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Customer-Integrated Business Models: A Theoretical Framework

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Customer-Integrated Business Models: A Theoretical Framework

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ABSTRACT
Over the last few years, firms have involved their customers increasingly in different goods- and services-related processes (design, production, delivery, etc.). A corollary of this trend towards increasing integration of the customer has been new organizational choices aimed at generating higher margins, either by increasing revenues or by reducing costs. In other words, thinking about the ways in which the customer can and should be mobilized has mirrored fundamental changes in business models (BMs). However, the academic literature on the BM concept has remained relatively scarce so far (Demil & Lecocq, 2008). In particular, it seems that no study has thus far tackled the issue of customer participation in the BM.

Customer participation has been the focus of much research in the field of services marketing and management. This literature considers the customer as an active player, going beyond traditional perspectives of the customer as a mere buyer Still, the customer's impact on the firm's ability to generate revenues, and thus on the firm's BM, remains unknown.

This paper aims to provide a theoretical framework for the way in which firms can and should integrate their customers into their BM. Combining BM and customer participation literatures, we develop a theoretical framework for what we label the "Customer-Integrated Business Model" (CIBM), a generic BM based on customer participation. Our model relies on the RCOV (Resources and Competences, Organization, Value Proposition) of Demil & Lecocq, 2010. In a CIBM, the customer is considered as a resource. This has significant consequences, both on the two other components (Value Proposition and Organization) and on the interrelations between the three parts of the model. We exemplify this theoretical framework with two case studies based on secondary data. We conclude by addressing the potential limitations of CIBM.

Keywords: Business models, customer participation, customer-integrated business models, customer's organizational socialization

INTRODUCTION

When, in 2003, the Danish toy-building company Lego announced a €188 million loss, it decided to revisit its organization and strategy to fight back. In particular, the firm chose to involve its customers in the conception of its products so that they offer a better fit with their expectations. Hence, their customers have become actual co-creators of Lego's products, and Lego mentions this on the boxes of the toys that result from collaboration with its customers. It is partly by dint of this decision that Lego's sales and results have dramatically improved: in 2007, the company made a €138 million profit, proving how advantageous it could be to involve its customers in its activities. The cases of Amtrak (a US railroad company) and Royal Mail (a UK postal services firm) are also interesting to study. Thanks to the development of self-service through interactive voice response systems, i.e. by outsourcing a part of the service given by the company's employees to their customers, the former saved $13 million, while the other reduced its service costs by 25% (Salomann, Kolbe, & Brenner, 2006).

These cases are but mere examples of a major trend in the way firms have been developing their business models (BMs) in recent times. Indeed, inspired by trends in open-source communities (e.g. Von Hippel & Von Krog, 2003), increasing numbers of companies have decided to have their customers participate in the design, production or delivery of their products. Such a move has been made possible, notably, by the growth in use of the internet and technological change in general (Prahalad & Ramaswamy, 2004). This means that firms have to create and nurture appropriate BMs that will enable them to make the most of their integration of customers into their activities (Holland & Becker, 2001). Thus, research on this topic is needed to help firms to improve their ways of incorporating the customer into their own internal resources and competences.

Yet, even though a number of changes have been occurring over the last few years, structured and formalized academic research on the BM concept is still in its infancy (Lecocq, Demil, & Warnier, 2006). Above all, to the best of our knowledge, there has been not yet been any systematic study dealing with the various potential roles of the customer in the BM, i.e. the ways in which firms may rely on their customers to generate higher margins by increasing revenues or decreasing costs. This may seem all the more surprising since manifold empirical evidence suggests that such trends exist, as we mentioned earlier. Academic contributions about BM mostly consider the customer as a mere buyer of the firm's products.

On the other hand, a great deal of literature has been published in the field of services marketing and management on the concept of customer participation, i.e. the way in which the customer participates in conception, production and delivery processes. Nevertheless, the majority of such studies deal with issues related to the use of quality, satisfaction, and loyalty improvement to generate competitive advantage. It seems that no research has dealt with the relationship between organizational issues raised by customer participation and the cost and revenue dimensions.

The aim of this paper, then, is to try to shed light on how and where the customer fits into the BM. In the first section, we underline the gaps in the BM literature where customers are concerned, and highlight the reasons why it is necessary to reintegrate them. The second section presents the concept of customer participation, the motivations of the customer to participate, and the ways in which firms can turn the customer into a resource. The third and final section presents a theoretical framework for what we call the Customer-Integrated Business Model (CIBM), a generic BM based on customer participation, which we exemplify with two case studies: Build-A-Bear Workshop and www.mymajorcompany.com.

THE CUSTOMER IN THE BUSINESS MODEL SO FAR

In this section we define the BM and look at the evolution of the concept over the last ten years. Then, we discuss the place of the customer in the BM literature and demonstrate the need to reintegrate them into the analysis.

The BM concept

The BM concept has been developing since the end of the 1990s due to the need for new ventures in the internet industry to explain to investors how they will generate revenues (Eisenmann, 2002) but also due to various strategic innovations in terms of activities or sources of revenue from incumbent firms. Nowadays, even big companies are urged by institutions such as the International Accounting Standards Board (IASB) to be able to describe their BMs to stakeholders. Indeed, as noted by Magretta (2002), the foremost strength of a BM is that it tells a story about the business. In more abstract terms, taking what is often labelled as the “ontological approach”, the BM is an operational tool expressing the business logic of an organization (Osterwalder, 2004). This story or this representation of an ontology may be seen as a convention between partners concerning the generation and sharing of value among stakeholders (Verstraete & Jouison , 2007).

Timmers (1998) is one of the first authors to have proposed a definition for BM. He states that “a business model includes an architecture for the product or service, an information flow, a description of the benefits for the business actors involved, and a description of the sources of revenue” (Timmers, 1998). During recent years, BM has essentially been related to value creation and appropriation. Thus, according to Shafer, Smith, & Linder (2005), the BM is the representation of a firm’s underlying logic and strategic choices to create and capture value within a value network. Nowadays, BM is essentially a matter of revenue generation (Weill, Malone, D’Urso, Herman, & Woerner, 2004; Tikkanen, Lamberg, Parvinen, & Kallunki, 2005; Demil & Lecocq, 2008). The BM spells out how a company organizes itself to make money. In the most basic sense, a BM is the method of doing business by which a company can sustain itself – that is, generate revenues (Rappa, 2003). The concept is now crucial for entrepreneurship and constitutes a very promising prospect of strategic management, based on a pragmatic and innovative approach. Rather than traditional competitive advantage, the BM approach stresses the revenue-generation process and its consequences on profit. For instance, according to Afuah (2004), BM handles the simple question of "How to make money in my industry?"

Following Lecocq et al. (2006), we define BM as a consequence of the choices made by an organization (whether for profit or not) to generate revenues in a broad sense (turnover but also royalties, rents, interests, subsidies, etc.). These choices encompass resources and competences to value, goods and/or services supplied and the internal and external organization of the business. As such, BM approach encompasses operational elements whereas traditionally strategic management and operations are distinguished or opposed (e.g. Porter, 1996). This integrative approach gives a crucial role to the implementation of and congruence between elements in the performance of an organization. Moreover, due to its ability to link business strategy and operations, BM is a "meso-level" construct congruent with managers' day-to-day frame of action (Demil & Lecocq, 2008) and a very attractive concept to them (Tikkanen et al., 2005).

Despite the amount of research dedicated to the exploration of the BM concept and to its theorization over the last decade, structured and formalized research is still in its infancy. A lot remains to be explored, and in particular, it does not appear to us that the various roles of the customer have been studied in great depth so far in the BM literature. This could seem all the more surprising as the level of so-called "user-generated content" has been growing very rapidly and customers have increasingly come to constitute a means of producing a good or service but also a value to generate revenues from other actors (for instance in the media industry) by valuing the size of the customers' community or the specific characteristics of the clients. Thus, in the following section, we discuss the role of the customer in the various models proposing a clear articulation of the BM components.

Where is the customer in the BM literature?

An important part of the literature on BM is dedicated to the identification of the key elements to describe it and on which to act to make it evolve. Customers appear to be frequently quoted as one of them.

Thus, Venkatraman & Henderson (1998) define the BM as a coordinated plan to design strategy along customer interaction, asset configuration and knowledge leverage dimensions. Meanwhile, Hamel (2000) considers the BM as the interaction of four axes: strategic choices, resources and competences, customer interface and the shareholders' value network. Chesbrough & Rosenbloom (2002) offer a more detailed conceptualization of the BM encompassing six elements: value proposition for customers, market segment, value chain structure, revenue generation and margin, position in the value network and competitive strategy. Voelpel, Leibold, Tekie, & Von Krogh (2005) mention three basic components in a BM: a value proposition for customers, a value network configuration to create that value, and returns ensuring the satisfaction of relevant stakeholders and thus the sustainability of the BM. According to Tikkanen et al. (2005), the main components of a BM are the relationships network of the firm, the resources and business process operations, and the finance and accounting dimension of the firm. More recently, Brink & Holmen (2007) have formulated two crucial questions to define BM: how is the value created for the customer? And how does the innovating firm appropriate economic value? Thus, for the last 10 years, most research has mentioned the customer as a component of the BM. However, it seems that the customer has essentially been considered as the addressee of an offer or from a more general point of view as the target of a firm's value proposition. Indeed, Chesbrough & Rosenbloom (2002) suggest that the value proposition is a firm's solution to a customer's problem.

Beyond this identification of components, the BM approach also frequently focuses on how pieces of the business fit together in a strategic fit or configurational perspective. As observed by Osterwalder (2004), "a business model is a conceptual tool that contains a set of elements and their relationships and allows expressing a company's logic of earning money". This means that, if we want to shed light on the place and role of the customer in the BM literature, it is necessary to go beyond the mere identification of the customer as a component of the BM. In other words, we also need to study the way in which the customer is connected to the other constituents of the BM. To do this, we rely on the following three models of the BM.

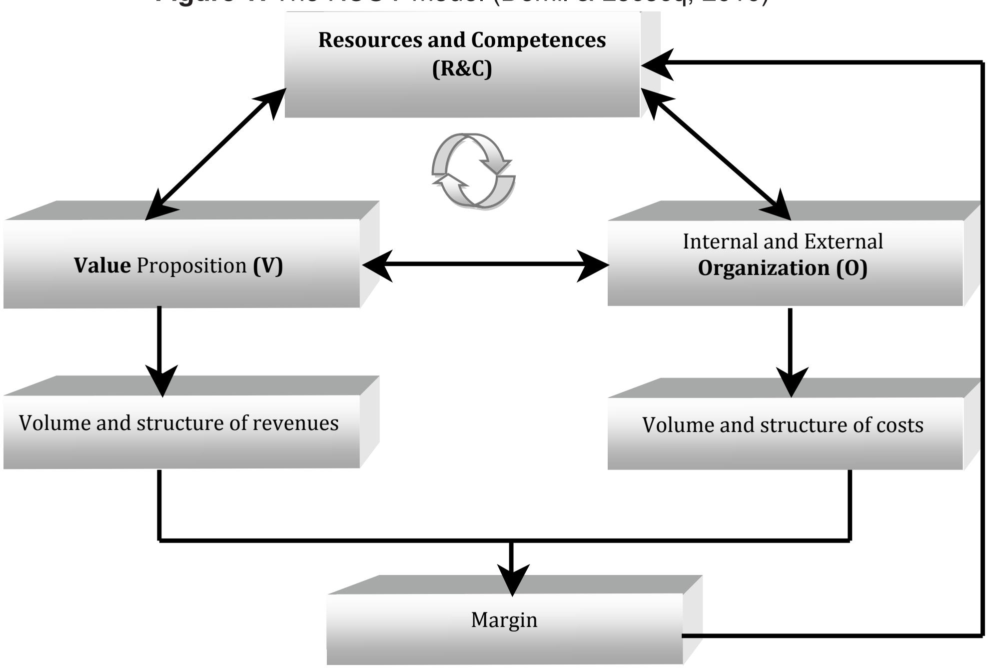
Firstly, we consider Osterwalder's model (2004), which is one of the most detailed. It is based on four blocks (infrastructure, offer, customer, finance) which include a total of nine components. The infrastructure (internal and external organization, i.e. value chain and value network) generates costs, but makes it possible to create a value proposition (an offer) for customers as well. In this model, customers are merely the target of the value proposition and the origin of revenue streams. They are neither a part of the infrastructure nor an actor involved in the definition of the offer.

Yip (2004) proposes another interesting model that emphasizes the transformation and the distribution processes of the firm. In this model, the customer is at the end of the whole process of production and distribution. Yet, once again, the customer receives the firm's output through distribution channels without any potential role of "content generator".

A third approach of the configurational perspective of the BM is the RCOA model (Lecocq et al., 2006; Demil & Lecocq, 2008; Volle, Helies-Hassid, & Sabbah, 2008), which was further refined as the RCOV model (Demil & Lecocq, 2010). The basic assumption of the RCOV model is that a firm builds its BM by making various choices to generate revenues (Figure 1) in a broad sense (turnover, royalties, rent, interest, subsidies, asset handovers, etc). These choices encompass resources and competences to value (Resources and Competences),

the value proposition from the firm to its customers (Value Proposition) and the internal and external organization of the business (Organization). The Resources and Competences are valued through the supply of products or services on markets. The organization refers to the choice of operations that an organization deals with itself (its value chain) and the relations it establishes with other organizations (its value network, including suppliers, customers, competitors, regulators, etc).
In the RCOV model, these three basic elements (Resources and Competences, Value Proposition, Organization) determine the structure and the volume of costs and revenues of a business and therefore its profit margin (thus, the sustainability of the BM). More precisely, the cost structure is essentially driven by the organization a firm deploys. The revenue volume and structure depend above all on the products and services it offers to its customers.
In the RCOV model, the customer is not an element of a BM. However, the authors mention that the customer may be a constituent of the external organization (the "Organization" dimension of the model).

Figure 1: The RCOV model (Demil & Lecocq, 2010)



Finally, it appears that even if most of BM definitions mention the customer, they only regard him as a revenue yielder to whom the value proposition is addressed. The configurational perspective of the BM and the various models proposed to describe the relations between BM constituents confirm the absence of the customer from the main firm processes and the implicit negation of its ability to be a "content generator" in the BM literature.
However, beyond general frameworks aiming at theorizing BMs, more specific work handles the integration of the customer into the innovation

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or production process of a firm. Thus, Von Hippel (1988, 2005) underlines the potential role of the customer in helping the firm to innovate. Other authors stress the importance of users in the production of a good within open-source communities (e.g. Von Hippel & Von Krogh, 2003) characterized by an intertwining of the "producer" and "customer" roles (Demil & Lecocq, 2006). More recently, the burst of "Web 2.0" technologies has provided a much more significant base of distributed intelligence which firms are increasingly trying to access and benefit from. Jeff Howe (2006), an editor of Wired, has forged the term "crowsdsourcing" to designate this phenomenon, which he defines as "the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined - and generally large – network of people in the form of an open call". While empirically at play in many industries, crowdsourcing has seldom been studied by researchers until now (a notable exception being Chanal & Caron-Fasan, 2008). In the same vein, Chesbrough (2006) has elaborated on the concept of "open BMs", which qualifies the means by which a firm can create and capture more value through the openness of the innovation process to various partners, including customers.
Whilst they are rich and interesting sources of ideas, none of these works provides a general framework for studying the different types of potential customer contributions. Nor do they study the different types of customer integration into the firm's processes and their impact on infrastructure. Indeed, some of them are primarily concerned with the general idea of openness and thus deal with external inventors, partners' firms, and intermediaries rather than customers. Others are limited to one kind of customer participation (such as innovation) or one kind of customer (e.g. users' communities). The studies in question do, however, illustrate the need to integrate the customer into the BM. More specifically, there is an obvious need for a general theory that sheds light on the various processes at work in the BM when integrating the customer. This is all the more crucial when a growing number of firms have been implementing what we term Customer-Integrated Business Models (CIBM), in which the customer plays an important role.
However, before actually theorizing the CIBM, it is necessary to study how the customer may take part in some of the firm's processes (such as the innovation or production process). To do this, we rely on services marketing and management literature, which has dealt with the concept of customer participation, though without considering it from a BM perspective.

CUSTOMER PARTICIPATION

To participate literally means "to take part in something, in its outcome". Applied to the customer of a firm, it implies an action or a group of actions by the customer, linked to the production of a good or a service. This raises many questions, such as: in what circumstances does this action take place? Is it spontaneous, or provoked by the firm? Why does the customer participate? Etc. The purpose of this section is to cast some light on these subjects. From this standpoint, we focus first on the nature of customer participation. Second, we study more precisely what leads a customer to participate.

The nature of customer participation

To begin with, customer participation is not new, as in 1938, Barnard himself noted the role played by the customer (Novicevic *et al.,* 2006). It gave rise to a lot of research, mainly in the field of services marketing and management, where the way in which the customer can take part in the servuction process to co-produce a service (Eiglier & Langeard, 1987) has been studied. However, not all the publications that deal with the concept of customer participation offer a definition for it. In fact, only a few of them give an explicit definition, while others merely refer to common sense, or to main dimensions (e.g. Fitzsimmons, 1985; Bowers, Martin, & Lucker, 1990; Bitner, Faranda, Hubbert, & Zeithaml, 1997). **Table 1** below shows that the literature does not really acknowledge one clear definition of the concept.

Table 1: A chronological review of definitions of the customer participation concept

Author	Definition
Kelley, Donnelly, & Skinner, 1990: 315	"For many services, the customer is required to contribute information or effort before the service transaction can be consummated"
Dabholkar, 1990: 484	"The degree to which the customer is involved in producing and delivering the service"
File, Judd, & Prince, 1992: 6	"'Participation, as a marketing construct, refers to the types and level of behavior in which buyers actually engage in connection with the definition and delivery of the service (or value) they seek"
Cermak, File, & Prince, 1994: 91	"Participation refers to the customer behaviors related to specification and delivery of a service"
Bettencourt, 1997: 402	"The customer's active role in the production or delivery of a service"
Rodie & Kleine, 2000: 111	"Customer participation (CP) is a behavioral concept that refers to the actions and resources supplied by customers for service production and / or delivery. CP includes customers' mental, physical and emotional inputs"
Namasivayam, 2003: 422	"The consumer's role in production processes, whether it is a service or tangible good"
Hsieh & Yen, 2005: 895	"The extent to which customers provide resources in the form of time and / or effort, information provision, and co-production during the service production and delivery process"
Lusch & Vargo, 2006: 284	"[Co-production] involves the participation in the creation of the core offering itself. It can occur through shared inventiveness, co-design, or shared production of related goods, and can occur with customers and any other partners in the value network"
Vargo & Lusch, 2008: 8	"[Co-production] is a component of co-creation of value and captures "participation in the development of the core offering itself", especially when goods are used in the value-creation process

This table calls for a certain number of comments. First, it exemplifies a chronological trend towards an increasing integration of the customer in the design, production, and delivery of an actual experience, and not only of a tangible good or a service (Prahalad & Ramaswamy, 2000). This development echoes that of the literature on relationship marketing, which insists on creating and nurturing long-term customer loyalty, not only through the quantitative intensification of contacts, but also the development of emotional relationships between the firm and its customer base (Berry, 1983, 1995; Grönroos, 1994; Ravald & Grönroos, 1996). In other words, customer participation has been regarded less as a series of separated and non inter-related transactions and increasingly as an improvement and an extension of contacts between the firm and its customer along the multiple “moments of truth” (Grönroos, 2001) that create value for customers (Vargo & Lusch, 2008).
Second, it makes it possible to bring out the main dimensions of customer participation. In particular, it enables us to identify four important characteristics: the nature of the production in which the customer participates (to what does the customer contribute?), the moment this participation takes place (when does the customer participate?), who it concerns (with whom does the customer interact?), and the nature of customer participation itself (what inputs does the customer bring into the process?).

Nature of the production and moments of customer participation

Firstly, the definitions cited in **Table 1** inform us about the nature of the production in which the customer participates: it can be either a service or a good. As mentioned earlier, most of the research about customer participation focuses on service production, yet some of the abovementioned contributions have highlighted the possibility for the customer to participate in goods production too (Namasivayam, 2003; Lusch & Vargo, 2006). This is nothing new, as from 1978, Von Hippel explained how customers could participate in elaborating the design of a good. Indeed, relying on end-user competences to generate new ideas and develop innovations proves to be very efficient (Lilien, Morrison, Searls, Sonnack, & Von Hippel, 2002; Von Hippel & Katz, 2002). In other words, customer participation is not necessarily tied to service production, but may also concern goods. So the customer can participate in the creation of both goods and services.
Secondly, this table demonstrates when the customer participates in the value chain. We have just specified that this participation may happen at the design stage, which some of the authors quoted in **table 1** confirm (File et al., 1992; Cermak *et al.,* 1994; Lusch & Vargo, 2006). This participation may happen through a process of comprehending customer expectations and preferences, in the course of iterations of submitting new products ideas, concepts or prototypes and analyzing customers’ feedback about these (Joshi & Sharma, 2004). Prior to the production and delivery stages, the customer may also participate in other ways, such as by testing goods or services (Lagrosen, 2005; Matthing *et al.,* 2004; Kristensson, Matthing, & Johansson, 2008). This proves to contribute significantly to value co-creation between the firm and the customer (Edvardsson, Enquist, & Johnston, 2005), even though

it does not go without limitations due to customers' cognitive limitations (Ullwick, 2002).

The customer may participate during the production and / or the delivery stage too (e.g. Kelley et al., 1990; Dabholkar, 1990; Bettencourt, 1997). At this level, the customer may not contribute in the same way in the case of both goods and services. The academic services literature has usually considered production, delivery and consumption to happen at the same time (Lovelock & Gummesson, 2004). Consequently, customer participation in the production process of the service is supposed to mean customer participation in the delivery process. On the other hand, it is harder for a customer to take an active role in the production of a tangible good, whereas he may participate in its delivery, i.e. in the service that completes the good (think of take-away food, for example, where customers are in charge of the delivery to home while they did not participate in the production of the food).

Finally, customers may also participate after the delivery stage. For instance, they may participate in the recovery of service failure (Dong, Evansa, & Zou, 2008). Moreover, some articles also underline the "co-marketer" role of the customer (Gouthier & Schmid, 2003; Chervonnaya, 2003). In this case, customers may recommend (or not) a good or a service to their family, friends, etc. This role has become all the more important since, with the internet, any customer can also describe any pleasant or unpleasant experience with a product to anybody.

The actors concerned by customer participation

Customers themselves are obviously the main actor concerned by this participation. For instance, it may influence his satisfaction (Kellogg, Youngdahl, & Bowen, 1997; Youngdahl, Kellog, Nie, & Bowen, 2003). However, customer participation also involves many other actors he interacts with while participating. The previous definitions enlighten us as to some of them, in more or less explicit ways.

Front-line employees come first, as they are in direct contact with customers. This is only implicit in **Table 1**, which is surprising given the direct and indirect influence the customer may have over these employees (Rafaeli, 1989). In particular, the customer as a "partial employee" (Mills & Morris, 1986) has been assumed to alleviate front-line employees' workload, since a great amount of work can be shifted to the customer. Nevertheless, other studies prove that it increases the perceived workload, because it frequently induces an increase in the variety and difficulty of employees' tasks, thus bolstering work uncertainty (Hsieh, Yen, & Chin, 2004).

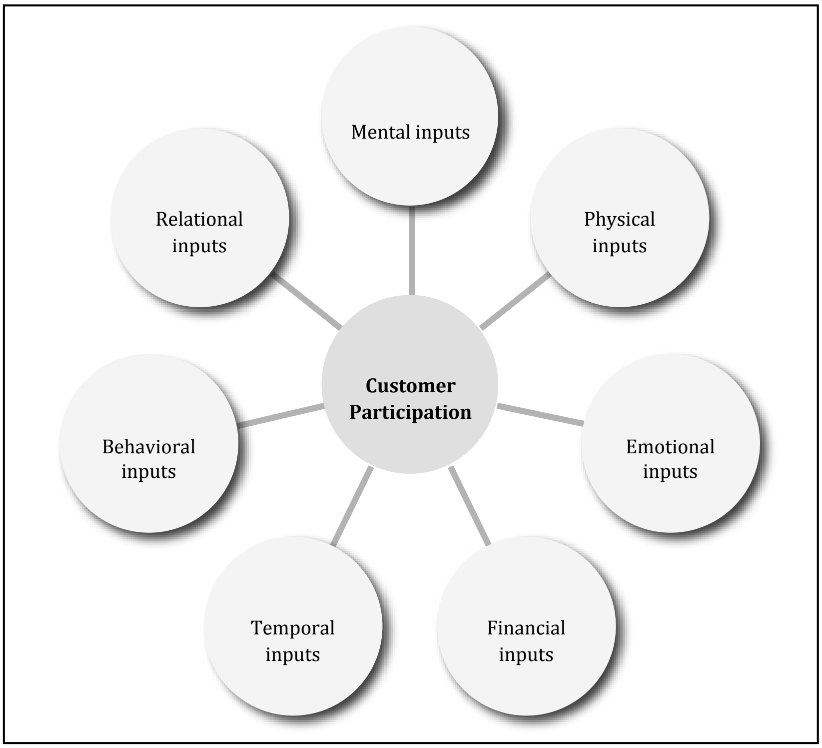
Besides its employees, the firm is another actor affected by customer participation, and may rely on customers to build new experiences of consumption (Prahalad & Ramaswamy, 2004). At the organizational level, involving the customer in the different steps of the development, production, and delivery of a product influences coordination (Larsson & Bowen, 1989; Plé, 2006).

Other customers are a third category of actors that may be concerned by customer participation. When a customer participates, he may be in the presence of other customers with whom he may interact (Parker & Ward, 2000). These interactions can potentially lead to new ideas of a product (Lundkvist & Yakhlef, 2004) and influence these other customers' perception of service quality and / or satisfaction, or their intention to purchase (Harris *et al.,* 1997 in Parker & Ward, 2000).

Customers' inputs

Table 1 also sheds light on the nature of customer participation. The contribution of the customer takes different forms, from merely communicating information to the firm so that it can offer a product that matches customers' expectations, to making efforts that will enable the customer to get the product (Kelley et al., 1990). Accordingly, Rodie & Kleine (2000: 111) mention three different kinds of inputs which the customer provides to the firm: mental, physical and emotional. However, the literature leads us to identify four other kinds: financial, temporal, behavioral and relational inputs. **Figure 2** below recapitulates these seven inputs. Not all of them may be mobilized every time the customer participates. This may depend, for example, on the nature of the product, or on some particular traits of the actual customer.

Figure 2: The seven inputs of customer participation



Mental inputs include the information given by customers to the firm, as well as the mental effort they agree to do to acquire the product (Mills, Chase, & Margulies, 1983; Mills & Turk, 1986; Rodie & Kleine, 2000). In this case, customers actually undertake a "cognitive labor" (Rodie & Kleine, 2000: 112), i.e. they make a mental effort to structure the information given to the company to understand how to get the product or to understand what they are supposed to do as participants. Physical inputs "include customers' own tangibles and physical efforts" (Rodie

& Kleine, 2000: 112). The first ones range from a part of the customer's body (for example, the customer's face when going to a beautician), to goods owned or managed by the customer, such as clothes taken to the dry-cleaner's (Lovelock, 1983, 2001). As for physical efforts, they mean labor for the customer, as they include actions undertaken during participation (Siehl, Bowen, & Pearson, 1992). This can include, for instance, following the fitness program designed by a personal coach. The last type of inputs cited by Rodie & Kleine is emotional inputs. They comprise all the emotions felt by participating customers. An example would be patient (or impatient) behavior during an unpleasant interaction with an incompetent or unpleasant employee.

In addition to these three categories, four others emerge from the literature. To begin with, financial inputs correspond to the price paid by the customer to get the product (Bitner et al., 1997). This implies that the customer decides to allocate financial resources to the detriment of another product. Temporal inputs are another category; these relate to the time it takes a customer to participate. Being part of a group of customers in charge of thinking about a product's design or technical specificities may be very time-consuming. This time expenditure varies greatly from one context to another. The time customers are willing to spend to acquire a product is taken into account in their assessment of the total value of the product in question (Beaven & Scottie, 1990; Song & Adams, 1993). Furthermore, the time spent on learning how to use the product or how to participate before even getting the product has to be taken into account as well (Mills & Morris, 1986).

We label the next sort of inputs "behavioral inputs". According to Grönroos (1984; 2001), service quality is composed of two different parts. Technical quality designates the quality of the outcome, i.e. the quality of the service the customer gets in itself (e.g. being transported from point A to B by an airline company). Functional quality is the quality of the process that leads to this outcome: it concerns the manner in which the service is delivered to the customer (e.g. the appearance and behavior of the airline staff). Kelley *et al.* (1990) and Kelley, Skinner, & Donnelly (1992) transpose these two concepts to customers, and consider that they can influence the quality of the service through both what they do in the service process and how they do it. The former ("what") has been dealt with earlier, since it essentially relates to mental and physical inputs. As a result, it is not a part of the customer's behavioral inputs. The latter ("how") refers to interpersonal dimensions of the interaction between a customer and a service employee, and focuses on the way customers behave during this interaction: how fast they will give information and bring their goods to the firm, whether they show goodwill (or ill-will) to participate, etc. Thus, we call these "behavioral inputs" as they refer to the participative behavior of the customer. It is a larger category than Rodie & Kleine's "emotional inputs" since, as we have already explained, it is not only limited to the customer's emotions.

Relational inputs are the final category of customer inputs. They derive from the fact that a customer's expectation and future behavior towards a service provider is influenced by previous encounters with a service provider (Grönroos, 2001). Accordingly, it seems rational to think that the content of past interactions is liable to influence the manner in which the customer enters into upcoming interactions in a similar context (be it with the same employee, the same company, or even another company of the same sector).

The intensity of customer participation

The customer does not always participate in the same way, or with the same intensity, in the production process. Determining the optimal level of customer participation is a strategic activity (Bowen, 1986). Nevertheless, it is highly contingent upon a sector of activity, and even upon a company, as it depends on the organization and the strategy of the firm (Bitner et al., 1997; Larsson & Bowen, 1989). Thus, many continuums of participation have been suggested to help to determine the customer's "role size", i.e. the significance of the participation (Rodie & Kleine, 2000). For example, Bowen (1986) distinguishes between two situations: one in which the customer is a co-producer with other employees, and one in which he can be considered as the sole producer. Kelley et al. (1990) also propose two extremes of customer participation. On the one hand, if customers are familiar with the service, their participation will be rather mechanical: their efforts, and in particular cognitive efforts, will be negligible. In such a situation, the customer is regarded as an "expert" (Bateson, 2002). On the other hand, the customer is a "novice" (Bateson, 2002) when unfamiliar with the service, or if the service induces significant mental or physical effort. Meuter & Bitner (1998) make a distinction between three situations: firm production, joint production and customer production. In the first case, the product is produced entirely by the firm and its employees. In the case of joint production, the customer interacts with the firm's contact employees to participate in production. Finally, customer production is a situation in which the customer produces the product entirely, without any intervention by the firm's employees. This last kind of situation is more and more frequent, along with the development of more and more sophisticated self-service technologies (Meuter, Bitner, Ostrom, & Brown, 2005; Curran & Meuter, 2005).

Determinants of customer-participation

The matters discussed above cast some light on what customer participation is. Nonetheless, by no means does it inform us of the reasons behind customer participation. According to the literature, there are two different kinds of determinants that explain the participation of the customer: the first one relies on the actual customer, whereas the second one depends on the firm that needs the participation. These two sets of factors are undoubtedly related to each other.

Customer-based determinants

Following Bowen (1986), Rodie & Kleine (2000) propose three determinants of customer participation: the size of the participation, i.e. the part of the product the customer produces and / or delivers herself, the customer's ability to participate, and the customer's willingness to participate. Meuter et al. (2005) identify customer ability, role clarity (is what the customer has to do clear to him?), and customer motivation. Lengnick-Hall, Claycomb, & Inks (2000) emphasize three main factors: perceived role clarity (how clearly does the customer perceive what he has to do?), the customer's ability or technical competence, and the customer's motivation to participate. Finally, Goodwin (1988) insists on the need for customers to be aware of their role in the production process (customer awareness). Accordingly, we focus here on the following four customer-based determinants: customer awareness; perceived role clarity; perceived ability; and to participate.

To our knowledge, **customer awareness** is the least studied customer-based determinant of customer participation. It refers to a process of socialization followed by the customer while learning different roles specific to the characteristics of participation (Goodwin, 1988). Indeed, the customer has to become aware, then learn and finally know how and when to adopt and display the behavior demanded to participate in a production process (e.g. what actions to perform, what to bring, etc.). In other words, the customer has to identify with a particular set of behaviors, a process which Kelley *et al.* (1990: 328) call "role identification". This identification should help customers to behave as expected in a particular setting, and should ease their adaptation to similar settings in future (e.g. making customers understand that they have to clear the table themselves when going to a fast-food restaurant for the first time).

There are three different levels of customer awareness. The first one relates to the need for participation: the customer has to become aware that his participation is needed in the process (Goodwin, 1988). The customer also has to be aware of both the practical details and the importance of this participation (what has to be done, where to go, how to behave, etc.). In addition, customers have to be aware of the advantages they can get from participating; otherwise, they may refuse to participate (Bowen, 1986). A lack of awareness at any of these three levels may result in detrimental outcomes for the customer (e.g. a lower level of satisfaction) and / or the firm (e.g. a lower level of productivity).

Perceived role clarity is the second customer-based determinant of customer participation. It is part of the knowledge that enables the customer to know and understand what he has to do (Bitner, Ostrom, & Meuter, 2002; Meuter *et al.,* 2005). By definition, this role clarity is "perceived", as it depends on the way customers understand the role the firm expects them to play. It is a determining dimension: Bitner et al. (1997), for instance, show that the higher the level of role knowledge and understanding, the higher the propensity to participate. Perceived role clarity is dependent on four major factors peculiar to the customer. The first one is the customer's own experience with a firm. Based on previous experiences with a specific firm, the customer is able to develop a script, i.e. "a set of behaviors that are appropriate for the situation and will increase the probability of goal attainment" (Solomon, Surprenant, Czepiel, & Gutman, 1985). The second one is the experience acquired by the customer in similar contexts (Bowen, 1986). Thirdly, the customer who is in a brand-new situation when unaware of how to behave may rely on potential previous experiences in similar contexts. In the end, one customer may even do as the others do (Parker & Ward, 2000). Hence, role clarity is dynamic by nature, since customers progressively learn and redefine their role as they gain experience.

The customer must have the necessary skills to perform the role in question (Bitner *et al.,* 2002). Thus, customer ability refers to “what a [customer] ‘can do’ rather than what he or she “wants to do” or ‘knows how to do’” (Meuter *et al.*, 2005: 64). In other words, it corresponds to the customers’ ability to carry out their role (Chervonnaya, 2003). This ability is bi-dimensional, as it is possible to discriminate between actual and perceived customer ability. Actual customer ability corresponds to what the customer can really do, i.e. their skills. Perceived customer ability, or “service use self-efficacy” (McKee, Simmers, & Licata, 2006), concerns the perception the customer has of these skills: if customers do not believe that they possess them, or consider themselves not to be skilled enough to use them, they may not engage in the relevant behavior (Mc Kee et al., 2006), even while recognizing that it would be preferable to do so (Seltzer, 1983). This lack of self-confidence is liable to hinder the overall performance of the process in which the customer participates, as well as limiting customer satisfaction (Goodwin, 1988). Consequently, even if the firm considers that its customers have the necessary skills to participate it will fail while ever customers do not share the same perspective. This implies that both actual and perceived customer ability to participate are not set once and for all, and may be enhanced through experience and the desire to learn from it (Prahalad & Ramaswamy, 2004)

The last customer-based determinant is the **willingness** of customers to participate. Indeed, even when customers are aware of the need to participate, have a clear representation of the role they should fulfill, and are able to participate, all of this is useless if they do not agree to participate. As a matter of fact, not all customers agree to participate, or to engage in the same level of participation as other customers (Bowers et al., 1990; Bateson, 1983, 1985). Three reasons explain these differences: firstly, some customers do not identify what they stand to gain from participation; secondly, the customer might refuse to participate due to some individual characteristics (psychological, behavioral, etc.); and thirdly, customers could consider that they do not have the skills to participate, or that the scale of participation is too important, as we have already discussed.

To overcome these restrictions to customer participation, it is imperative to identify means by which to motivate the customer (which underscores the dynamic nature of customer willingness). One way is to make sure that customers understand how their participation maximizes the efficiency of the process. Since the firm partially transfers a part of the total production cost to the participative customer, the latter can expect the firm to forgo a portion of the cost savings. This explains why customers show a greater willingness to participate when this participation is compensated for by a lower price (Fitzsimmons, 1985). Yet, not all customer needs are economically-driven (Bowen, 1986). Some may be all the more motivated to participate as it enables them to save time (Bitner et al., 2002; Bowers et al., 1990), or if a self-service technology is easy to use (Weijters, Ragarajan, Falk, & Schillewaert, 2007). The customer may also benefit from interactions with other customers. For instance, customers are all the more ready to exchange information with other customers via a firm's hosted commercial online communities if the informational value which is ascribed to the community is high (Wiertz & de Ruyter, 2007).

Willingness to participate may also increase as customers understand that participation increases the quality of the product (Bowers et al., 1990; Kellog et al., 1997). This also applies to those customers who have clearly identified the inputs they have to bring into the process, as well as how they have to bring them (Bitner et al., 1997; Schneider & Bowen, 1995). Customers can also be motivated to participate when they believe that this may improve the future level of service quality. This explains some customers' complaining behaviors (Snellman & Vihktari, 2003).

Participation also often brings psychological advantages (Bendapudi & Leone, 2003). As an example, novelty or innovation may appeal to some customers, as may the possibility of entertaining while participating (Dabholkar, 2000). The perceived level of control is another psychological advantage that may lead the customer to participate more actively. The higher the level of control which customers believe they exercise over the production, the higher their level of motivation (Bateson, 1985; Dabholkar, 1996). The improvement in self-image resulting from this increased perceived independence and control has been offered as explanations of this increased customer willingness to participate (Goodwin, 1988). Psychological advantages may also be drawn from interactions with other customers (Wiertz & de Ruyter, 2007).

Finally, it has also been suggested that this willingness to participate varies according to the extent of the customer's role identification. A participative customer has two roles (Kelley *et al.,* 1990). On the one hand, the traditional customer role is undertaken when buying and / or consuming the product. On the other hand, the customer also has the role of a "partial employee" when taking part in production. According to Kelley *et al.* (1990), customers who identify more strongly with the role of partial employee will be more willing to adapt or transform their behavior to contribute more effectively. As was the case for the other customer-based determinants, companies have many tools at their disposal to influence this behavior, e.g. to encourage the customer to participate, or to increase the extent of this participation. We are now going to focus on these tools.

Company-based determinants

Since customers can be regarded as partial employees, some authors have suggested that they be managed with some organizational socialization techniques usually applied to employees (Bowen, 1986; Bowers *et al.,* 1990; Halbesleben & Buckley, 2004). Customer organizational socialization refers to a process aiming to develop customer skills, knowledge and attitudes that are relevant to the setting to which these skills, knowledge and attitudes apply (Kelley et al., 1990, 1992). During this process, the firm tries to influence the customer determinants of participation as discussed above.

To begin with, **organizational socialization techniques** may be leveraged to clarify what and how the customer has to do. In other words, they aim to improve the customer's perceived role clarity, or to specify the qualitative importance of customer participation in the production process. At this level, it is important for the firm to define precisely what the "job" of the customer is. This will help to recruit appropriate customers, i.e. customers who are motivated and have the necessary skills to participate (Halbesleben & Buckley, 2004). Defining precisely what the customer has to do also helps to develop formal programs of socialization, including a preliminary and realistic presentation of the production process, through "organizational literature" (Kelley *et al.,* 1990), such as brochures, leaflets, etc. It is also possible to use what Bitner (1992) calls "the servicescape" (i.e. the physical environment such as atmospherics, physical elements, decor elements, etc.) to help the customer to understand what to do and how to do it. The organization of the servicescape generates affordances as noted by Norman (2002). Affordances pertain to the potential actions which an actor can perceive in his interactions with a machine, a tool, or any other object. In the context of customer participation, we argue that the different elements of the servicescape create affordances appealing for specific inputs from the customer. Procedures (for instance, queues) and precise rules also provide the customer with some clues about the appropriate behaviors to show (Bowen, 1986; Rodie & Kleine, 2000). Finally, organizationally socializing the customer is supposed to positively impact satisfaction (Kellogg et al., 1997), even though other research shows contradictory results (Groth, 2005).

Secondly, the firm has **to help the customer to understand what its expectations are** in terms of quantitative importance. Indeed, we noted earlier that the customer may not always participate in the same way, or to the same degree. This varies greatly from one industry to another and even from one firm to another. However, whatever the ideal size of customer participation defined by the firm, in the end, only the actual actions of the customer define the real size of this participation. To this extent, individual customer characteristics may play an important role. For example, customers' commitment to a firm and its products and services impacts their willingness to participate in an online community to answer other customers' questions about these products and services (Wiertz & de Ruyter, 2007). In this case, it is difficult for the firm to influence the importance of customer participation. On the contrary, it is easier in other situations, such as when the firm can circumscribe both its size and duration. In effect, whereas some customers may not understand when their participation begins, others do not understand when it has come to an end. As a consequence, firms need to know how to end this participation, even though the customer does not want to (Hubbert, Sehorn, & Brown, 1995). In some cases, customers may hinder organizational performance if they are unable to provide the resources expected by the firm. To avoid such situations, the firm has to plan organizational withdrawal procedures for the customer (Halbesleben & Buckley, 2004).

Furthermore, the firm has an interest in **developing its customers' ability to participate**. To do this, the first step may rely on the implementation of a selection and recruitment process for customers (Bowen, 1986; Mills & Morris, 1986) based on the analysis of their behavior and the determinants of this behavior (Lovelock & Young, 1979). Thus, “the more complex the production-related skills and knowledge required of the client, and the greater the extent and length of client inclusion, the more resources one would expect to be directed at the selection of client with the higher a priori ability to perform within the service operation” (Mills & Morris, 1986: 729). This recruitment and selection phase may rely on marketing and advertising to identify customers who would be interested in contributing to the production process. Nevertheless, such a process is not easy to execute since the firm does not always have reliable information to identify the appropriate customers. To compensate for this lack of information, Mills & Morris (1986) suggest socializing the customer before the production process, i.e. to shape the skills of the customer before entering the production stage, to ensure that these skills match the needs of the firm. However, the authors admit how hazardous this strategy may be, since the customer may decide to use another provider. In this case, the firm would work for its competitors and raise its costs. Accordingly, most firms favor the development of training programs for their customers once they have begun to interact with the firm (Bowers *et al.,* 1990; Zhao, Mattila, & Tao, 2008). This is all the more crucial when the firm has introduced a new technology, since it makes it easier to limit customer anxiety surrounding this technology (Matsson & Helmersson, 2005; Zhao *et al.,* 2008).

Relying on the firm’s employees to train customers and encourage them to participate also helps to increase customers’ abilities. Moreover, interpersonal interaction between employees and customers constitutes an opportunity to convince the latter that they are capable of doing what they are expected to do (Goodwin, 1988).

The firm can also potentially **motivate the customer to participate**. In this respect, many studies showed that rewarding customer contribution, through either monetary or non-monetary advantages (price cuts, time savings, higher quality, etc.) is very efficient. These advantages also limit the risks associated with participation perceived by the customer, which increases the customer’s willingness to participate (Abernathy & Butler, 1993).

However, even if these advantages are objectively present, they are useless until the customer perceives them. This is why the firm has to develop, or even build, customer awareness of these advantages (Ennew & Binks, 1996). Marketing and communication policies centered on the different kinds of benefits the customer can draw from participating may be very useful. One way to communicate these benefits effectively is to associate the customer to: their determination; the elaboration of the product offer, or the definition of the “customer job”, etc. (Graf, 2007). In a nutshell, it means that firms have to adopt a relatively transparent communication about their internal processes, so that the customer understands how and where he fits in to improve the efficiency of the process and the quality delivered (Lengnick-Hall, 1996).

Finally, the way a firm deals with customer complaints is very important to increase customer willingness. Indeed, we mentioned previously that complaining could be considered as a way to participate after the production process. If the customer notices that despite his efforts the quality of the product does not improve, his future motivation to participate may be significantly lower (Snellman & Vihktari, 2003). Hence, through the support it brings, the firm gives the customer a certain amount of power and responsibility, and “gains [the customer’s] awareness and understanding of the problems [the firm] face[s]” (Thompson & McEwen, 1958: 28).

As interesting as this literature on customer participation may be, only a few contributions give insight into the way the customer actually influences the organization of the firm. All the same, not much research analyzes either how to mobilize the customer in order to increase the firm’s margin, or the direct impact of customer participation on loyalty (some authors study the impact of customer participation on service quality or customer satisfaction – e.g. Cermak et al., 1994; Kellog et al., 1997 – but few deal with positive market feedbacks such as loyalty or new customer enrollments). As a consequence, the third part of this paper posits a conceptual model of what we call Customer-Integrated Business Model (CIBM), i.e. a BM that integrates the customer.

THEORIZING CUSTOMER-INTEGRATED BUSINESS MODELS

The literature on customer participation helps us to understand the consumer socialization process and the various inputs that consumers may yield to help a given firm. Thus, the combination of the lessons from the services marketing and management literature and the BM literature allows us in this section to put forward a theoretical framework for CIBM. We go on to illustrate this with two “library” cases (where the main sources of information are publicly available).

Integrating the customer into the BM

Increasing numbers of organizations have been giving an important role in their processes to the customer. For these organizations, the customer is not only the revenue yielder but also a resource in its own right. In these cases, the role given to the clients may vary, and can include producer, distributor, tester, etc. We use the term CIBM to describe business models largely involving customers.

Despite their diversity, CIBMs have common features. They tend in particular to build on a tighter coupling between the firm and the customer. Indeed, an organization and its customers tend traditionally to be loosely coupled. According to Weick (1976), a system is considered to be loosely coupled when its components do not have the same goals, do not react to the same variables, and do not share the same temporality and/or the same culture. In most common BMs, customers have their own goals that rarely overlap with those of the firm. An organization and its customers are rarely influenced by the same variables and they do not have the same temporality.

To improve their coupling with customers, firms tend to study the market and promote mutual adjustment with the clients’ requirements or expectations. Thus, they seek to share the same temporality and the same concerns as their customers. In B-to-B, firms may even try to promote internally the values and beliefs of their main client.

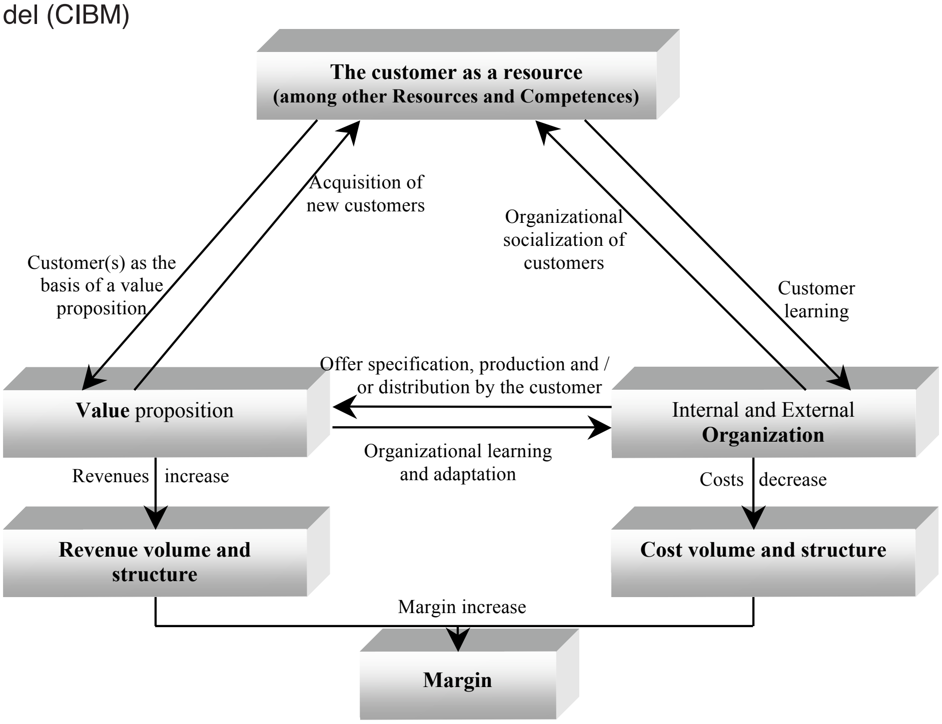
On the contrary, CIBM-focused firms try also to attract customers to their value, beliefs, goals and temporality or at least to create a better alignment between their concerns and the customers' ones. Thus, in these BMs, the client becomes a resource that may be used by the organization in several ways.

To theorize CIBM, we have chosen to build on the RCOV model of Demil & Lecocq (2010) as presented in the first section of this paper. The RCOV model has two advantages over competing models. Firstly, it presents dynamic features and is very parsimonious at the same time. Secondly, due to this parsimony, the customer has not been previously considered alone in this model. For instance, while many authors locate customers out of the firm as a target of the value proposition (see the first section of this article), the RCOV model merely identifies "Resources and Competences", "Value proposition" and "Organization" as constituents of a BM and thus leaves open the possibility of treating customers (or their inputs) as a specific kind of resource influencing and influenced by the value proposition and the organizational infrastructure (see **Figure 3**).

We have previously shown how the customer could bring inputs to participate in the conception, production and / or delivery of the firm's product. From a BM perspective, this means that the customer may be considered as one particular resource (Gouthier & Schmidt, 2003) among the set of resources and competences of the firm.

If customers are regarded as a resource, it means that we have to examine the way they influence the two other components of the RCOV model to which resources are related, i.e. the value proposition and the organization. Furthermore, it also means that we need to study its impact on the interrelations between these three main parts of the RCOV model. We illustrate this influence in **figure 3**, which demonstrates a full CIBM, i.e. a BM that fully exploits the leverage of the customer as a resource. In a full CIBM of this type, the customer as a resource is both a part of a value proposition (meaning that some specific customers or customers as a whole may be valued for money by the firm as a community, like in social network platforms, or as an advertising , like in the media) and a participant in the production or delivery process. For instance, eBay is undoubtedly a full CIBM. Customers are both the suppliers and the buyers of the products; they assess individuals with whom they interact for a transaction (assessing the quality of the products) and they also create network externalities for the website as the more sellers/buyers are enrolled, the more new customers subscribe to buy or sell products. Thus, in eBay, the customer can be considered as a resource since he is both the basis of the value proposition in its own right (eBay sells access to a very large established customer base) and a contributor as a producer of this value proposition (for instance, sellers make their own adverts, take pictures, assess independently the price of the product being sold and send the product themselves through the postal system).

Figure 3: A representation of a full Customer-Integrated Business Model (CIBM)



However, beyond the case of a full CIBM, we have to remind that our aim in this paper is to offer a general framework for customer participation within the BM theory and thus, a given CIBM may not include all the relationships identified in figure 3 and the virtuous circle it may generate. Indeed, a CIBM may simply use the customer as a producer (like Ikea) or a generator of network externalities to enhance the value proposition without any participation in the production process of the product or service. For instance, Lecocq & Demil (2006) have documented how the role-playing game industry (selling books with the game rules of play) is a network sector characterized by strong network externality mechanisms. Role-playing games are a social activity in which three to six people around a table play a character in a given setting (science fiction, western, heroic fantasy, etc) to undergo 'virtual' adventures created by a storyteller called the "gamemaster". Thus, in the role-playing game industry, even though most of the time the players do not contribute to writing the rules of the game, it is in their interest to choose to buy and play to the most practiced games if they want to find players with knowledge of the same rules. As a result of this, most successful firms editing role-playing games value the size of their customers' community, developing a CIBM without an imperative contribution of the customer himself to the production process of the products. **Table 2** specifies the relationships between the components of the RCOV model in a CIBM.

Table 2: Customer's influence on the BM in a CIBM

Label and place in the RCOV model	Note
Customer(s) as the basis of a value proposition (Resources and competences **->** Value proposition)	According to the RCOV model, resources and competences may be used to become a value proposition released to the market. The customer as a resource may become the basis of a value proposition in its own right (e.g. social network offers, market-place, etc).
Acquisition of new customers (Value proposition **->** Resources and competences)	The involvement of customers in specification, production and distribution (see Organization **->** Value proposition) makes it possible to improve the targeting of the product or to increase the scope of the product delivery, leading to the acquisition of new customers for the firm. In the meantime, choosing to value customers as a value proposition (see Resources and competences **->** Value proposition) allows the firm to benefit from network externalities, generating more and more adopters of the product or services.
Organizational socialization of the customer (Organization **->** Resources and competences)	The use of customer organizational socialization techniques by a firm aims to transform a basic customer into a resource. These techniques enable the development of customer awareness, ability and willingness to participate, as well as determining the degree of participation. Incentive mechanisms (to encourage the customer to participate) and integration mechanisms (to help the customer understand how to participate) are deployed. Thus, thanks to socialization techniques, a buyer becomes an "expert customer" and a better resource for the company.
Customer learning (Resources and competences **->** Organization)	The incentives and integration mechanisms deployed by the firm to socialize the customer leads to a better knowledge of the activities and organization of this firm. The quality of the socialization will lead to more or less input investment from customers in the firm's organization. By participating, the customer learns how to fit into the organization and how to behave while increasing interaction with the firm. This process of customer learning may improve customer loyalty.
Value proposition specification, production and / or distribution (Organization **->** Value Proposition)	Once customers have been integrated into the organization, their various inputs may be used to participate in the conception, the production and / or the delivery of the product. Note that the elapsed time between integration through socialization techniques and mobilization of the inputs may be very short in practice.
Organizational learning and adaptation (Value Proposition **->** Organization)	Customer participation in the value proposition (as a value proposition as such or as an innovator/producer/distributor) leads to a learning process at both an individual level (i.e. employees) and a collective level (i.e. firm). Thus, through interaction with the market, a firm may adapt its process to improve customer socialization, whether to use customers more efficiently as a resource to generate network externalities or to favor customer learning and ultimately increase production quality and volume.

The core of our argument is that making customers a resource is the basis of a CIBM and this generic category of BM may take various forms depending on the use of this resource by the firm. In a BM approach, a good CIBM should lead to an increase in customer satisfaction and loyalty, a growth of the customer base, and an increased margin due to a decrease in costs and/or an increase in revenues.

For instance, Huston & Sakkab (2006) have documented the new innovation process at Procter & Gamble, involving external resources (individual inventors, partner firms, etc.) for R&D. This new approach to innovation, based on open innovation (Chesbrough, 2003), leads

Procter & Gamble to both cost savings and faster time to market. What has been demonstrated for the single innovation process seems to be generalized to the whole value chain. In CIBM, the mobilization of customers to innovate, test, produce and/or distribute products may lead to a significant saving if the organization does not compensate the cost savings in operations by huge costs to generate incentives and facilitate the integration of customers into the process (coordination and control costs). Beyond direct cost and time savings, a good CIBM may also reduce costs related to the risk. Indeed, in some CIBMs, customers may counter an important part of the risk by providing investment or R&D (for an example, see the case of MyMajorCompany.com as discussed below).

Concerning revenues, CIBMs may have several effects. First, customers may give ideas to broaden the number and the kind of markets a product or service may address (extensiveness). Second, customers may suggest developing new value propositions or may help to adapt products and services to a specific market already served by the firm (intensiveness). Third, valuing customers may generate network externalities and attract new paying customers (as in the case of professional social network platforms like Viadeo in France) or generate new sources of revenues, such as advertising (like in the press industry).

Examples of CIBMs

Now that we have presented our conceptual model of CIBM, we shall exemplify its actual application. Based on a documentary analysis carried out on the basis of secondary data, we study below the cases of two different companies: Build-A-Bear Workshop and www.mymajorcompany.com.We deliberately selected these from two different sectors. We also purposely decided not to study two internet-based companies, as we consider our model to be applicable to both online and offline activities.

Build-A-Bear Workshop®: build your own teddy bear!

Build-A-Bear Workshop (BBW) is an American firm created in October 1997 by Maxine Clark. It enables any customer to build a teddy bear through a specific bear-making consisting of eight steps; at the end of this process, the customer can go home with their own personalized teddy bear. As explained on the firm's website, BBW "was founded as an interactive retail entertainment experience based on the enduring love and friendship that connects us all to stuffed animals and especially to our teddy bears". Thus, from its very inception, BBW was thought of as integrating customers, who are partly in charge of the creation of the experience: the process of creating their own stuffed bear (BBW's value proposition). In other words, the customer will contribute to the production process. Prompting the customer to participate is undoubtedly a key factor in BBW's success, illustrated by indicators such as the presence of around 400 outlets worldwide (as of September 2008), getting the 2001 "Retail Innovator of the Year" (delivered by the US National Retail Federation), etc. The noteworthy progress of the firm illustrates its ability to attract new customers through the originality of its value proposition.

Customer participation in the BBW model is determined by the various organizational socialization techniques used through the production process of the stuffed animal. Indeed, on entering a BBW shop, customers are welcomed by "master Bear Builder® associates", who share their experiences through the eight bear-making stations of the process. These associates are some of the resources BBW puts at the disposal of its customers along with all the tools and materials that customers will find at each station to help them build their own bear. Master Bear Builder associates explain customer the bear-making path from step 1 to step 8, and assist them at each step if this is needed. The customer can also find many indications in the shop both about what he is supposed to do and how he is supposed to do it during every step of the process. Indeed, the layout of the shop itself and the various tools and materials at the disposal of the customers to build their bear create affordances and appeal for specific inputs from the customer during the process.
Furthermore, the customer may also be helped directly (by asking a question) or indirectly (simply by looking) by other customers, since many of them may be present at the same time. Accordingly, this help from the Bear Builder or the other customers and all the information obtained are organizational socialization techniques used by BBW to integrate the customer into its organization. They are intended to increase customer awareness (customers are made aware that they have no choice but to participate in order to acquire bear), ability (they are "trained" by the Bear Builder in how to co-produce a bear) and willingness to participate (they are willing to participate because they can picture their future bear). These organizational socialization techniques aim to clarify the customer's role and the size of participation too, since the customer is clearly explained what he has to do as opposed to the Bear Builder. In return, customers learn how to build the bear even before embarking upon the process, and throughout it, in order to maximize their experience and effectiveness as a bear-maker. This learning will help not only during the ongoing experience, but also for future experiences of this type, since the customer will know what to do and how to behave. Incidentally, it is worthy of note that BBW also presents the whole process, and the content of the customer's "job" at each station, on its website. When connecting to the BBW's website, eight drawings present the order of the eight steps the customer has to go through in the shop. Clicking on them leads to pictures and explanations about what the customer has to do. This allows customers to prepare for their experience by understanding their role in advance, and then to integrate faster into BBW's organization. The presentation of the whole process on the website also helps kids to present BBW to their friends and to attract new customers. Once customers have understood the nature and content of their participation, they are ready to bring multiple inputs to produce and get the value proposition. These inputs are most probably mental, physical, emotional, financial, temporal and behavioral. We analyze them in **Table 3.**
The socialization techniques deployed by the firm and the resulting involvement of the customers in the production process leads to a decrease in personnel costs, as only one or two Master Bear Builder as-

sociates may help a dozen kids to make their own teddy bear at the same time. On the company website, the customer also learns how to extend the experience undergone in the workshop through the virtual world created recently by Build-A-Bear, called www.buildabearville.com. This virtual world continues to involve buyers and constitutes a basis for creating a community of customers and generating network externalities to attract more and more teddy bear builders around the world. Thus, this demonstrates that even in traditional industries (such as the toy industry), firms may create an establish base of customers and harness this to generate positive network externalities, bolstering the attractiveness of the product or services.

Table 3: Customer's inputs at Build-A-Bear Workshop

Nature of the inputs	Description
Mental	The cognitive efforts customers have to expend in order to conceive the teddy bear virtually and imagine what they want it to look like.
Physical	The physical effort required by the process of making the teddy bear (pick up the materials, the clothes, going from one station to another, etc.)
Emotional	The excitement felt by customers while participating in the creation of their own personalized stuffed animal. BBW's value proposition is highly experiential.
Financial	The price of the teddy bear, including all the things the customer decided to add (kind of bear, kind of sound, clothes, etc.).
Temporal	The time spent by the customer going to the shop, choosing the teddy bear, choosing the sound, going from one station to another, etc.
Behavioral	The nature of the interpersonal interactions the customer has with Master Bear Builder associates and other customers sharing the experience.

Integrating the customer in its BM has enabled Build-A-Bear to develop very quickly since its creation. Indeed, between October 1997 and September 2008, the firm has opened 341 Company-owned stores in North America, the UK, Ireland and France, as well as 60 franchised stores in 14 countries, and sold 65 million stuffed animals. Enabling customers to participate in the conception and production of their own bear results in a very high rate of loyalty, since 60% of BBW business is generated by a returning customer (with 80% planning their visit in advance). Customers do enjoy the experience, since 90% of them rate it as the highest or second highest retailer providing a delightful experience among the largest US Toy retailers. As a result of this, the firm has strong merchandise margins, and reduces markdowns to a minimum, because its customers are willing to pay for this experience.

In 2007, it also delivered its tenth consecutive year of total revenue growth, with net retail sales increasing by 7.6% (from about $432 million to about $468 million). This makes BBW the 10th largest US toy retailer, and it has "the second largest percentage increase in sales of any of the Top 25 Toy Retailers". This clearly means that its BM generates higher revenues than many of its competitors.

www.mymajorcompany.com: produce the new artists you like!

Mymajorcompany.com (MMC) is an internet-based company created in December 2007. Trying to take advantage of the great changes that have been shaking the music industry over the last few years, MMC invites people to become producers of new artists. Their website presents a shortlist of artists, and gives detailed information about each of them. All the artists have a dedicated public space on the website where they can describe themselves (with an additional opinion from MMC), share news, and upload pictures, videos, and, of course, music. They can also interact with their fans, be they their producers or not, through discussion forums. Someone who likes an artist (or a group) and who wants to help to make them known can buy "shares" that allow them to become a producer of the artist, and accordingly a customer of MMC. Each share costs €10, and it is not possible to buy more than 100 shares in the same artist in order to favor the largest number of producers. This is because the producers all have a stake in the marketing of the artist, since it is highly probable that, from the moment they decide to bet on him, these producers will do their best to make "their" artist famous. Once the total amount of money bet on an artist has reached €70,000, MMC records, produces and distributes the artist's album (total investment is about €100,000, through various kinds of subsidies) In return, each individual producer is paid 30% of MMC's net income generated by the artist which they helped produce, proportionally to the amount of her financial participation.

Thus, MMC enables artists to find funding, and is based on a BM that requires the participation of the customers who become producers of these artists. As a result, this BM is a full CIBM, where the customer is at the same time involved in the production process (as an investor, as a "tester" of an artist, and as a marketer) and a generator of network externalities (because the more people have invested in an artist, the more this will attract new investors that may expect to generate an income on sales). This CIBM is very interesting as the established base of customers having invested in an artist will promote the artist in question themselves, as well as MMC, and will thus increase the tendency to produce positive network externalities.

Nonetheless, this BM is also very new. Consequently, it is necessary to explain it clearly to the potential producers so that they understand what they have to do and where and how they fit into the organization, and to convince them to participate. Due to the nature of the company, this organizational socialization essentially happens through MMC's website, which is filled with information about the model, the way customers can put money on the artists, and what benefits they may get. The architecture of the website in itself and its ergonomics create affordances, as they guide the customer through the process of becoming

a producer. An analysis of their website is very helpful to understand how its functionalities generate affordances to integrate the customer into the firm's organization. Due to the originality, newness and relative complexity of this BM, we deem it essential to conduct a comprehensive analysis of the way in which the customer is socialized in this case.
Firstly, the slogan "Music is your business" offers a clue as to the importance of customers, even though their role is not entirely explicit. Secondly, one of the main tabs at the top of the homepage is labelled "MyMajorCompany". Clicking on this transfers the user to another page that succinctly describes the vision and the objectives of the company, the way to become a MMC producer, and the way to become a MMC artist. One of the objectives is stated as follows: "involve customers in the selection and the success of artists. At MyMajorCompany, internet users become producers. By deciding to bet on their favorite artists, they select the ones whose albums will be produced, distributed and advertised. What's more, they participate in the strategic decisions of their development and get money from the sales of their supported artists". Still on the homepage, there is also a frame where the latest bets are listed: the name of the individual producer is specified (with a hyperlink to their profile), as are the amount spent and the name of the artist (with, once again, a hyperlink to their profile). Below this frame is a flash animation that describes very clearly and simply the advantages of this BM for both artists and customers / producers. On the basis of all this information, customers who arrive on the website should be able to understand quickly that participation is needed to make the website work (i.e. customers are aware of their participation), and that they may benefit from participating (i.e. this increases willingness to participate). Moreover, the names of some of MMC's well-known partners are mentioned on the homepage in order to diminish the level of perceived risk the customer may feel, and which is likely to limit any motivation to bet on an artist. Finally, at the bottom of the homepage, there are links to frequently asked questions (FAQs), conditions of use, and a presentation of MMC's creators.
We studied the FAQs and coded them according to the four different determinants of customer participation: awareness, ability, perceived role size and clarity, and willingness (see section 2). This proved to be very interesting insofar as of 16 questions, four aim to increase the customer's ability to become a producer, 13 aim to increase willingness to participate, 8 clarify role and the size of participation, whereas none of them would really increase their awareness[1]. Even though it could seem surprising to find such an imbalance, we deem that these results are not illogical. Firstly, it is not shocking to find no question aiming to increase the awareness of the customer. More precisely, all of the FAQs could have been coded "awareness", since each of them mentions customer participation. However, we decided that it would be inappropriate to code them in this way, as we could not determine when the customer really becomes aware of the need for participation on the basis of our data. Concerning the four questions aimed at developing the customer's ability, we initially considered this figure to be low compared to the number of questions trying to increase motivation. With hindsight, however, it can be easily understood: buying shares is no more difficult than buying

1. Some FAQs were coded in two or three different categories, as proposed by Gibbs (2002), which explains why we exceed the total number of 16 questions

a book on Amazon, since it is merely necessary to register and create a profile, then listen to the music, and finally pay with a credit card. On the contrary, understanding how to participate in artistic decisions and realizing one's own impact in choosing between two songs or selecting the color of a record sleeve, etc. is not this easy. It is therefore explained that users can access a producer-exclusive VIP space on the website, managed by MMC and the artists. There, online discussions are held with producers, who can also express their preferences through voting systems. Producers are offered exclusive pictures, videos and songs in exchange for their participation.

Hence, MMC considers that the most important thing to convince its potential customers is to reassure them about what they have to do, how they have to do it, what their precise power over the record is, what they stand to gain from their participation, and, finally, the extent to which they may stop participating. Thus, all of this is accurately detailed in the conditions of use (even though legal factors also make this obligatory). In other words, it is absolutely necessary to explain as clearly as possible the role of the customer and the size of participation as clearly as possible, as well as increasing customers' willingness to participate.

All of this means that in this kind of brand new and original BM, customer learning is of crucial importance: customers learn about the way in which the website works, the way customers are allowed to participate, what they stand to gain from it, etc. Thus, when they have been reassured and understand that risks are limited, customers are assumed to be all the more willing to participate. Furthermore, customers who have already participated in the website progressively learn how to be more efficient when participating in future and promote the website. After this organizational socialization step, customers are finally ready to participate, that is to say to bring their inputs to contribute to the value proposition. In the case of MMC, it would seem that these inputs are mental, emotional, financial, temporal and behavioral (**Table 4**).

Table 4: Customer's inputs at Mymajorcompany.com

Nature of the inputs	Description
Mental	The cognitive efforts of the customer to appreciate the quality of the artist, to select one (or more) to bet on, or to think about the kind of music the majority of people would be willing to pay for.
Emotional	All the thrills, excitement or disappointment the customer may feel when listening to the music to make their choice and to help in making artistic choices, as well as the fear (of losing) and hope (of earning money) resulting from financial participation (and the joy or disappointment of earning money when the artist is ultimately produced).
Financial	The total amount of money the customer decides to bet on an artist when buying shares.
Temporal	The time spent by the customer listening to the music, reading artists' profiles, chatting online with other customers about artists, helping to take artistic decisions, and generating buzz so that the artists in question become known.
Behavioral	Nature of the online (and possibly offline) interactions the customer may have with MMC's employees.

Based on an analysis of customer participation and its results, our CIBM model posits that organizational learning may follow. This is exactly what happened at MMC. In fact, at the beginning, each customer could buy 700 shares of an artist, meaning that they could bet €7,000. However, a few months after the website was launched, a major change occurred. In February 2008, the first MMC artist, called "Grégoire", was produced and released to the market. 347 people invested a total of €70,000, from €10 to €6,010. The result was a commercial success, since as at July 2009, 400,000 copies had been sold. This is very rewarding for those who bought shares, since their initial investment was multiplied by more than five. Such developments encouraged many people to join the website, hoping to get money in exchange of their participation. Therefore, many customers decided to bet a lot on one artist, with a negative outcome. Indeed, one objective of MMC is to rely on the largest number of producers to generate a lot of buzz about the artist on the web. To do so, they provide their customers with many tools to advertise for the website or for their artist (scripts to insert a banner or a music player on a personal webpage, for instance). However, if many people buy a lot of shares in one artist, fewer people can advertise for that artist (one single customer who buys a €7,000 share replaces 699 potential producers who would have bought a €10 of share) and more risk affecting the sales of the copies as less customers have supported the artist before the production stage. Thus, on May 22 2008, MMC changed its rules, as its founders announced on the blog's website that the maximum number of shares in one artist which a customer could buy would be 100 (hence a €1,000 share). This was necessary, as their BM would have been at risk if they had not done so: the model relies not only on financial participation from the customer, but also on many other kinds of inputs, as we explained earlier. If MMC does not have enough producers for an artist, it has to promote them, hence increasing its costs, while its revenues are stable. This case also proves the importance of the community at MMC (blog and number of comments on the blog). The advantages of the value proposition make many people join the community. Indeed, since customers themselves are part of this value proposition, they also try to encourage new customers to join the community so as to increase the quality and quantity of the product offering. More recently, new learning loops have occurred in MMC's CIBM. First, on 5 May 2009, MMC's founders announced that the minimum investment to produce a new artist would be €100,000 instead of €70,000. Their argument is twofold. First, the company wants to have more money for launching and promoting new artists. Second, MMC wants to improve its selectivity given the fact that most of the artists used to succeed in collecting €70,000 (it was just a question of time). Moreover, to avoid speculation, on 6 April 2009, MMC decided to limit the maximal investment per individual producer depending on the amount already collected for a given artist. Thus, until €10,000 has been collected, a producer is allowed to invest a maximum of €1,000, while this amount is limited to €100 beyond €90,000 collected. This new investment rule aims to limit speculation from customers. These various changes in the

CIBM of MMC demonstrate that the integration of the customer in a BM has systemic organizational consequences.

At the financial level, this kind of BM is interesting for MMC, since it makes it possible to finance an artist only when they actually have most of the money needed to record, produce and distribute him. This has a great positive impact on the cash flow of the firm. As for promotional expenditure, these are reduced by dint of the buzz generated by the individual producers, as mentioned previously. MMC also took advantage of its own model in terms of advertising: “giving the power” to their customers remains an original model in their industry, and many IT and music websites followed suit following the creation of the company. Furthermore, since their first artist has been very successful, they have also benefited from many television and radio reports explaining the concept of the website and the way in which people could become producers of their own favorite artists. Finally, it is important to highlight that their margin is 50% of their revenues, with the other 50% split between the producers (30%) and the artists (20%, as opposed to a mere 8 or 9% when they sign with traditional labels). Thus, the MMC BM makes it possible to reduce production and marketing costs dramatically and increase the company’s revenues due to the number of consumers-producers promoting the artist. Moreover, this CIBM reduces the risk undertaken by the firm as 70% of investment is made by co-producers (customers) and the number of these co-producers may guarantee that the artist will meet with some success.

However, the CIBM of MMC does not come without any dangers. Indeed, the fact that customers may become producers may lead to speculative behavior that is better suited to a producer than a customer. In such a situation, one may even wonder whether integrating customers into a business model through various roles does not blur the initial role of the customer, preventing participants from acting and behaving as customers. Another drawback of the MMC CIBM lies in the emergence of two kinds of customers with almost opposite behaviors: producers and non-producers (i.e. people who buy the music, give their opinion, etc., but do not produce the artists). Indeed, both types are MMC customers. However, while non-producer customers buy the music they like, producers may not only invest in artists they like, but also try to speculate just as in the Keynes’ beauty contest. In this case, they decide to invest in the artists whom they believe will be the most successful and acclaimed. This explains why the level of investments increases very quickly when the €70,000 (or €100,000 from mid-2009) limit is neared. This behavioral gap between producer-customers and non-producer customers (mere buyers of the music) may lead to artists who will not be successful from a commercial point of view (i.e. in terms of sales volumes) being launched on the market. For instance, in 2009, MMC launched an artist called “Agonie” (rap music), who had generated a significant amount of buzz on the internet. However, the artist sold a mere 671 albums in the two weeks that followed the release of her album, which is relatively low. In this case, the 300 customers who produced “Agonie” anticipated that young people would enjoy rap music, whereas the expected target did not buy this music in any great quantities . Thus, the 300 producers who supported this artist did not represent the opinion of the market, and this may appear contrary to the fundamentals of the MMC CIBM. More generally, this shows that what we have called a full CIBM is not sufficient to ensure superior commercial and / or financial performances. This leads to the need for a discussion of the limitations of CIBM.[2]

2. Unfortunately, we did not find any information about the reasons why "Agonie" did not succeed.

Limitations of CIBM

The above cases are but two of many examples of CIBMs. They show that CIBMs may be developed regardless of the sector of activity, or of the nature of the firm (be it an online or "brick" company). However, it has to be borne in mind that integrating its customers into the BM is by no way a guarantee of success. Indeed, as we explained above, a CIBM may present many advantages for both the firm (e.g. cost savings, profit maximization, innovation, etc.) and the customer (e.g. a better match between the value proposition and needs and expectations, price cuts, time savings, etc.). However, as promising as they may be, CIBMs do not come without any limitations, and it is necessary to be aware of these to maximize the CIBMs' effectiveness and efficiency. We identify five potential drawbacks: inappropriate participation; customers' cognitive limitations; excessive pressure from customers; blurring of customer roles; and, finally, the need for a clear sharing-out of the benefits that result from customer participation among a firm and its customers.

Firstly, inappropriate participation from customers may lead the value proposition to fail, be it in its conception, production and / or delivery. This is why many authors insist on the need to specify most precisely the way in which the customer participates and the way the firm supervises this participation. To this extent, mapping the customer's job may increase the potential offered by customer participation, while limiting its risks (Bettencourt & Ulwick, 2008). Adaptations also have to be made over time; otherwise, the firm may encounter costs and revenues problems. For example, when retail banks developed their call-centers, they met with strong resistance from their customers. In fact, these call-centers were supposed to deal with customer calls, which had previously been dealt with by branches. Many customers considered this a breach in their relationship with their branch advisor. As a result, some customers actually developed strategies to bypass the call-center, lying about the reason for their call, or refusing to give any information, so that they could talk directly to their branch advisor (Plé, 2006). In other words, they refused to provide the mental inputs that were necessary for the call-center to answer them. Accordingly, inappropriate participation may generate organizational costs due for instance to an increased need for coordination.

Secondly, customers' cognitive limitations may hinder the advantages of integrating the customer into the BM. For instance, asking customers to participate in the conception stage of a product may result in mere incremental innovations, and leave the door open for competitors. This is due to the fact that customers do not always know what they are talking about, or are unable to envisage what the innovation could really bring them (Ulwick, 2002). Consequently, the firm must make sure that customers are sufficiently guided through the process by means of organizational socialization techniques. These techniques should be developed and tested to make sure that they are the most appropriate and understandable for customers.

Thirdly, customers may make excessive use of their power once they are asked to participate in the firm's processes, and display what some have called opportunistic behaviors (Plé, 2006). As an example, some hotel customers testing new room concepts have tried to get a discount at the end of their stay, threatening to write a bad review on the hotel's website, or of one of its partners. Such excessive pressures from customers may lead firms to reduce their margins, or take the consequences of a negative market feedback on its own. Thus, involving the customer may trigger value co-destruction processes (Plé and Chumpitaz, 2010).

As a fourth limitation, we should mention the blurring roles of the customer that may follow the implementation of a CIBM. In a CIBM, customers are encouraged to become designers, co-producers, salesmen, promoters, etc. These various roles may create competing behaviors liable to generate several categories of customer depending on the nature and level of their participation. Such a consequence of CIBM appeal for organizational processes and structures not only to manage customer participation, but also to manage the different roles that emerge from this participation.

The fifth and final limitation which we identify concerns the sharing out of the benefits that ensue from customer participation. From the moment that customers are aware of their participation, they want to be rewarded for it. This reward may be a price cut, a better experience, etc. As long as they consider that the firm is using their services without offering anything in return, they may be reluctant to participate, or their satisfaction may decrease (Lovelock & Young, 1979; Evans, Stan, & Murray, 2008). Accordingly, precise and clear rules about this sharing out of the benefits must exist and be communicated to customers.

It is crucial to take these limitations into account, as they may have disastrous consequences on the firm's BM. Each one of these limitations may either decrease the firm's revenue or increase its costs.

CONCLUSION

Based on the analysis of the academic literature on BMs, this paper introduces the concept of Customer-Integrated Business Model (CIBM). Developing such a framework of a BM that takes the participation of the customer into account appears to be necessary, for both theoretical and empirical reasons. Indeed, increasing numbers of companies have been relying on their customers as co-producers of the value proposition which they release to the market. However, most studies of customer participation refer to the services marketing and management literature. Only a few of them focus, then, on ways to generate higher margins through improved integration of the customer as a resource, either by decreasing the firm's costs or by increasing its revenue (i.e.

a BM approach).
Accordingly, this paper mobilized both literatures (on BMs on the one hand and services marketing and management on the other), to build the concept of the CIBM, demonstrate what it comprises, and examine the way in which it works in all its diversity. We then illustrated it by drawing on two case studies in two different sectors of activity. Consequently, this conceptual model allows us to gain a deeper and more precise understanding of how the customer fits into a BM, i.e. how a firm may leverage its customers as resources. Moreover, this proves to be all the more interesting in that it brings in the possibility of a typology of CIBMs, depending on the manner in which the firm mobilizes its customers, the intensity of their mobilization, and the way the customer is used as a resource (co-producer, distributor, generator of network externalities, etc.).
To conclude, however, it is important to note that our paper can only be interpreted in the light of certain limitations that are also opportunities for further research. In particular, the “library” nature of our two case studies did not enable us to take into account psychological aspects concerning the encounter between employees and customers. Thus, nor could we take into account the actual content of the interactions between the customer and the firm’s employees and infrastructures. We were also unable to appreciate the psychological consequences of conflicting roles due to the various facets of customer participation.
Despite such shortcomings, our organizational approach to customer participation allows us to identify some mechanisms contributing to the efficiency of CIBM. First, companies have to go beyond mere customer socialization to help them deal, through specific structures and processes, with the multiple roles which participating customers have to assume. Second, firms have to communicate explicitly with their customers about the way in which both parties will benefit from participation, and share either resulting economies or value created by dint of customer participation. From a more general point of view, our cases also suggest that the success of a CIBM lies in the ability of a firm to generate positive feedback loops between the constituent parts of the BM (resources and competences, organization, value proposition).

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