

CHANGING CUSTOMER ROLES TO INNOVATE BUSINESS MODELS: AN OVERVIEW OF DESIGN-INTENSIVE INDUSTRIES

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1. Introduction

Throughout the last decade, the focus on innovation studies and practice has shifted from the product to the business model, i.e., the elements surrounding the core offer of innovating companies. Game-changing and largely popularized contributions, such as the Business Model Canvas (Osterwalder et al., 2005) and the Ten Types of Innovation (Keeley et al., 2013), have elegantly packaged and convincingly evidenced not only the importance of creating customer value, but also the seamless integration of entrepreneurial action. As Osterwalder said in his work on Business Model Generation, “business model innovation is about creating value for companies, customers and societies. It is about replacing outdated models”.

Previous theories focus on new trends of business model innovation which created innovative products and services thanks to a mix of inside and outside resources and competences. The Open Innovation approach (OI) has emerged as an umbrella concept that refers to a setting where the focal company strives for innovation by purposefully seeking to tap into available knowledge residing outside its boundaries, while simultaneously allowing for its own unused knowledge to outflow and be exploited by third parties (Chesbrough, 2003, Gassmann and Enkel, 2004).

The paper aims to identify new business models based on new rules and logic concerning customer engagement that are far different from those highlighted by the literature contextualized in fast-paced technology industries.

To accomplish this aim, a case study based on explorative research has been conducted. The company for study was selected because it met the following three criteria: (i) had a widely acknowledged innovative business model; (ii) had new rules for engaging customers in the value creation process; and (iii) was a fast growing company.

The article is composed of five different sections. First, a literature analysis will be presented, highlighting how the dominant studies focused on business model innovation in the fast-paced technology industry have

underestimated industrial settings in which other ways to innovate business models have emerged. Due to this gap in the literature, a case study analysis research strategy is proposed in the second section, where the field of analysis has been identified in design-intensive industries because business model innovation in these industries has been able to confer new roles and functions to the customer.

In the third section, the LAGO case study is developed, pinpointing the product design strategy that is coupled business model innovation.

A discussion is advanced in the fourth section, where some evidence and insights based on the case study analysis support the development of a relational business model innovation approach.

In the final section, the conclusions, the main limitations of the research and new and promising research strands are proposed.

2. Theoretical background and research questions

As can be expected by delineating the meaning of the business model in the web economy, the concepts of *flow* and *relationship* are significantly stressed in both cases. In other words, a business model represents the device by which the main flows and the company's web of relationships are designed, aiming to create benefits for the different participating actors.

In their attempt to extend the business model concept by trying to go beyond the foundation originally centered in e-business, Amit and Zott (2001) define the business model as "the content, structure, and governance of transactions designed to create value through the exploitation of business opportunities."

Even in this case, through the term *transaction*, scholars pinpoint the relational rationale underpinning the business model concept in which the exchange and interactive dynamics prevail.

Recalling the basic business question advanced by Drucker, Magretta (2002) describes business models as "stories that explain how enterprises work. A good business model answers Peter Drucker's age-old questions: Who is the customer? And what does the customer value? How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?" Here, the concept of the customer, customer value and money making are intended to be constitutive business model elements.

Other scholars have grappled with the attempt to split a business model and to identify its various components.

According to Osterwalder et al. (2005), "a business model is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm. Therefore we must

consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is performed and with which financial consequences.”

In an initial proposal, these authors identify four main pillars – the product, the customer interface, the infrastructure management and the financial aspects – around which some “building blocks” are identified.

In a later release, Osterwalder and Pigneur (2010) directly proposed a “nine building blocks business canvas” (i.e., value proposition, channels, customer relationships, customer segments, revenue streams, key activities, key resources, key partnership, cost structure).

Other scholars have provided a more compact version. Specifically, business model based on six elements has been depicted where value proposition, customers, internal processes/competencies, external positioning, the economic model and personal investor factors constitute the key elements of the model (Morris et al. 2005).

On the one hand, Voelpel et al. (2005) mention three basic components of a Business model: value proposition for customers, value network configuration to create that value, and returns ensuring the satisfaction of relevant stakeholders and, thus, the sustainability of the business model.

On the other hand, a business model concept based on four characteristic elements (customer value proposition, profit formula, key resources, and key processes) has been defined (Johnson et al. 2008), pointing out the interlocking logic among the different elements.

Tab. 1 - Literature review

Authors	Focus on
Timmers (1998)	Product, service and information flows, business actors
Weil and Vitale (2001)	Roles and relationships among a firm’s consumers, customers, allies, and suppliers
Amit and Zott (2001)	Transactions
Magretta (2002)	Customer value, economic logic, value delivery
Von Hippel (2005)	Participation in the elaboration of the design of a product, “lead users” and “user toolkits”
Morris et al. (2005)	Value proposition, customer, internal processes/competencies, external positioning, economic model and personal investor factors
Osterwalder, Pigneur, Tucci (2005)	Product, customer interface, the infrastructure management and the financial aspects
Voelpel et al. (2005)	value proposition, value network, returns
Johnson et al. (2008)	customer value proposition, profit formula, key resources, and key processes
Osterwalder, Pigneur (2010)	value proposition, channels, customer relationships, customer segments, revenue streams, key activities, key resources, key partnership, cost structure

In any case, the different attempts to identify the components the transactional and relational dimensions of the business model are depicted as fundamental. The concepts of “customer value proposition,” “customer value,” “customer segments,” “key partnership,” and “customer relationship” reference the interactive and relational dimensions of the core of the business model.

Literature related to defining the business models and their main building blocks is indeed dense and rich, but there is an evident gap in the business model *innovation* literature.

A primary research strand emphasized how business model innovation is induced by or mainly related to technological innovation.

As stated by Teece (2009), “technological innovation often needs to be matched with business model innovation if the innovator is to capture value.”

Furthermore, new business models have been usually connected to new R&D strategies. In “Open Business Models,” Chesbrough (2008) affirms: “an open business model uses the new division of innovation labor – both in the creation of value and in the capture of a portion of that value. Open models create value by leveraging many more ideas, due to their inclusion of a variety of external concepts. Open models can also enable greater value capture, by using a key asset, resource, or position not only in the company’s own business but also in other companies’ businesses.” The author, going beyond the integrated company concept in which R&D and exploitation are equally run, identifies two ways to build open business models: (i) the inside-out approach, where ideas, patents and copyrights are internally produced and then licensed to external actors that take them on the market; (ii) the outside-in approach, where companies grasp ideas and technologies from external networks turning them into products to commercialize on the marketplace (Chesbrough, 2006).

Both approaches tend to stress “openness” as a dominant way to innovate business models in a successful and profitable manner.

In contrast, Johnson et al. (2008) cite real successful cases as Hilti, Intuit, and Apple, who have anchored their business model innovation mainly in value proposition change, where companies generate new customer value propositions thinking about the “foremost barriers keeping people from getting particular jobs completed: insufficient wealth, access, skill or time.”

Another strand definitively relates business model innovation to the way goods and services are purchased and accessed by the customer.

Firstly, Markides (2006), claiming for the “need of a better theory,” emphasizes the difference between disruptive innovations and business model innovations, pinpointing how the latter tend to basically change competitive rules and “enlarge the existing economic pie,” either by attracting new customers into the market or by encouraging existing customers to consume more. Furthermore, according to the author, “(...) it is important

to note that business model innovators do not discover new products or services; they simply redefine what an existing product or service is and how it is provided to the customer.”

Consistent with this approach and centering on the transaction dimension, Zott and Amit (2008) also interpret business models as innovative ways in which economic exchange is explored and run. Employing the words of the authors: “novelty-centered business models refer to new ways of conducting economic exchanges among various participants. The conceptualization and adoption of new ways of conducting transactions can be achieved, for example, by connecting previously unconnected parties, by linking transaction participants in new ways, or by designing new transaction mechanisms” (Zott, Amit, 2008).

The vision that business model innovation occurs when changes are made in the way to conduct transactions, to create and deliver value and to build up new customer relationships is indeed widely accepted.

Mainly in service sectors and in the fast-paced technology industry, different business model innovations have been conceived, reconfiguring the customer’s role in the productive process. Starting from the customer active paradigm (Von Hippel, 1978) where the manufacturer switches from a framework of perceiving needs to a framework of perceiving and screening ideas, following the “lead user” concept for new product development (Von Hippel 1986), the customer represents an important resource to help the firm to innovate (Von Hippel, 1988). In 2005, Von Hippel specified his understanding of what he labels as “user driven innovation” and mentioned the concepts of “lead users” or “user toolkits”. Hippel explained how customers could participate in the elaboration of the design of a product. Indeed, relying on end-users competences to generate new ideas and develop innovations proves to be very effective (Lilien et al., 2002; Von Hippel and Katz, 2002) In the works of McKelvey (2001), Verganti and Pisano (2008) Johnson et al. (2008) innovation involves the customer as a collaborative producer in both products (Simonson, 2005 and Franke et al. 2009, Dahl and Moracu, 2007) and services (Yi and Gong, 2013). The advent of a user-generated content movement, the diffusion of social media and Web 2.0 technologies (Tredinnick, 2006; Wagner and Majchrzak, 2007; Yanbe et al. 2007) and the emergence of skilled and well-educated customers has enabled whole crowds or single users to heavily collaborate in the production processes of companies. According to this framework, the customer is a company productive or co-developing partner that jointly affects the evolution, the costs and the benefits of the business ecosystem.

With Apple, iPhone users are free to conceive and hopefully sell their own apps; in the Linux operating system, people take part in writing codes and strings to optimize the functionalities and the performance of the system; with different low-cost airlines, customers are empowered to accom-

plish check-in activities and most of the luggage handling on their own.

The entire literature aligned to this frame serves the limits usually contextualized in the fast-paced technology industry or in service industry; this literature avoids the relevant distinction between the cases where the customer plays the role of a mere product assembler and the cases where the user represents a creative and cutting-edge solution provider producing a real impact on the essence of the business model.

In design-intensive industries, where the competitive dynamics are driven by a continuous proposition of new product languages and meanings (Verganti, 2003; 2008; 2009), there is a wide lack of literature about the business model and how customers are engaged in business model innovation.

In design-intensive industries, products are more or less open narratives in which customers are involved in defining the product sense and meaning (Krippendorff, 1989; Norman, 2005; Verganti, 2003; 2009). The creation of product meaning seems not to be delegated to the tangible product in itself, but to the entire business model that companies run and to the ways in which customers are engaged in it (Battistella et al. 2012).

Notwithstanding, some questions remain open and fertile to reach a deeper understanding of how companies create business model innovation by leveraging new customer roles.

What is the logic behind customer engagement in design-driven innovation? Which are the emerging patterns in engaging customers in design-intensive industries? What are novel customer roles that could impact on business model innovation?

Due to a lack of previous literature, these research questions are addressed in this paper through the development of a case study analysis.

3. Research strategy

Literature about business model innovation is generally lacking; specifically, there is a gap relative to this topic in industries characterized by different a logic that that of fast-paced technology industries. Furthermore, if design-driven innovation is a concept that has widely permeated the management literature (Dumas, Mintzberg, 1989; Verganti, 2003; 2006; 2009; Noble and Kumar, 2008; Ravasi and Lojacono, 2005; Ravasi and Stigliani, 2012), there is a neglected area of research where design management studies meet business logic and the relevant business models.

This literature scarcity led to explorative research based on a case study analysis (Eisenhardt, 1989; Yin, 1981; 1984; Mintzberg, 1979). According to the words employed by Eisenhardt (1989): "there are times when little is known about a phenomenon, current perspectives seem inadequate

because they have little empirical substantiation (...). In these situations, theory building from case study research is particularly appropriate (...)."

The first methodological issue faced by the research group pertained to the criteria through which to select a particular case study. A primary sample of 25 Italian furniture companies was considered. The sector choice was indicated as a representative field of design-intensive industries where companies mostly compete on the proposition of new product languages and meanings (Dell'Era and Verganti, 2007; 2011).

The sample companies were identified by matching two different criteria: (i) the turnover growth rate in the previous 4 years; (ii) the innovativeness of the business model.

The first quantitative parameter helped to select an initial ranking of ten companies. The final selection of the case to investigate was run according to an open discussion about the concept of "innovativeness of the business model." This concept was discussed in a research group of 5 scholars of Politecnico di Milano and University of Torino (2 Assistant Professors in the Design area; 2 Associate Professors in the Innovation Management area; 1 Full Professor in the Business Innovation area).

The concept of innovativeness was split according to two main dimensions: (i) the depth of the innovation, intended to indicate how much the transactions flows and the company-customer relationship changed in business models; (ii) the breadth of the innovation, intended to indicate how many components of the business model have been affected by change with respect to the traditional sectorial trends.

The selection indicated LAGO as an intriguing case of business model innovation, where both the levels of depth and breadth of innovation were agreed to by the members of the research group.

As required by theory building based on case study, a combination of multiple sources and investigation methodologies was employed to achieve a certain robustness and extensibility of the results (Yin, 1981; Eisenhardt, 1989).

The case study analysis was conducted over a period of one year and 5 months, involving three main sources in an iterative way:

- a press analysis conducted on following 26 journals and design-related magazines in the time range 2009-2013

Magazine	Number of articles
Abitare	2
Ottagono	2
Wallpaper	2
Interni	20

- five in-depth interviews, three of which were conducted with the LAGO CEO, Daniele LAGO, and two were conducted with an external consultant architect, Massimo Antinarelli;
- participation in four workshops and events organized by the Brera LAGO Apartment, located in Milan.

The press analysis supported a primary understanding of the LAGO business system. Different articles (18 of 26 articles) emphasized both directions of innovation pursued by the company: innovation in the product and in the overall business model. A great amount of attention (15 on 26 articles) and space has been dedicated by the press to the LAGO Apartment network and its novel ways of engaging customers and building new relationships.

These initial understandings derived by the press analysis supported the formulation of the main issues and questions that were explored in the subsequent interviews.

Interviews focused on the following aspects:

- driving forces that supported innovation in the business model;
- product design strategies and creativity management;
- innovative concepts related to the LAGO business model;
- logics to engage and manage relationships with customers;
- distributive policies and the LAGO Apartment network.

Following these interviews, researchers' participation in four workshops and events organized by LAGO was encouraged to assess the atmosphere and the social interaction among the different involved actors.

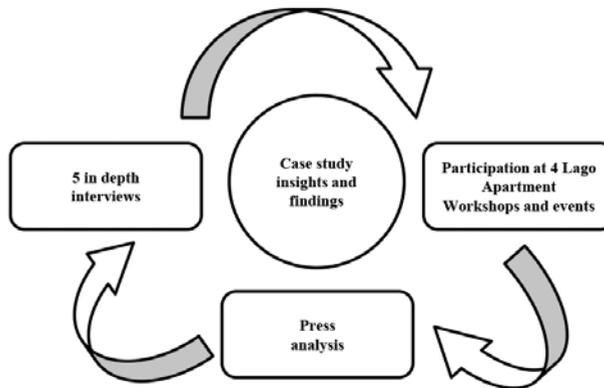
Different assessments were taken, aiming to identify qualitative customer profiles, the type of events held and how customers are involved in relevant activities (workshops, events, artistic performances, etc).

Three data sources have been employed in an iterative way. Primarily, a first cluster of articles (15) were read to grasp an overall understanding about LAGO's innovation and design strategy and its underpinning business model. The main concepts derived by reading the articles supported the formulation of an open-answer questionnaire submitted to LAGO's CEO and architect consultant (2 initial interviews). The questionnaires supported the first development of concepts and some main findings about the form and the logic of the business model and the company's logic of customer engagement. Following the administration of these questionnaires, the researchers' participation in three main events and workshops organized by LAGO Apartment helped to qualify a direct experience with the concepts and findings related to the tenants' and participants' experience.

A second iterative flow, mainly focused on additional articles, readings, and three more interviews, supported the refinement of the concepts studied, and a final confirmation of findings and main concepts were derived by the last of the series of interviews. In this paper, only a brief essay is

presented to highlight the focal points related to LAGO's product design strategy, business model, logic, and pattern of customer engagement.

Fig. 1: iterative research process



4. Case study: LAGO

LAGO was founded at the end of the nineteenth century by Policarpo LAGO, a wood craftsman who worked in aristocratic homes and Venetian churches. The generation that followed continued his tradition, but expanded their production first to bedroom furniture and later to entry-way furniture. . Today, LAGO is considered a fast-growing company in the furniture design landscape, where it grew from approximately 5 million € of turnover in the first two years of the company's redesign to 30 million € of turnover in 2010, with approximately 170 employees (of which over 25% were hired in 2008).

LAGO can be found in 400 selected shops around the world and has numerous mono-brand stores in several Italian and European cities, including Rome, Milan, London, Paris and Barcelona. Lately, the company began some fertile ventures with partner leaders in the same sector to enlarge their range of products and share the pursuit of people-friendly designs, thus creating solutions that can improve the customer's quality of life.

Recently, the company has opened itself to the skills of craftspeople and designers to retrieve the importance of handwork ability, local embedded know-how, and care for detail. This was the beginning of the "LAGO Objects" collection, a set of small objects of high quality and craftsmanship.

The entire LAGO business model is based on two main pillars:

- an innovative product design strategy, fostered by the LAGO STU-

- DIO, the creative hub where young, external and talented designers are engaged to conceive new product propositions;
- an innovative customer engagement model, based on the creation of a diffused network of LAGO APARTMENT, where LAGO-furnished apartments of specific customers operate as showrooms and product-diffusing vehicles.

At LAGO, products are conceived as parts of an alphabet. Each product combined with other parts can form a proper language. The combination of the product language is delegated to the hands of the customer. Products are conceived as an open or unfinished work, a sort of narrative that assumes sense on the basis of the successive “reader” interpretation. The products’ modularity and their openness and flexibility to be adapted to different contexts permit a full interpretation by the customer-reader (Figure 2).

Fig. 2: Slide carpet by Lago



The other feature of the design strategy consists of conceiving product systems. Going beyond the logic of the single protagonist product, LAGO proposes products be aggregated in a way to suggest a proper whole language, a coherent and organic mood of living and domesticity. Products are conceived as a part of systematic dialogue where each one relates to others in terms of color, sense, shape, and texture. LAGO offers a language bundle more than independently designed products.

Practically, this means that the company considers space as a system in which furniture products communicate with each other. At LAGO, design means creating small designs (products) and, at the same time, knowing how to create large designs (design systems) by looking at the home and its habitability as a whole. The creation and the design of new product platforms and languages is entrusted to an external creative hub, LAGO Studio. LAGO Studio is the company’s temporary environment in which

different cultures and geographically dispersed people meet to generate new concepts and products.

In fact, LAGO organizes a yearly creative workshop, hosting young university students and designers from around the world and schools such as Saint Martin's, London Royal College of Art, Eindhoven Design Academy, and Milano Domus Academy. The main logic behind these workshops consists of engaging young and inexperienced designers to dive into LAGO's philosophy and to contribute to developing new design systems and single products.

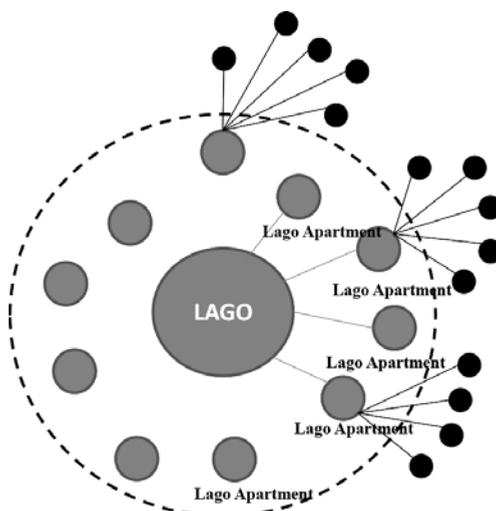
4.1 Three hats for the customer

The development of the LAGO case study pinpoints how the customer is a basic part of the LAGO business model.

Far from the "productive function" highlighted in fast-paced technology industries, where the customer plays the role of a collaborative productive partner, at LAGO, customers are engaged according to other logic and functions.

First, the customer seems to act as a market bridge for the company. The tenants of the LAGO Apartment network form an "inner circle" aiming to access different market segments. Leveraging their own relationships or directly supported by LAGO in multiplying contacts and meeting opportunities, the tenants represent a contact gate through which to experience a real LAGO Apartment with a proper mood, language frame, living space and organization.

Fig. 3: The Lago Apartment network as market bridge



In cases where the tenant is also an architect or a designer, the value of the relationship is even more evident. The professional tenant interested in enlarging his customer base and work opportunities can leverage being at the center of an open network that naturally attracts customers interested in design and architecture.

In addition, tenants are engaged as design innovation promoters. When customers send their projects to enter and take part in the LAGO Apartment network, they provide new and inspiring knowledge for innovation. They do so by proposing completely fresh product combinations and languages or by radically proposing new LAGO moods and settings by reinterpreting existing product languages and meanings. LAGO Apartments, according to this role, can be depicted as extended “design laboratories” oriented towards grasping innovative signals and generating fresh insights (Dell’Era and Verganti, 2009). These roles directly impact the LAGO business model.

The last role of the tenant definitively impacts the innovation process. The sketches, drawings and designs sent by customers in their applications to become LAGO tenants continuously provide the company with a knowledge base affecting the trajectories of product language innovation.

Tab. 2 - The three roles played by the customer in Lago business model

Customer as	Function	Direct impact on
Market bridge/ Commercial partner	Connection with potential users	Revenues
Showroom	Product placement, “living” exhibition	Reduction of communication and exhibition costs
Design innovation promoter	Exploration of new design patterns and product languages	Innovation trajectories Inspiring knowledge base

Different management actions could be considered to sustain and develop the customer’s new roles. First the organization’s ability to connect different customers into the same role would be useful to inspire, promote and stir the customer to feel part of the design-driven community. Customers co-create their show room, communicate the events to exhibit their apartment, get inspired by other costumers over the country and increase the network. In this way, customers take part in a co-design process using the modularity of LAGO’s product portfolio.

Second the policy to discount the furniture acquired by the tenants of Lago’s apartments may reduce entry-cost barriers due to the medium-high level of product price.

Third Lago’s design innovation strategy represents an opportunity for customers to increase their experience, skills and capability in an innovative framework where technology and creativity are mixed together to create original and customized products.

5. Discussion

The presented LAGO case study evidence at least three key issues in business model innovation.

First, for long time, business models and innovation have been considered as two different aspects pertaining to the company's management and function. Business models as related to "value creation and capture" have been analyzed as operational devices mostly pertaining to the ordinary survival and the operating company routine. Contrarily, innovation has been framed as a changing activity oriented to move company assets, strategy and value creation means towards thriving and superior performance levels. In other words, a business model relates to *exploitation*, whereas innovation equals *exploration* (March, 1991).

This clear-cut separation seems to lose its validity. As evidenced by LAGO, the business model and innovation are intertwined concepts. LAGO innovatively created its own business model, changing the typical value drivers in the furniture industry and at the same time, its business model fosters continuous innovation because some of its constituent elements – i.e., the LAGO apartment network – feed stimuli and insights to the company about sociocultural models and new emerging patterns in terms of product languages and meanings.

The business model in LAGO's case not only guarantees value creation but it also works as an engine aiming to update and revamp product languages and meanings.

The intertwined relationship between the business model and innovation activities proposes different questions about the *locus* and management of R&D. At LAGO, R&D is spread out into three main moments and entities: LAGO Studio is the creative platform in which foreign and other talented designers seek for new concepts and products languages; the LAGO Apartment network feeds stimuli and insights handled and systematized to build design briefs and inspirational knowledge for LAGO Studio designers; the internal department solves technical issues and drives concepts towards the manufacturing process.

More than an open innovation pattern (Chesbrough, 2006), the LAGO business model enables a diffused R&D system in which the LAGO apartments play the role of explorative and diffused design labs, feeding cultural insights, product languages and inspirational apartment language moods.

A second finding that emerged from the case study deals with the scope and "object" of design-driven innovation. Design-driven innovation has traditionally related to the product scope (Verganti, 2003; 2009; Noble and Kumar, 2008). Product meaning and language change has been framed by scholars as a change of some tangible product elements such as shape, material, texture, color, joining relationships, and finishing (Dell'Era and Ver-

ganti, 2007; de Bont et al. 1992; Person et al. 2008; Ravasi and Stigliani, 2012; Noble and Kumar, 2008).

In LAGO, however, design has been applied to the entire value system and business model. Design is progressively being employed to innovate services, intangibles, applications, and interfaces (Morelli, 2002; Manzini and Vezzoli 2003; Brown, 2008). The dematerialization of offerings is driving companies and designers to enlarge the design action range from a product and tangible dimension to the overall value system, where business models take up a prominent role (Osterwalder and Pigneur, 2010). This point seems to strengthen a literature strand at the intersection between design and management studies labeled “design thinking” (Brown, 2008; Dorst, 2011; Martin, 2009), where creativity and lateral thinking, with a proper mindset, knowledge and cognitive tools, foster the value of organizational innovation.

A third piece of evidence linked to this second point addresses the specific direction of business model innovation. LAGO introduced a novel business in the furniture industry, reconfiguring the customer relationship system and the logic of customer engagement.

In a sector such as furniture, where fragmented and small distributive players or large low-cost malls prevail, LAGO revamps the customer relationship by introducing a familiar concept – the apartment – and provides the customer with three novel roles and functions.

These new roles and functions set the customer as a key asset in creating the LAGO business model and in boosting and stimulating the innovation process.

Recalling some new productive roles attributed to customers in fast-paced technology industries, business model innovation through the alteration of company relational systems is becoming a critical outpost in innovation management studies and practice

Assuming a more general perspective, business model innovation through the alteration of the company relational system can be framed according to main variables or “objects to change”: the actors and their roles.

According to this framework, business model innovation can be fostered by:

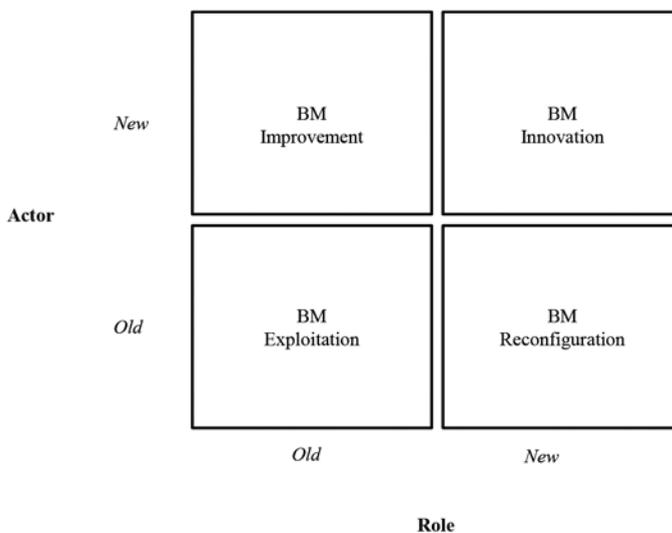
- changing the *actors*, when new actors (customers or stakeholders) are included in business models as providers of new assets or activities;
- changing the *roles* of actors, when the same or new actors are provided with novel roles in the value creation process.

The matrix below shows four different business model strategy options (Figure 4):

- business model exploitation, where companies basically change only the product-service offering and leave the transaction and relational systems unaltered;

- business model improvements, where companies change one or some key partners in the value system to shift the transaction and exchange logic;
- business model innovation, where companies change both actors and roles, radically shifting novel business logic and transaction architecture;
- business model reconfiguration, where companies confer to new roles to existing actors, partially changing transactional structures and exchange logic.

Fig. 4: business model innovation approaches based on a relational perspective



The proposition of this theoretical frame tries to enlarge the perspective of business model innovation as mostly depicted in fast-paced technology industries where a robust research strand provides a dominant view in which business model innovation is mainly based on “openness” and on a collaborative production function exerted by the customer. Based on a case study methodology approach, the proposed framework aims to enlarge the range of study of business model innovations towards other industrial settings and competitive environments to deepen existing knowledge and seek new findings.

In the conclusion below, the limits of this research are highlighted and some possible new research directions are proposed.

6. Conclusions

Business model innovation has undergone deep changes due to the different ways to engage stakeholders and partners in the company value system. Innovating business models through opening them to a wider group of stakeholders has become more than a fad. Consolidated literature in the fast-paced technology industry focused on the different ways to engage external partners as co-developers or collaborative producers.

Design intensive industries, where companies compete through the creation and the diffusion of new product languages, symbolic values and meanings have been traditionally neglected, leaving a research gap in understanding other additional business model innovation trajectories where products are framed as “open narrations” and the customer is a “sense giver” more than user enticed by product functionalities and performance.

The analysis of LAGO as a case study notes how the customer is basically a key asset of LAGO’s business model. LAGO’s case shows how customers can assume roles different from those of co-developers or collaborative producers.

LAGO pinpoints how business model innovation can be fostered by engaging customers with new roles and logic. At LAGO, the customer acts as the company’s market bridge, forming an “inner circle” that enables the company to access different market segments. The apartment of the tenant-customer furthermore acts as an exhibition platform where events and workshops are organized to host potential customers in a sort of “living showroom.” Additionally, customers, by submitting their “apartment ideas” to the company, provide their own perspectives and moods for LAGO apartments, acting as an external design lab and innovation promoters.

These highlighted customer engagement tools mainly show how other business model innovation trajectories are pursued in industries that are different from the logic pursued by the fast-paced technology industry.

The limits of the demonstrated insights and findings are related to the development of a single case study.

However, several signals by which to interpret other ways to innovate business models according to new customer engagement rules cannot be neglected.

As outlined in the LAGO study, new directions of business model innovation are even aligned with new R&D management systems. LAGO apartments become external platforms, design labs or antennas through which part of the R&D process is managed by a community of architects, designers, and customers.

The outcome of these design labs is a sort of inspirational knowledge that feeds the LAGO Studio creative hub and internal technical offices.

Future research can deepen the knowledge surrounding new roles and

functions of the customer in innovative companies' business models. A further investigation could strengthen the presented insights by exploiting a quantitative analysis on a wider case sample.

Moreover, extending the research questions and the framework of this study to other fast-paced design industries, e.g., the fashion industry, where the evolution of product language and meanings is particularly rapid, could provide additional findings about the logic of customer engagement in business model innovations.

Furthermore, the rapid emergence of fashion and the changing role of distribution within the fashion industry could provide additional rules for customer engagement and rich new insights about relationship-based business model innovations.

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Riassunto

L'articolo si focalizza sulle nuove modalità di coinvolgimento del cliente e come queste possono impattare sui modelli di business delle imprese design-intensive innovative.

Il continuo cambiamento del contenuto intrinseco e del linguaggio del prodotto che sta interessando i settori design-intensive inducono il cliente ad assumere un differente ruolo caratterizzato da un coinvolgimento molto più ampio e proattivo. L'evoluzione di questo nuovo ruolo è analizzata attraverso lo studio di un caso d'impresa in crescente sviluppo nel settore dell'arredo casa.

Il caso analizzato propone tre differenti declinazione del nuovo ruolo del cliente che possono influenzare il modello di business: (i) il cliente come "ponte" verso il mercato (ii) il cliente come "show room" che utilizza la propria casa come "vetrina" (iii) il cliente come "laboratorio di design esterno" dove progettare e sperimentare nuove soluzioni di arredo.

Abstract

Framing business models as relational devices governing transactions with the customers and stakeholders, the current article aims to identify new rules of customer engagement and their impact on business model innovations in design-intensive industries. These industries, characterized by a continuously changing product language and meaning, sees the customer as a product "sense giver," an interpreter of the meaning, the cultural and symbolic messages attached to the product. In this setting, new customer roles are explored through a case study analysis based on a fast-growing company operating in the furniture sector.

The case study analysis highlights three main customer roles that impact business models: (i) the customer as a market bridge, where the customer attracts new potential contacts and customers; (ii) the customer as a company "show-room," where the customer's home setting is designed to convey the company's product language mood; (iii) the customer as an external company design lab, where the customer continuously submits and fosters new language moods and product propositions.

JEL Classification: M-Business Administration and Business Economics; Marketing; Accounting

Keywords (Parole chiave): business models, design, innovation (modelli di business, design, innovazione)

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