of delivering so-called "bespoke solutions" to customised technologies. That is it studies systems in order to manage, create, measure and transfer data. In this sense, Loccioni is succeeding in adding in the *value offer,* an important component of services, by offering competences demanded by the customer for the measurement and management of large amounts of data.

Moreover, the *research and development* area has been divided into five R&D laboratories (one per each market segment, applying decoupling capability) and a "Research for Innovation" team, that has the role of anticipating and monitoring innovation trends, also outside actual business boundaries (thanks to the Open Innovation attitude), in order to develop cross-competencies and technologies. Moreover, innovation has been supported by the organisational model called "Play Factory" that has rethought the *knowledge management* block to promote knowledge activation and sharing by experiencing it as a "play"; this being made possible by the ample training provided internally.

The company has innovated its *branding* building block by conveying a recognisable brand identity with a strong orientation towards eco-sustainability. It created the "Leaf community" promoting research into energy savings and the use of renewable energies and it consolidated an already close connection with the territory of the "Marche" region with the project "LOV", which ends a visit to the company's facilities with a holistic food and wines experience offered by regional structures.

Its business model is still strongly based on the concept of the *network*, which is also one of its main building blocks. The company indeed plays a "hub role" within the networks that it has built with different stakeholders, such as networks of schools and universities (named Bluzone), which aims to integrate school and work), a network of universities and research centres (named U-Net), and a network of top firms and local players. This last network, as an example, is a "spin-off" network: ex-collaborators who have left the Group and become entrepreneurs (82 companies in 43 years employing about 300 people in the territory), and who continue to collaborate with Loccioni, thereby enriching the two domains of work and knowledge.

The aim of creating interconnections is also a key part of the *human resources* building block, since in the entrepreneurial formula of Enrico Loccioni the social networks created from interpersonal relationships are the engine for a company's sustainable success. For example, "Silverzone" is a network of the experiences and knowledge of the "beautiful minded", retired people over-65, who, as collaborators and partners, choose to pass on their experience to the young in a way that is enjoyable to both parties.

Table 9 and table 10 show how Loccioni successfully designed and renewed its business model highlighting single building blocks and the micro-capabilities activated in each of them.

Table 9 – Business model and building blocks in Loccioni

Table 10 – Building blocks and capabilities in Loccioni

4.4 Illycaffè

"Illycaffè" is an Italian company in the coffee market since 1933. It competes with a niche strategy, selling a unique coffee blend (100% "Arabica" premium quality espresso coffee). 2014 closed with a consolidated turnover of over 400 million euro, with sales outside Italy of about 56%. There are more than 990 employees worldwide, distributed also among its 20 associated companies.

The recognisable company *motto* "One blend, one brand" is followed up on by the continuous search for, and guarantee of, a high level of quality in all strategic issues and by alignment of the

whole supply chain in line with values. Respect for quality standards is guaranteed by buying green coffee of the highest "Arabica" quality directly from the growers – bypassing traditional actors in the coffee supply chain such as traders – and by according to the growers a premium price above-market prices (determined by the coffee exchange in the New York Exchange). It rewards quality with prices that are approximately 30 per cent higher than the market average, creating an environment of reputation and trust that has redesigned its *network* building block. Moreover, the company is the coordinator of a business ecosystem which promotes knowledge sharing and educational initiatives for coffee producers and the other stakeholders, through, for example, the creation of "Unilly", the University of Coffee.

As regards the *branding and retailers* building block, Illycaffè rewards elite cafes who achieve high standards in coffee-making and preparation, with the designation "Artisti del Gusto" (taste artists) and "Espressamente Illy". The aim is to select and create a community of "interpreters of the Italian bar" and to create a "space for involvement and stimulus for creativity". Such specialists are aligned with the company's strategic values and are given exclusive commercial offers, solutions for their internal design, special recipes, events and coffee courses promoting Italian food and taste. The brand identity is also part of the *human resources* block, as the Illy family has developed the company to an international level from generation to generation, maintaining a balance between innovation and tradition in its mission. There is indeed a continuous investment in *research and development* with the conducting of studies on sensory phenomena and emotional design in order to stimulate all the consumer's five senses, to create a real coffee experience and, therefore, encourage identification with the world of Illycaffè.

Finally, the value for customers is also increased by the strong connection with *art and culture*. For example, the company redesigned its own brand in 1996 with James Rosenquist, one of the most important artists of pop art, who created the now famous red square with white writing in four strokes and soft dynamics.

Table 11 and table 12 show how Illycaffè successfully designed and renewed its business model highlighting single building blocks and micro-capabilities activated in each of them.

Table 11 – Business model and building blocks in Illycaffè

Table 12 – Building blocks and capabilities in Illycaffè

5. Discussion

Table 13 summarises the specific capabilities activated in the specific building blocks in the four case studies.

We argue that the capabilities that constitute the foundations of a strategically agile organisation should not always be applied throughout the entire business model: companies can concentrate on acting on and activating specific areas of the business model with specific capabilities available for renewing it. The cases suggest that reconfiguring a company's business model rapidly and successfully requires the right combination of capabilities in different and specific building blocks. To this end, we have highlighted the most numerous correspondences between macro- and micro-capabilities and the addressed building blocks in the table below. This analysis enables us to put forward the propositions in the following paragraphs.

Table 13 – Capabilities for strategic agility and building blocks of the business model: cross-case analysis

5.1 Strategy innovation

Capabilities that belong to the *strategy innovation* class refer to the sharpness in perceiving, the intensity in internalising and the attention in then implementing possible strategic developments. In particular, being strategically agile requires a proactive and continuous search for the innovation of products (through R&D), processes and businesses and subsequently being able to effectively deploy this in order to grasps opportunities, satisfy new customer needs and generate new value.

In this sense, we have divided the capabilities activated by companies for strategy innovation into (1) capabilities to *anticipate* and *look for* strategy innovation, by sensing and anticipating possible

target markets and (2) capabilities to *realise* strategy innovation, by shaping the environment and proposing innovative products and services.

The four companies investigated gained strategic agility by focusing strategy innovation capabilities mostly in three specific areas of the business model: motto and value offer, research and development and social responsibility.

When changes in customer needs occur or new needs are generated, new market opportunities emerge. Strategy innovation allows to rapidly detect and seize opportunities, ideas and innovative behaviours both inside and outside a company's boundaries and also to rapidly change the assets, business environment, markets, etc. to rethink or renew the ***value offer*** for customers.

For example, Nice was able to adapt in different business areas and capture more opportunities, both in terms of target markets and in terms of agreed partnerships, in order to restate its value offer through product range expansion. In particular, the company applied the strategic meaning of "thinking different" – mentioned in its motto – in expanding the business through the acquisition of partners belonging to different industries and countries and then *grafting* (Doz and Kosonen, 2010) its business model onto it. This "outside-in" perspective allowed it to enrich the company's vision and to extend its boundaries by *sensing* and then properly *seizing* the *opportunities* (Teece, 2007) in integrating different alternatives and perspectives into the same business (e.g. smart technologies with home automation) and then in "thinking differently" about their products. In order to achieve this, the company invested internally in new and diversified competences for new product development and was able to leverage on new and reliable information sourced by partners. In this way, when new market segments or customer needs arise, companies that are more ready and able to catch and to exploit new opportunities are also able to vary their value offer and motto rapidly (being then ready to transform strategy into concrete actions).

In the development of their unique value offer, both Lago and Illycaffè constantly seek to *abstract* (Doz and Kosonen, 2010) new usage concepts linking design (Lago), sensory perception (Illycaffè) and artistic meanings (both) to products and to customer purchase experiences. Illycaffè recognised that customers are increasingly seeking sensory and emotional pleasure and focusing on consumption

experience and a better quality of life (a change in customer needs and view of coffee). The company has become strategically agile by changing its motto and consequently part of its business model, relying on its knowledge, anticipating and matching the new perceptions from customers. The company *experimented* with new ideas (Chang *et al.*, 2012) and applied *absorptive capability* (Wang and Ahmed, 2007) in this new concept by rejecting coffee as a commodity product and offering instead a premium quality product via the "one blend, one brand" motto. It has thus been able to build a new product ontology of espresso coffee, rejecting most of the industry recipes and reputational rankings that characterise the traditional coffee business and enriching the involvement of consumers through the integration of the most desirable products with the places of consumption. It thus demonstrated *acuity* (Stalk *et al.*, 1992) in perceiving the cultural trend of the "experience economy" (Pine and Gilmore, 1999), where society is increasingly sensitive to ways of improving the quality of life while the product becomes secondary.

Researching product quality and leveraging on its knowledge of chemistry and the aesthetic sensory aspects of coffee, the company persistently applied *innovation* (Wang and Ahmed, 2007) to the ***research and development*** building block as well, seeking both the most advanced technologies – among all the new ways of preserving coffee with liquid nitrogen – and the emotional and intellectual involvement of premium customers. As argued by Teece (2007) and Lokshin *et al.* (2009), investing in R&D is a requisite for dynamic capabilities: it nurtures the growth of employees' knowledge and collaboration and therefore companies' ability to propose new and/or different products and, consequently, to be more flexible when customers modify their requirements or change their expectations.

In its continuous research for the "new", Lago has introduced product *modularization* (Doz and Kosonen, 2010) by designing standard modules with which to build their furniture. In addition, the development, production and launch of their new products has been accompanied by the participation of emerging artists, cultural centres and universities, thereby demonstrating the company's capabilities of *experimenting*, *innovation* and *learning* (Ulrich and Smallwood, 2004), through which they systematically stimulate the generation and testing of new radical ideas in order to create new

value. Emblematic examples are the "Art Waiting Room", mentioned above, the first example of a company waiting room transformed into a kind of art gallery, which changes the experience of those waiting there; and the Lago Studio, a creativity Lab located in the countryside where workshops with international design schools take place 5 times a year.

Strategy innovation capabilities also cover the ***social responsibility*** building block – which includes all initiatives aiming to integrate meanings outside the company's core business and to strengthen connections with society – in three of the companies: Nice, Lago and Illycaffè. They have been able to *open up* (Chang *et al.*, 2012) towards different sources of ideas, constantly scan new opportunities (*sensing*) and recognise new and integrated artistic and cultural meanings for their strategic values (*absorptive capability*). For example, Nice set up its first fair stand with only a painting by a Venetian painter on view. In recent years the company has also promoted initiatives such as "Nice Meets Art", where product and process usage concepts such as sustainability and "green" are *abstracted* through pictures; "Nice F.e.e.l." (For Everyone Everywhere Liberty), which aims to give people with motor difficulties – such as the disabled and the elderly – greater freedom of movement and more individual autonomy; and, in the sports field, the "Nice Sailing Team" which participates in different sailing competitions including the "Extreme Sailing Series". Lago, in its turn, *reconfigured* (Protogerou, 2005) and *opened* to artistic meanings, its values with so-called lateral projects such as "Art Waiting Room". Finally, Illycaffè has shown *openness* in establishing a strong connection with art and culture, from the redesign of its logo by a famous pop artist to the annual *reconfiguration* of its cup collection in collaboration with a different artist each year (the last one being devoted to Expo 2015). Companies exhibiting social responsibility achieve strategic agility by connecting their core business to alternatives and synergistic meanings and thus building material and immaterial relationships with society and customers. A number of lateral initiatives could also rapidly promulgate new information on a company's innovations technologies (as per Nice) or product potential. Moreover, developing social responsibility enhances the emergence (and then adaption to company strategy) of new customer needs or new usage/concepts (e.g. arts with coffee) and thus allows companies to move toward and exploit these new opportunities first.

On the basis of the above reasoning, we advance the following proposition:

P1: Companies achieve business model agility if **strategy innovation capabilities** are focused on the *motto and value offer, research and development* and *social responsibility* building blocks.

5.2 Resource capitalisation

Resource capitalisation involves capabilities which rapidly reconfigure, redeploy and reallocate resources in line with new opportunities or new activities in a transformed activity system. These capabilities have a strong "applicative" focus, requiring the definition of company strategy in terms of effective actions for leveraging on its assets, both internal and external, in order to quickly respond to environmental changes.

In the four case-studies, capabilities for resource capitalisation are activated mostly in two specific areas of the business model: education and knowledge management and human resources.

At the risk of stating the obvious, resource capitalisation capabilities should cover the two above-mentioned building blocks; however, it is interesting to explore which micro-capabilities are involved and how these were applied in the four companies to improve strategic agility.

Companies that invest in **education and knowledge management** are able to *align* employees and other involved stakeholders with their vision and goals, fostering common interests and values beyond incentives (Kaplan and Norton, 2004; Doz and Kosonen, 2010). The four analysed companies have succeeded in making their business more flexible through *sharing* (De Toni *et al.*, 2011) organisational culture and values and creating a fertile working climate based on *teamwork* (Kaplan and Norton, 2004), on continuous learning and on self-organisation. For example, Lago plans weekly team meetings and makes personal visual tables available for each working team, where objectives and activities are clearly stated. These are then supplemented by single employees who *reveal* (Doz and Kosonen, 2010) their personal motives and needs – for example through adding their own post-its notes. In Loccioni, each employee has an internal-use rulebook called "organisational values chart" where the company's mission and vision are stated. With these kinds of initiative, employees have

demonstrated their commitment and readiness for collaboration. Illycaffè activates a *shared mind-set and coherent brand identity* (Ulrich and Smallwood, 2004) by organising monthly meetings involving all organisational levels both to share company results and collect evaluations and suggestions on possible future steps – as well as to ensure the consolidation of a consistent company image and shared vision. A clear understanding and sharing of the company's strategic objectives and values by the employees, and a concomitant readiness by the management and owners to collect feedbacks and evaluations, enables the whole organisation to move forward rapidly and in unison when new strategies are adopted (i.e. with the fast adoption by the employees of the new strategic directions).

Illycaffè has extended these capabilities to the whole supply chain through its "University of Coffee" where suppliers – but also employees and other stakeholders – are trained in the properties and cultural meanings of coffee, via *teamwork* and *sharing* capabilities. Virtuous cycles of education in quality and knowledge on sensory coffee experience are thereby created also downstream, where elite cafes achieving high standards in coffee making and selling are designated "Artisti del Gusto" or "Espressamente Illy". Building and cultivating a common and reliable knowledge along the whole supply chain, also by extending incentives outside the company's boundaries (i.e. through both material and immaterial relationships), then prove effective in fostering key partners' (suppliers and direct costumers) readiness to adapt and to remain competitive in the face of changing consumers' needs.

Companies that capitalise on **human resources** are able to attract and nourish *talent* (Ulrich and Smallwood, 2004) and then to keep them by *caring for* (Doz and Kosonen, 2010) and cultivating individual competences and ideas in order to enrich the work experience; they thereby obtain a higher level of performance (*accountability* by Ulrich and Smallwood, 2004). In attracting *talent*, Loccioni developed a network labelled "Bluzone", an open network with schools and Universities in the territory which hosts and trains students; Nice created the slogan "Nice wants you" to recruit competent personnel and Lago rewards the best projects developed in its Lagostudio every year. As an emblematic example of *caring* for human resources, Nice created a comfortable workplace with areas for relaxation, saunas etc. Loccioni designed the so-called "Play Factory" where teams of

employees challenge themselves through searching for solutions to problems. Lago designed its headquarters in the style of a home and promotes weekly team building activities such as "cooking together" for the company canteen. These companies have thus demonstrated the ability both to explore new competences and knowledge through the attraction of talented people and to invest in their commitment and collaboration through provision of a suitable workplace. In this way they have stimulated positive feedback and created a critical mass of new and diversified knowledge and competences that allows them to rapidly capture new business opportunities.

Finally, in most of the four cases the entrepreneurs themselves are a key resource in that they activate *leadership* skills (Ulrich and Smallwood, 2004), *organisational competencies* (Lokshin *et al*., 2009) in ensuring the cohesiveness of the organisation and *technological competencies* (Lokshin *et al*., 2009). Over the generations, the Illy family has helped Illycaffè grow to an international level, leveraging on acquired knowledge and maintaining the linkage between innovation and tradition within the whole organisation. Daniele Lago, who is also the art director of the Lago company, has a strong planning-skills programme which fosters awareness of the company's mission and therefore obtains a high involvement and identification with the organisation amongst the employees. A clear vision of the organisation on the part of the management and owners, and their encouragement of employees' commitment to share a common vision and to rapidly follow and adapt to new strategic directions, has enabled the company to easily respond and adapt to business changes.

On the basis of the above reasoning, we advance the following proposition:

P2: Companies achieve business model agility if *resource capitalisation capabilities* are focused on the *education and knowledge management* and *human resources* building blocks.

5.3 Networking

Capabilities for *networking* involve the capabilities of growing networks around the organisation that allow win-win solutions activation, knowledge creation and sharing and a new strategic directions definition. These capabilities imply a double perspective: an internal perspective that consists of

creating interdependences inside organisational boundaries; and an external perspective that consists of connecting the organisation's internal system to the external one; in particular, attention being paid to the firms' stakeholders.

The four companies investigated achieved strategic agility by focusing networking capabilities mostly in two specific areas of the business model: branding and retails and network.

While it seems to be stating the obvious to say networking capabilities should specifically cover the "network" building block, it is interesting to explore which micro-capabilities are involved and how these have been applied in the four companies to improve strategic agility.

All the four case studies created either internal and external **networks** or communities to support business, to dialogue and share knowledge and to collect stakeholders' suggestions. Moreover, Illycaffè built a real business ecosystem *dialoguing* (Doz and Kosonen, 2010) to develop a common ground with both upstream (coffee suppliers) and downstream (retailers and final customers) levels and activating *interconnectivity* (De Toni *et al*., 2011) in order to realise a "small-world" effect. In this collaborative environment, all supply chain actors have an active role in promoting a common ground of high quality standards, reputation and trust through improvement in *stakeholder integration* (Sharma and Vredenburg, 1998) capability. From the internal perspective, Loccioni applied *integrating* capability with the creation of many networks such as the "intra-preneurs", the internal collaborators net, where 350 minds share their knowledge and projects inside the company every day. This capability was also extended to the "Silverzone" network of "beautiful minded" over-65 retired people with whom the company made connections in the past, such as collaborators, clients, suppliers and partners who now feel like transferring their experience to young people, with renewed enthusiasm and passion. The *collaboration* capability (Ulrich and Smallwood, 2004) was then the key to creating the company's multiple networks of schools, institutions, clients, partners, suppliers and with the local area in general. Finally, Nice was able to *coordinate* (Protogerou, 2005) its rich network of partners by systematically combining different business models and industries as it extended its core business. In these cases, the focus of networking capabilities in the network building block has the effect of making available information and competences even more reliable (in reducing

information biases and errors) at a faster pace. This enables a company to be strategically agile because it is well-positioned in its ecosystem and can thus catch better and faster opportunities and deal with any potential threats. At the same time it is helped by committed and collaborative internal employees in turning this information into decision-making (and then concrete) actions towards extending its boundaries.

As regards **branding and retails**, Illycaffè has been able to build long-term relationships with customers (*customer connectivity* by Ulrich and Smallwood (2004)) of horeca and cafè and bar segments using magazines, blogs, shops and many branding activities to transfer benefits to them. Indeed, as discussed above, it provides them with exclusive commercial offers, solutions for their internal design, special recipes, events and coffee courses promoting Italian food and taste. Lago applied *customer competencies* (Lokshin *et al.*, 2009) by creating specific Lago stores and "shops in a shop" that are built in order to create the "future house" concept along with customers. The company *integrated* customers into the sales process also through the above mentioned "Apartment showroom", whereby it furnished entire apartments with Lago products, and gave the tenants substantial additional discounts on the condition that they allowed customers to visit their apartment. In these cases, the focus of networking capabilities in the branding and retails building block has the effect of involving customers in a durable relationship, because they will develop trust and a "sense of belonging", and a tighter relationship because of eventual investmentin partnership building and mutual growth towards a common vision. Therefore, the company finds itself in a favourable position to reach its customers faster and more effectively and to collect feedback and suggestions from them. In fact, in case of any context change, customers will be more willing to continue the relationship with the company so as not to lose the mutual advantages and therefore adapt to eventual changes in branding and retail practices.

On the basis of the above reasoning, we advance the following proposition:

P3: Companies achieve business model agility if **networking capabilities** are focused on the *branding and retails* and *network* building blocks.

The model obtained from the above reasoning, with highlighted the three propositions and the effects of focusing capabilities on specific building blocks to achieve strategic agility, is shown in Figure 1.

Figure 1 – Model showing the effects of focusing capabilities on specific building blocks to achieve strategic agility

6. Conclusions

In this paper, we have presented three macro-capabilities for business model reconfiguration and we have argued for their use in specific areas – namely the building blocks – of the business model. Companies that manage to successfully adapt and reconfigure their business models over time are typically able to identify the best micro-capabilities (already possessed) to be activated in the three classes and use them *specifically* in the business model.

Companies that achieve sustained value creation through business model innovation tend to direct different capabilities to different areas of the business model. Strategy innovation capabilities mainly focus on restating the company mission and value offer to improve customer satisfaction and loyalty, which is possible also thanks to continuous innovation and research into innovative ideas and behaviours and with the extension of business with multilateral (art, culture, sport) initiatives. Companies competing in a hyper-competitive environment are required to overdevelop this capability in order to anticipate and then overcome competitors.

Resource capitalisation capabilities focus both on creating an internal climate that aligns an organisation's employees, with the sharing of organisational culture and values and teamwork and on fostering leadership attitudes and virtuous behaviours, thus obtaining higher performance. This is also extended to external organisations' boundaries, by the activation of networking capabilities that allow knowledge creation and sharing, collaboration and integration with the key stakeholders, in particular customers, in order to consolidate strategic partnerships. These two classes of capabilities allow them

to gain flexibility in and leveraging on key resources and business partners to reach strategic agility, supporting and integrating capabilities for strategy innovation.

While a number of scholars have pointed out the need for business model change as well as the fact that strategy and experimentation might be important in achieving it, it still remained unclear what actions are needed to achieve such change and where to address them in the black box of business models. With this paper, we have attempted to address this gap in the existing business model literature, by providing a framework which comprehensively outlines how business models changed over time through the use of a set of capabilities for strategic agility.

The findings have implications for practitioners as well as for theory development and future research on business models. We have illustrated that business models – which create value over time – are embedded in a multi-dimensional organisational and strategic setting of capabilities, which are oriented towards specific building blocks. This distinction is important to avoid wasting resources and time and to direct critical capabilities and actions to specific areas of the business model in order to enable the shaping, adapting and renewing of the entire business model. With our conceptualisation, we contribute to the business model literature by identifying necessary capabilities and exemplifying detailed capabilities to be used in specific building blocks to achieve business model change over time. While the recent literature on business models has pointed out that they need to change over time, it was still unclear if the capabilities and the actions should address the entire business model or could address only a part of it so as not to waste resources and time.

We have argued that the three types of capabilities are directed to specific building blocks: (1) strategy innovation capabilities to motto and value offer, research and development and social responsibility; (2) resource capitalisation to education and knowledge management and human resources; and finally (3) networking to branding and retails and network. This enhances their intended outcomes as far as business model change for sustained value creation is concerned.

The results presented in this paper are linked to managerial practices. We have clarified a specific set of capabilities needed for each building block in order for a company to become strategically agile in reconfiguring its business model. Drawing on four different case studies, we have provided

examples that can help managers to rethink their key micro- and macro-capabilities and whether or

not they pay enough attention to organisational and strategic aspects relevant to business model

development and change.

References

- Achtenhagen, L., Melin, L. and Naldi, L., (2013). Dynamics of business models – strategising, critical capabilities and activities for sustained value creation. *Long Range Planning*, 46(6), 427-442.
- Afuah, A. and Tucci, C., (2003). *Internet business models and strategies*, McGraw-Hill, Boston, MA.
- Basile, A. and Faraci, A., (2015). Aligning management model and business model in the management innovation perspective: the role of managerial dynamic capabilities in the organisational change. *Journal of Organisational Change Management*, 28(1), 43-58.
- Battistella, C., Biotto, G. and De Toni, A.F., (2012). From design driven innovation to meaning strategy. *Management Decision*, 50(4), 718-743.
- Boonpattarakan, A., (2012). Model of Thai small and medium sized enterprises' organisational capabilities: review and verification. *Journal of Management Research*, 4(3), 15-42.
- Bouchikhi, H. and Kimberly, J.R., (2003). Escaping the identity trap (corporate identity and the management of change). *MIT Sloan Management Review*, 44(3), 20-26.
- Calia, R.C., Guerrini, F.M. and Moura, G.L., (2007). Innovation networks: from technological development to business model reconfiguration. *Technovation*, 27(8), 426-432.
- Carayannis, E.G., Sindakis, S. and Walter, C., (2014). Business model innovation as lever of organisational sustainability. *Journal of Technology Transfer*, 40, 85-104.
- Casadesus-Masanell, R. and Ricart, J. E., (2010). From strategy to business models and onto tactics. *Long Range Planning*, 43(2), 195-215.
- Cavalcante, S.A., (2014). Designing business model change. *International Journal of Innovation Management*, 18(2), 1450018.
- Chang, Y.C., Chang H.T., Chi, H.R., Chen, M. and Deng, L., (2012). How do established firms improve radical innovation performance? The Organisational Capabilities View. *Technovation*, 32, 441–451.
- Chesbrough, H. and Rosenbloom, R.S., (2002). The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spinoff companies. *Industrial and Corporate Change*, 11 (3), 529-555.
- Chesbrough, H., (2007). Business model innovation: it's not just about technology anymore. *Strategy and Leadership*, 35, 12-17.
- Chesbrough, H., (2010). Business model innovation: opportunities and barriers. *Long Range Planning*, 43(2), 354-363.
- DaSilva, C. and Trkman, P., (2014). Business model: what it is and what it is not. *Long Range Planning*, 47, 379-389.
- Davenport, T.H., Leibold, M. and Voelpel, S., (2006). *Strategic management in the innovation economy*, Publicis Corporate Publishing and Wiley, Erlangen.
- Davis, J. P., Eisenhardt, K. M. and Bingham, C. B., (2007). Developing theory through simulation methods. *Academy of Management Review*, 32(2), 480-499.
- Day, G.S. and Schoemaker, P.J.H., (2004). Driving through the fog: managing at the edge. *Long Range Planning*, 37(2), 127-142.
- De Toni, A.F., Comello L. and Ioan L., (2011). *Self-organisations*, Marsilio, Venezia.

- Demil, B. and Lecocq, X., (2010). Business model evolution: in search of dynamic consistency. *Long Range Planning*, 43(2), 227-246.
- Di Minin, A., Frattini, F., Bianchi, M., Bortoluzzi, G. and Piccaluga, A., (2014). Udinese Calcio soccer club as a talents factory: strategic agility, diverging objectives and resource constraints. *European Management Journal*, 32, 319-336.
- Dosi, G., Nelson, R.R. and Winter, S.G., (2000). *The nature and dynamics of organisational capabilities*, Oxford University Press.
- Dove, R., (1999). Knowledge management, response ability and the agile enterprise. *Journal of Knowledge Management*, 3(1), 18-35.
- Doz, Y. L. and Kosonen, M., (2010). Embedding strategic agility: a leadership agenda for accelerating business model renewal. *Long Range Planning*, 43, 370-382).
- Doz, Y.L. and Kosonen, M., (2008a). *Fast strategy: how strategic agility will help you stay ahead of the game*, Wharton School Publishing, London, UK.
- Doz, Y.L. and Kosonen, M., (2008b). The dynamics of strategic agility: Nokia's rollercoaster experience. *California Management Review*, 50(3), 95-118).
- Eisenhardt, K.M and Graebner, M.E., (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1): 25-32.
- Eisenhardt, K.M. and Martin, J.A., (2000). Dynamic capabilities: what are they?, *Strategic Management Journal*, 21(10-11), 1105–1121.
- Eisenhardt, K.M., (1989). Building theories from case study research. *Academy of Management Review*, 14, 532-550.
- Fartash, K., Davoudi, S.M.M. and Semnan, I., (2012). The important role of strategic agility in firms' capability and performance. *International Journal of Engineering and Management Research*, 2(3), 6-12).
- Fleury, A., Leme Fleury, M.T., (2014). Local enablers of business models: The experience of Brazilian multinationals acquiring in North America, *Journal of Business Research*, 67(4), 516-526.
- Flynn, B.B., Sakakibara, S., Schroeder, R.G., Bates K.A. and Flynn, E.J., (1990). Empirical research methods in operations management. *Journal of Operations Management*, 9, 250-84.
- Gandossy, R., (2003). The need for speed. *Journal of Business Strategy*, 24(1), 29-33).
- Ganguly, A., Nilchiani, R. and Farr, V.J., (2009). Evaluating agility in corporate enterprises. *International Journal of Production Economics*, 118, 410-423.
- Gebauer, H., Worch, H. and Truffer, B., (2012). Absorptive capacity, learning processes and combinative capabilities as determinants of strategic innovation. *European Management Journal*, 30, 57-73.
- Giesen, E., Berman, S.J., Bell, R. and Blitz, A., (2007). Three ways to successfully innovate your business model. *Strategy and Leadership*, Vol. 35, pp. 27-33.
- Golden, B. R., (1992). The past is the past – Or is it? The use of retrospective accounts as indicators of past strategy. *Academy of Management Journal*, 35(4), 848-860.
- Grant, R.M., (1996). Prospering in dynamically-competitive environments: organisational capability as knowledge integration. *Organisation Science*, 7(4), 375-387.
- Hamel, G. and Valikangas, L., (2003). The quest for resilience. *Harvard Business Review*, 81(9), 52-63.
- Hartley, J.F., (1994). *Case studies in organisational research*, in: Qualitative methods in organisational research: a practical guide. Ed. C. Cassell, London: Sage, 208-219.
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M.A., Singh, H., Teece, D.J. and Winter, S.G., (2007). *Dynamic capabilities: understanding strategic change in organisations*. Blackwell Publishing, Malden, MA.
- Henkel, M., Bider, I. and Perjons, E., (2014). Capability-based business model transformation. *Lecture Notes in Business Information Processing*, 178, 88-99.
- Johnson, M.W., Christensen, C.M. and Kagermann, H., (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 57-68.

- Johnston, K., (2009). Extending the marketing myopia concept to promote strategic agility. *Journal of Strategic Marketing*, 17(2), 139-148.
- Kaplan, R.S. and Norton, D.P., (2004). Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 82(2), 52-63.
- Kotter, J.P., (2012). Accelerate!, Harvard Business Review, 90(11), 44-58.
- Kun-Huang, H., (2013). A two-tier business model and its realization for entrepreneurship. *Journal of Business Research*, 66(10), 2102-2105.
- Lado, A. and Wilson, M.C., (1994). Human resource systems and sustained competitive advantage: a competency-based perspective. *The Academy of Management Review*, 19(4), 699-727.
- Leonard-Barton, D., (1990). A dual methodology for case studies: synergistic use of a longitudinal single site with replicated multiple sites. *Organisation Science*, 1(1), 248-266.
- Linder, J. and Cantrell, S., (2000). Changing business models: surveying the landscape, Working Paper, Inst. for Strategic Change, Accenture.
- Lokshin, B., Gils, A.V. and Bauer, E., (2009). Crafting firm competencies to improve innovative performance. *European Management Journal*, 27(3), 187-196.
- Magretta, J., (2002). Why business models matter. *Harvard Business Review*, 86-92.
- Markides, C.C., (2008). *Game changing strategies*, Jossey-Bass, San Francisco, CA.
- McCutcheon, D.M. and Meredith, J.R., (1993). Conducting case study research in operations management. *Journal of Operations Management*, 11(3), 239-256.
- Handfield, R.B. and Melnyk, S.A., (1998). The scientific theory-building process: a primer using the case of TQM. *Journal of Operations Management*, 16(4), 321-339.
- McGrath, R. G. and MacMillan, I.C., (2009). How to rethink your business during uncertainty. *MIT Sloan Management Review*, 50(3), 25-30.
- Mezger, F., (2014). Toward a capability-based conceptualization of business model innovation: insights from an explorative study. *R&D Management*, 44(5), 429-449).
- Miles, M.B. and Huberman, A.M., (1994). *Qualitative data analysis: an expanded source book*, 2nd ed., Sage Publications, London.
- Miller, C.C., Cardinal, L.B. and Glick, W.H., (1997). Retrospective reports in organisational research: A reexamination of recent evidence. *Academy of Management Journal*, 40(1), 189-204.
- Morgan, R.E. and Page, K., (2008). Managing business transformation to deliver strategic agility. *Strategic Change*, 17, 155–168.
- Morris, M., Schindehutte, M. and Allen, J., (2005). The entrepreneur's business model: toward a unified perspective. *Journal of Business Research*, 58(6), 726-35.
- Osterwalder, A. and Pigneur, Y., (2010). *Business model generation: a handbook for visionaries, game changers and challengers*, Wiley, Hoboken, New Jersey.
- Osterwalder, A., Pigneur, Y. and Tucci, C. L., (2005). Clarifying business models: origins, present and future of the concept. *Communications of the Association for Information Systems*, 16(1), 1-25.
- Pateli, A.G. and Giaglis, G.M., (2004). A research framework for analysing eBusiness models. *European Journal of Information Systems*, 13(4), 302-314.
- Patton, M.Q., (2002), *Qualitative research and evaluation methods*, Sage Publications, Thousand Oaks, CA.
- Pettigrew, A.M., (1992). The character and significance of strategy process research. *Strategic Management Journal*, 13, 5-16.
- Pine, J.B. and Gilmore, J.H., (1999). *The experience economy*, Harvard Business School Press, Boston, MA.
- Porter, M.E., (1996). What is strategy?. *Harvard Business Review*, 74(6), 61-78.
- Protogerou, A., (2005). Dynamics of industry and innovation: organisations, networks and systems, *Proceedings of the Druid Tenth Anniversary Summer Conference 2005*, Copenhagen, Denmark, June 27-29.

- Raff, D.M.G., (2000). Superstores and the evolution of firm capabilities in American bookselling. *Strategic Management Journal*, 21, 1043-1059.
- Santos, J., Spector, B. and Van der Heyden, L., (2009). Toward a theory of business model innovation within incumbent firms. Working paper No. 2009/16/efe/st/tom, INSEAD, Fontainebleau, France.
- Schneider, S. and Spieth, P., (2013). Business model innovation: towards an integrated future research agenda. *International Journal of Innovation Management*, 17(1), 1340001.
- Shafer, S.M., Smith, H.J. and Linder, J.C., (2005). The power of business models. *Business Horizons*, 48(3), 199-207.
- Sharma, S. and Vredenburg, H., (1998). Proactive corporate environmental strategy and the development of competitively valuable organisational capabilities. *Strategic Management Journal*, 19, 729-753.
- Siggelkow, N., (2002). Evolution toward fit. *Administrative Science Quarterly*, 47(1), 125-159,
- Siggelkow, N., (2007). Persuasion with case studies. *Academy of Management Journal*, 50, 20-24.
- Smith, W.K., Binns, A. and Tushman, M.L., (2010). Complex business models: Managing strategic paradoxes simultaneously. *Long Range Planning*, 43(2), 448-461.
- Spieth, P., Schneckenberg, D. and Ricart, J. E., (2014). Business model innovation – state of the art and future challenges for the field. *R&D Management*, 44(3), 237-247.
- Stalk, G., Evans, P. and Shulman, L.E., (1992). Competing on capabilities: the new rules of corporate strategy. *Harvard Business Review*, March/April, 57-69.
- Teece, D.J., (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.
- Teece, D.J., (2010). Business models, business strategy and innovation. *Long Range Planning*, 43, 172-194.
- Teece, D.J., Pisano, G. and Shuen, A., (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Tikkanen, H., Lamberg, J.A., Parvinen, P. and Kallunki, J.P., (2005). Managerial cognition, action and the business model of the firm. *Management Decision*, 43, 789-809.
- Ulrich, D. and Smallwood, N., (2004). Capitalising on capabilities. *Harvard Business Review*, 119–128.
- Voelpel, S., Leibold, M., Tekie, E. and Von Krogh, G., (2005). Escaping the red queen effect in competitive strategy: sense-testing business models. *European Management Journal*, 23, 37-49.
- Voss, C., Tsikriktsis, N. and Frohlich, M., (2002). Case research in operations management. *International Journal of Operations and Production Management*, 22, 195-219.
- Wang, C.L and Ahmed, P. K., (2007). Dynamic capabilities: A review and research agenda. *International Journal of Management Review*, 9(1), 31-51
- Winter, S.G. and Szulanski, G., (2001). Replication as strategy. *Organisation Science*, 12(6), 730-743.
- Winter, S.G., (2004). Specialised perception, selection and strategic surprise: learning from the moths and bees. *Long Range Planning*, 37(2), 163-169.
- Wirtz, B.W., Pistoia, A., Ullrich, S. and Göttel, V., (2015). Business Models: origin, development and future research perspectives. *Long Range Planning*, 49(1), 36-54.
- Wirtz, B.W., Schilke, O. and Ullrich, S., (2010). Strategic development of business models: implications of the web 2.0 for creating value on the Internet. *Long Range Planning*, 43, 272-290.
- Yin, R.K., (2003). *Case study research design and methods*, Sage, Newbury Park, CA, Applied Social Research Methods Series.
- Zott, C. and Amit, R., (2010). Business model design: an activity system perspective. *Long Range Planning*, 43, 216-226.
- Zott, C., Amit, R. and Massa, L., (2011). The business model: recent developments and future research. *Journal of Management*, 37(4), 1019-1042.

Table 1 – *Capabilities for strategic agility in the literature*

#	CAPABILITIES	Chang et al. (2012)	De Toni et al. (2011)	Doz and Kosonen (2010)	Eisenhardt and Martin (2000)	Hamel and Valikangas (2003)	Kaplan and Norton (2004)	Lokshin et al. (2009)	Protogerou (2005)	Sharma and Vredenburg (1998)	Stalk et al. (1992)	Teece (2007)	Ulrich and Smallwood (2004)	Wang and Ahmed (2007)
1	Absorptive capability													x
2	Abstracting			x										
3	Accountability												x	
4	Acuity										x			
5	Adaptive capability													x
6	Agility										x			
7	Alignment/Aligning			x			x							
8	Anticipating			x										
9	Autonomy	x												
10	Caring			x										
11	Collaboration												x	
12	Consistency										x			
13	Conquer denial					x								
14	Coordination, integration capability								x					
15	Cultural capability / Culture						x							
16	Customer competencies							x						
17	Customer connectivity												x	
18	Decoupling			x										
19	Dialoguing			x										
20	Dissociating			x										
21	Distancing			x										
22	Efficiency												x	
23	Embrace paradox					x								
24	Experimentation / Experimenting	x		x										
25	Gain and release resources				x									
26	Grafting			x										
27	Innovation / Continuous innovation / Innovative capability / Innovativeness									x	x		x	x
28	Integration / Integrating / Integrate resources	x		x	x									
29	Interconnectivity		x											
30	Leadership						x						x	
31	Learning capability / Continuous higher order learning								x	x			x	
32	Liberate resources					x								
33	Managing threats and reconfiguration											x		
34	Modularising			x										
35	Openness	x												
36	Organisational competencies							x						
37	Reconfiguration / Reconfiguration of resources / Transformation and reconfiguration capability		x		x				x					
38	Redundancy			x										
39	Reframing			x										
40	Revealing			x										
41	Seizing opportunities											x		
42	Sensing opportunities											x		
43	Shared mind-set and coherent brand identity												x	
44	Sharing		x											
45	Speed											x	x	
46	Stakeholder integration									x				
47	Strategic unity												x	
48	Switching			x										
49	Talent												x	
50	Teamwork						x							
51	Technological competencies							x						
52	Value variety					x								
	TOTAL	4	4	15	3	4	4	3	3	3	5	3	11	3

Table 2 – *Classes of capabilities for strategic agility*

#	STRATEGY INNOVATION CAPABILITIES	
(15)	Capabilities to realise strategy innovation	
5	Adaptive capability	Ability to identify and capitalise on emerging market opportunities (Wang and Ahmed, 2007).
6	Agility	Ability to adapt simultaneously to many different business environments (Stalk *et al.*, 1992).
9	Autonomy	Ability to encourage and tolerate risky, ambiguous, and unsuccessful radical ideas (Chang *et al.*, 2012).
12	Consistency	Ability to produce a product that unfailingly satisfies customers' needs (Stalk *et al.*, 1992).
23	Embrace paradox	*Dedicate as much energy to systematic exploration of new strategy options as you do to the relentless pursuit of efficiency* (Hamel and Valikangas, 2003).
24	Experimentation / Experimenting	Ability to probe, experiment with, test, and commercialise radical ideas and concepts, across R&D, manufacturing and marketing disciplines (Chang *et al.*, 2012). Ability to gain insight, to probe and to discover innovation opportunities by local experiments, in-market tests, use of ventures (Doz and Kosonen, 2010).
26	Grafting	Ability to acquire and to import from others to transform oneself (Doz and Kosonen, 2010).
27	Innovation / Continuous innovation / Innovative capability / Innovativeness	Ability to develop new products and/or markets, through aligning strategic innovative orientation with innovative behaviours and processes (Wang and Ahmed, 2007). Ability to generate new ideas and to combine existing elements to create new sources of value (Stalk *et al.*, 1992).
31	Learning capability / Continuous higher order learning	Ability to generate and generalise ideas with impact (Ulrich and Smallwood, 2004).
33	Managing threats and reconfiguration	*Ability to recombine and to reconfigure assets and organisational structures as the enterprise grows, and as markets and technologies change, as they surely will.* (Teece, 2007).
34	Modularising	Ability to assemble and disassemble business systems and processes (Doz and Kosonen, 2010).
37	Reconfiguration / Reconfiguration of resources / Transformation and reconfiguration capability	Ability to change asset structure in a continuously changing environment (Protogerou, 2005).
45	Speed	Ability to make important changes rapidly (Ulrich and Smallwood, 2004).
48	Switching	Ability to use multiple infrastructures in parallel and to align and switch elements between them (Doz and Kosonen, 2010).
52	Value variety	*Launching a swarm of low-risk experiments* (Hamel and Valikangas, 2003).
(10)	Capabilities to anticipate and look for strategy innovation	
1	Absorptive capability	Ability to recognise the value of new, external information, assimilate it, and apply it to commercial ends (Wang and Ahmed, 2007).
2	Abstracting	Ability to generalise and to restate in conceptual terms (Doz and Kosonen, 2010).
4	Acuity	Ability to see the competitive environment clearly and thus to anticipate and respond to customers' evolving needs and wants (Stalk *et al.*, 1992).
8	Anticipating	Ability to refine foresight tools to explore future usage concepts (Doz and Kosonen, 2010).
13	Conquer denial	*Become deeply conscious of what's changing - and perpetually consider how those changes might affect your firm's current success* (Hamel and Valikangas, 2003).
18	Decoupling	Ability to gain flexibility and to organise by segmentation-based value domains (Doz and Kosonen, 2010).
35	Openness	Ability to harvest ideas and competencies from a wide array of sources (Chang *et al.*, 2012).
39	Reframing	Ability to sense the need of renewal through *honest, open and rich dialogue around strategic issues* (Doz and Kosonen, 2010).
41	Seizing opportunities	*Identification and calibration of technological and market opportunities, the judicious selection of technologies and product attributes, the design of business models, and the commitment of (financial) resources to investment opportunities* (Teece, 2007).
42	Sensing opportunities	*Constantly scan, search, and explore across technologies and markets* (Teece, 2007).
#	RESOURCE CAPITALISATION CAPABILITIES	
(15)	Resource capitalisation capabilities	
3	Accountability	Ability to obtain high performance from employees (Ulrich and Smallwood, 2004).
7	Alignment/Aligning	Ability to align goals and incentives at all levels (Kaplan and Norton, 2004). Ability to share a common interest and common meanings beyond incentives (Doz and Kosonen, 2010).
10	Caring	Ability to provide empathy, compassion and personal safety (Doz and Kosonen, 2010).
15	Cultural capability/Culture	Ability to foster awareness and internalisation of the mission, vision and core values (Kaplan and Norton, 2004).
20	Dissociating	*Separating resource use from resource ownership and negotiating resource access and allocation* (Doz and Kosonen, 2010).
22	Efficiency	Ability at managing cost (Ulrich and Smallwood, 2004).
25	Gain and release resources	Ability to gain and release resources. These include knowledge creation routines whereby managers and others build new thinking within the firm (Eisenhardt and Martin, 2000).
30	Leadership	Ability to embed leaders throughout the organisation (Ulrich and Smallwood, 2004).
32	Liberate resources	*Get cash to people who can bring new ideas to fruition* (Hamel and Valikangas, 2003).
36	Organisational competencies	*Team cohesiveness; Slack time* (Lokshin *et al.*, 2009).
38	Redundancy	Ability to create a surplus of intangible cognitive, functional, informative resources (De Toni *et al.*, 2011). Redundant functions create backup capabilities that improve the company's ability to respond to demand changes (Hoyt et al., 2007).
40	Revealing	*Making personal motives and aspirations explicit* (Doz and Kosonen, 2010).

43	Shared mind-set and coherent brand identity	Ability to ensure that employees and customers have positive and consistent images of and experiences with our organisation (Ulrich and Smallwood, 2004).
44	Sharing	Ability to share values, vision and processes (De Toni *et al.*, 2011).
47	Strategic unity	Ability to articulate and share a strategic point of view (Ulrich and Smallwood, 2004).
49	Talent	Ability to attract, to motivate, and to retain competent and committed people (Ulrich and Smallwood, 2004).
50	Teamwork	*Ensure that knowledge and staff assets that have strategic potential are shared* (Kaplan and Norton, 2004).
51	Technological competencies	Ability to generate, as well as to assimilate, to transform and to exploit the acquired knowledge (Lokshin *et al.*, 2009).
#	**NETWORKING CAPABILITIES**	
(9)	Networking capabilities	
11	Collaboration	Ability to work across boundaries to ensure both efficiency and leverage (Ulrich and Smallwood, 2004).
14	Coordination, integration capability	Ability to effective integrate and standardises business processes, adopt the latest management tools and techniques, and systematic implement business plan (Protogerou, 2005).
16	Customer competencies	*Customer cooperation, market research, customer sourcing, customer meetings* (Lokshin *et al.*, 2009).
17	Customer connectivity	Ability to build enduring relationships of trust with targeted customers (Ulrich and Smallwood, 2004).
19	Dialoguing	Ability to explore and share underlying assumptions and hypotheses, to understand contexts and to develop a common ground (Doz and Kosonen, 2010).
21	Distancing	Ability to gain perspective in an 'outside-in' process through a rich network of personal contacts or by hearing the voice of the periphery (Doz and Kosonen, 2010).
28	Integration / Integrating / Integrate resources	Ability to integrate and align the organisational connectedness and ambidexterity of radical innovation with the mainstream business (Chang *et al.*, 2012). Ability to build interdependencies by defining a *valuable common agenda* for success (Doz and Kosonen, 2010).
29	Interconnectivity	Ability to create networks able to exploit the small-world effect (De Toni *et al.*, 2011).
46	Stakeholder integration	Ability to establish trust-based collaborative relationships with a wide variety of stakeholders, especially those with noneconomic goals (Sharma and Vredenburg, 1998).

Table 3 – *Papers dealing with business model innovation and capabilities, with evidence of the literature gap*

AUTHORS	CONCEPT	METHODOLOGY	BM				CAPABILITIES FOR BMI	GAP
			CS	VA	BB	NA		
Achtenhagen *et al.*, 2013	Critical capabilities and strategising activities for business model dynamics	Longitudinal multiple case study		x			x	They do not discuss whether capabilities address the entire business model or only specific components
Calia *et al.*, 2007	Technological innovation network for business model change	Case study				x	x	They focus on business model change as only creation of value thanks to resources provided by an innovation network
Casadesus-Masarell and Ricart, 2010	Business model evolution	Multiple case study		x				They study how strategic decisions require changes in the business model without a capabilities perspective
Chesbrough, 2007	Framework for business model innovation	Conceptual	x	x			x	He mentions only the capability of establishing a company's technologies for improving business model configuration
Demil and Lecocq, 2010	Dynamics inside business model	Case study		x	x		x	They only mention dynamic consistency as capability to implement or control changes in business model components' dynamics
Doz and Kosonen, 2010	Strategic agility framework to accelerate business model renewal	Longitudinal multiple case study		x			x	They analyse outcomes of strategic agility only at the business model level and not in single components
Giesen *et al.*, 2007	Business model innovation	Survey	x	x				They underline the need for capabilities for managing business model innovation but without providing definitions
Henkel *et al.*, 2014	Capabilities for business model transformation	Conceptual		x			x	They only identify structures of capabilities and resources for change to produce value for stakeholders
Johnson *et al.*, 2008	Business model innovation	Conceptual	x	x				They investigate motivations and drivers for business model innovation without focusing on organisation's capabilities
Mezger, 2014	Business model innovation as higher order dynamic capability	Multiple case study				x	x	They analyse sensing, seizing and reconfiguring capabilities to address transformation only at the business model level
Osterwalder and Pigneur, 2010	Business model canvas	Conceptual			x			They do not mention capabilities for business model configuration
Santos *et al.*, 2009	Structural and behavioural aspects for business model innovation	Multiple case study		x			x	They identify only informal relational dynamics and activities performed by organisational units for business model innovation
Smith *et al.*, 2010	Behavioural aspects for business model innovation	Survey		x			x	They only mention leadership from a behavioural and cognitive perspective as capability for managing complex business models change
Teece, 2010	Business model connection with business strategy, innovation management, and economic theory	Conceptual	x	x			x	He only mentions the role of dynamic capabilities in designing business models adapting and changing with the business environment

CS = Cash Streams; VA = Value Added; BB = Building Blocks; NA = Not applicable.

***Table 4** – The case studies*

	FIRM	BUSINESS AREAS	INNOVATIVENESS IN BUSINESS MODEL	BUILDING BLOCKS RECONFIGURED						
				Motto and Value offer	Research and Development	Education and Knowledge management	Branding and Retails	Network	Human Resources	Social Responsibility
1	*NICE*	Home automation	Multi-partnerships and brand strategy	**X**		X		**X**		X
2	*LAGO*	Design furniture	Non traditional marketing	X	X				**X**	**X**
3	*LOCCIONI*	Quality control and hi-tech electronic solutions	Network building and cultivating	X	**X**			X		
4	*ILLYCAFFÈ*	Coffee-related products	Customer relationships and education on quality	X		**X**	**X**			X

*Ticks and bold ticks indicate respectively the building blocks where important and fundamental reconfigurations occured in the company. Fundamental reconfigurations were the triggers for the other reconfigurations.

Table 5 – Business model and building blocks in Nice

1. NICE			
BB1	Motto and Value offer	1.1	*Be Nice, think different, be reliable*
		1.2	Design and innovative products
		1.3	Product range width
BB2	Research and Development	2.1	R&D Labs
		2.2	Technologies
BB3	Education and Knowledge management	3.1	Training
		3.2	External know-how
		3.3	Informative system
BB4	Branding and Retails	4.1	Non conventional communication
		4.2	DIY (Do It Yourself) clients
		4.3	Stock Market quotation
BB5	Network	5.1	Group partners
		5.2	Territory
BB6	Human Resources	6.1	Headquarters
BB7	Social Responsibility	7.1	Nice meets art
		7.2	Nice feel
		7.3	Nice sailing team

Table 6 – Business model and building blocks in Nice

BUILDING BLOCKS	CAPABILITIES			
	STRATEGY INNOVATION		RESOURCES CAPITALISATION	NETWORKING
	(realise)	(anticipate and look for)		
Motto and Value offer	Agility Grafting Innovation Reconfiguration	Absorptive capability Decoupling Seizing opportunities Sensing opportunities		
Research and Development	Autonomy Innovation			
Education and Knowledge management			Alignment Sharing Talent	Dialoguing Integration
Branding and Retails				
Network	Agility Grafting Innovation	Seizing opportunities	Redundancy	Coordination Integration Stakeholder integration
Human Resources			Caring Talent	
Social Responsibility	Autonomy Experimentation Innovation Learning capability	Absorptive capability Abstracting Sensing opportunities	Sharing	

Table 7 – *Business model and building blocks in Lago*

2. LAGO				
BB1	Motto and Value offer	1.1		Home furniture
		1.2		Fashion products
		1.3		pCon planner
		1.4		Modular design
BB2	Research and Development	2.1		Lago studio
		2.2		R&D centres
		2.3		Designers
BB3	Education and Knowledge management	3.1		Olga (Social platform)
		3.2		Blogs
BB4	Branding and Retails	4.1		Brand
		4.2		Lago store
		4.3		Shop in shop
		4.4		Store openness
		4.5		Lago Flat
		4.6		Tenant
BB5	Network	5.1		External community (suppliers)
BB6	Human Resources	6.1		Daniele Lago
		6.2		Headquarters
BB7	Social Responsibility	7.1		Lateral projects

Table 8 – *Business model and building blocks in Lago*

BUILDING BLOCKS	CAPABILITIES			
	STRATEGY INNOVATION		RESOURCES CAPITALISATION	NETWORKING
	(realise)	(anticipate and look for)		
Motto and Value offer	Experimentation Innovation Modularising	Abstracting		
Research and Development	Autonomy Experimentation Innovation Learning capability	Absorptive capability Openness	Talent Technological competencies	
Education and Knowledge management	Innovation		Alignment Revealing Sharing Teamwork	
Branding and Retails	Innovation	Decoupling		Collaboration Customer competencies Customer connectivity Dialoguing Integration Stakeholder integration
Network			Shared mind-set and coherent brand identity	Integration
Human Resources			Accountability Alignment Caring Cultural capability Organisational competencies Revealing Talent Teamwork Technological competencies	Stakeholder integration
Social Responsibility	Autonomy Experimentation Learning capability Reconfiguration	Absorptive capability Openness Reframing Sensing opportunities		Dialoguing

Table 9 – *Business model and building blocks in Loccioni*

3. LOCCIONI			
BB1	Motto and Value offer	1.1	Bespoke solutions
		1.2	On-demand competences
BB2	Research and Development	2.1	R&I team
		2.2	R&D labs
BB3	Education and Knowledge management	3.1	Training
		3.2	Open innovation
		3.3	Top firms
		3.4	Play factory
BB4	Branding and Retails	4.1	Brand identity
		4.2	Business marketing lab
		4.3	Leaf community
		4.4	LOV
BB5	Network	5.1	Spin-offs / start-ups
		5.2	Nexus
		5.3	U_Net
		5.4	Bluzone
		5.5	Schools and universities
		5.6	Research centres
BB6	Human Resources	6.1	Enrico Loccioni
		6.2	Young collaborators
		6.3	Loccioni's experience
		6.4	Silverzone
BB7	Social Responsibility	-	

Table 10 – *Business model and building blocks in Loccioni*

BUILDING BLOCKS	CAPABILITIES			
	STRATEGY INNOVATION		RESOURCES CAPITALISATION	NETWORKING
	(realise)	(anticipate and look for)		
Motto and Value offer	Adaptive capability Innovation Reconfiguration	Acuity		
Research and Development	Agility Grafting Innovation Switching	Abstracting Seizing opportunities	Redundancy	
Education and Knowledge management	Experimentation Grafting	Absorptive capability Openness	Revealing Shared mind-set and coherent brand identity Sharing Talent	Integration
Branding and Retails	Innovation			Collaboration Customer connectivity Integration
Network	Modularising			Collaboration Coordination Dialoguing Integration Interconnectivity Stakeholder integration
Human Resources	Grafting	Openness Reframing	Accountability Caring Sharing Talent	
Social Responsibility				

Table 11 – *Business model and building blocks in Illycaffè*

4. ILLYCAFFÈ			
BB1	Motto and Value offer	1.1	High quality coffee
		1.2	*One blend one brand*
		1.3	Knowledge on chemistry and sensorial aspects
		1.4	Technology innovations & patents
BB2	Research and Development	2.1	R&D and ddl
BB3	Education and Knowledge management	3.1	Education on coffee
		3.2	Knowledge ecosystem coordinator
		3.3	Knowledge ecosystem partners
		3.4	Unilly
BB4	Branding and Retails	4.1	Brand management
		4.2	Artisti del Gusto
		4.3	Espressamente Illy
		4.4	Bar cafes
		4.5	Ho.Re.Ca
BB5	Network	5.1	Clubilly
		5.2	Premium price
		5.3	Illy award
BB6	Human Resources	6.1	Illy family
BB7	Social Responsibility	7.1	Illy art collection
		7.2	Art & culture and coffee lovers brand
		7.3	Illystories
		7.4	Illyworld
		7.5	Cultural events & initiatives

Table 12 – *Business model and building blocks in Illycaffè*

BUILDING BLOCKS	STRATEGY INNOVATION (realise)	STRATEGY INNOVATION (anticipate and look for)	RESOURCES CAPITALISATION	NETWORKING
Motto and Value offer	Adaptive capability Experimentation Innovation	Absorptive capability Abstracting Acuity	Alignment	
Research and Development	Innovation Learning capability	Seizing opportunities		
Education and Knowledge management	Innovation	Acuity	Accountability Alignment Caring Cultural capability Revealing Shared mind-set and coherent brand identity Sharing Talent Teamwork	
Branding and Retails	Innovation Switching	Acuity Decoupling	Alignment Sharing Talent	Collaboration Customer competencies Customer connectivity Dialoguing Stakeholder integration
Network	Reconfiguration Switching			Collaboration Dialoguing Interconnectivity Stakeholder integration
Human Resources			Accountability Alignment Caring Cultural capability Organisational competencies Revealing Shared mind-set and coherent brand identity Sharing Talent Teamwork Technological competencies	Stakeholder integration
Social Responsibility	Autonomy Experimentation Learning capability Reconfiguration	Absorptive capability Abstracting Acuity Openness Sensing opportunities		

Table 13 – *Capabilities for strategic agility and building blocks of the business model: cross-case analysis*

CAPABILITIES		BUILDING BLOCKS						
		Motto and Value offer	Research and Development	Education and Knowledge management	Branding and Retails	Network	Human Resources	Social Responsibility
STRATEGY INNOVATION (realise)	Adaptive capability	LO, IL						
	Agility	NI	LO			NI		
	Autonomy		NI, LA					NI, LA, IL
	Consistency							
	Embrace paradox							
	Experimentation	LA, IL	LA	LO				NI, LA, IL
	Grafting	NI	LO	LO		NI	LO	
	Innovation	NI, LA, LO, IL	NI, LA, LO, IL	LA, IL	LA, LO, IL	NI		NI
	Learning capability		LA, IL					NI, LA, IL
	Managing threats and reconfiguration							
	Modularising	LA				LO		
	Reconfiguration	NI, LO						LA, IL
	Speed							
	Switching		LO		IL			
	Value variety							
STRATEGY INNOVATION (anticipate and look for)	Absorptive capability	NI, IL	LA	LO				NI, LA, IL
	Abstracting	LA, IL	LO					NI, IL
	Acuity	LO, IL		IL	IL			
	Anticipating							
	Conquer denial							
	Decoupling	NI			LA, IL			
	Openness		LA	LO			LO	LA, IL
	Reframing						LO	LA
	Seizing opportunities	NI	LO, IL			NI		
	Sensing opportunities	NI						NI, LA, IL
RESOURCES CAPITALISATION	Accountability			IL			LA, LO, IL	
	Alignment	IL		NI, LA, IL	IL		LA, IL	
	Caring			IL			NI, LA, LO, IL	
	Cultural capability			IL			LA, IL	
	Dissociating							
	Efficiency							
	Gain and release resources							
	Leadership						LA, LO, IL	
	Liberate resources							
	Organisational competencies						LA, LO, IL	
	Redundancy		LO			NI		
	Revealing			LA, LO, IL			LA, IL	
	Shared mind-set and coherent brand identity			LO, IL		LA	IL	
	Sharing			NI, LA, LO, IL	IL		LO, IL	NI
	Strategic unity							
	Talent		LA	NI, LO, IL	IL		NI, LA, LO, IL	
	Teamwork			LA, IL			LA, IL	
	Technological competencies		LA				LA, LO, IL	
NETWORKING	Collaboration				LO, LA, IL	LO, IL		
	Coordination					NI, LO		
	Customer competencies				LA, IL			
	Customer connectivity				LA, LO, IL			
	Dialoguing			NI	LA, IL	LO, IL		LA
	Distancing							
	Integration			NI, LO	LA, LO	NI, LA, LO		
	Interconnectivity					LO, IL		
	Stakeholder integration				LA, IL	NI, LO, IL	LA, IL	

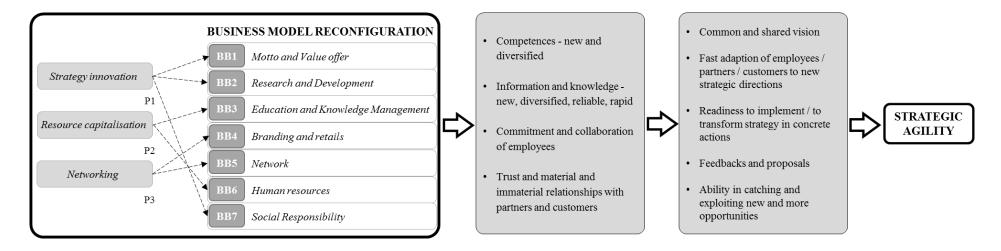*NI = Nice; LA = Lago; LO = Loccioni; IL = Illycaffè.*

Figure 1 – Model showing the effects of focusing capabilities on specific building blocks to achieve strategic agility

BUSINESS MODEL RECONFIGURATION

Strategy innovation

Resource capitalisation

Networking

P1

P2

P3

BB1	Motto and Value offer
BB2	Research and Development
BB3	Education and Knowledge Management
BB4	Branding and retails
BB5	Network
BB6	Human resources
BB7	Social Responsibility

- Competences - new and diversified
- Information and knowledge - new, diversified, reliable, rapid
- Commitment and collaboration of employees
- Trust and material and immaterial relationships with partners and customers

- Common and shared vision
- Fast adaption of employees / partners / customers to new strategic directions
- Readiness to implement / to transform strategy in concrete actions
- Feedbacks and proposals
- Ability in catching and exploiting new and more opportunities

STRATEGIC AGILITY