

Participatory Micro-Retailer's Business Model Emergence

Rethinking and Adapting Micro-Retailer's Business Model by means of Social Media

Silvia Rodriguez-Donaire*
Industrial and Aerospace Technical Engineering School, Technical University of Catalonia,
Terrassa, Catalonia, Spain
silvia.rodriguez.donaire@gmail.com

Abstract

The aim of this research is two-folded. On the one hand, it attempts to assist employers of Catalan micro-retailers in designing, implementing and developing their Social Media strategy as a complementary channel of communication. On the other hand, it attempts to contribute to the research community with a better understanding on which building block of the micro-retailer's Business Model is more influenced by the customer level of interaction by means of the Social Media. To carry out this research the Participatory Action Research methodology has been used. Although the paper shows a scarce transformation of Catalan micro-retailer's business model, it was significant enough to be considered as more than just a simple adoption of an alternative channel of communication. This incipient transformation point out the emergence of a *Participatory micro-retailer Business Model* that would help micro-retailers to adapt and rethink their business models in turbulent times using social media as a communication channel.

Keywords: Social Media; Web2.0; Business Model (BM); Business Model innovation; Small-Medium Enterprises (SMEs); Participatory Action Research (PAR)

Introduction

This research is based on Catalan family micro-retailers, which need to adapt to the fast-changing environment. Specifically, if the micro-retailers want to survive and remain the engine of Catalonia's Economy, they should rethink their business model, which does not mean starting from scratch, but defining a business model that may allow them to easily adapt to these new environment and adapt their value creation logic by reorganizing their resources and capabilities and developing an ongoing learning ability.

The aim of this research is two-folded. On the one hand, it attempts to assist employers of Catalan micro-retailers in designing, implementing and developing their social media strategy as a complementary channel of communication. On the other hand, it attempts to contribute to the research community a better understanding on how

customer interaction incise in the transformation of the activity system of the micro-retailer's Business Model.

The research question to be answered in this paper is how the transformation of the activity system of the micro-retailers' Business Model would allow the emergence of a *Participatory Business Model* by means of Social Media. To carry out this research the Participatory Action Research methodology was used, whose contribution has two results: the one is more practitioner oriented and the other is more academic. The incipient results of the research showed a scarce transformation of Catalan micro-retailer's business model as a consequence of the implementation of social media. However, it is significant enough to be considered as more than just a simple adoption of an alternative channel of communication.

The main contribution is related to how customer influences the activity system of the micro-retailer's business model beyond four levels of customer interaction (communication, interaction, participation and collaboration) by means of social media. On the one hand, the activity system of a business model is referred to the eight building blocks of [1] research that includes customer segment, customer relationship, distribution channel, capabilities, partner, value configuration, value proposition, profit and cost. On the other hand, the four defined levels of customer interaction are based on the literature of group collaboration systems.

The results showed that not all the building blocks forming the business model are influenced by consumer interaction. The only building blocks influenced by an initial communication level in the current social media strategy implementation stage of our sample (five micro-retailers) are the following: customer segment, customer relationship, distribution channel, value proposition and cost. This incipient stage of transformation can be justified by a lack of effort made due to the small size of the business and a lack of team working inside the companies, easily adapting to changes. It can also be justified by the fact it was carried out by the micro-retailers only during a short period of time (14 month).

This paper develops as follows. Firstly, the Catalan micro-retailer context and a brief literature review related to BM and Social Media concepts. Secondly, the Participatory Action Research (PAR) methodology and its limitations, as well as, the design of the Social Media strategy implemented. Thirdly, a brief story of the five case studies used to assess the micro-retailer BM transformation. Fourthly, the discussion of the theoretical contribution is argued. Finally, a briefly summary of the paper as well as further research activities have been highlighted.

Context: Catalan Family Micro-Retailers

Around 85% of Spanish Small-Medium Enterprises (SMEs) are family businesses and some 66% of them are located in Catalonia. These SME's are very important to the Catalan Economy because they account for 81% of Gross National Product (GNP) compared with only 19% for large companies. Due to Internet expansion, the Web2.0 phenomena and the new pattern of consumer participation, companies should promote a change in their operative processes in order to adapt to those changes.

According to the study "*Barometer of Catalan Family Businesses*" [2], employers recognize the importance of innovation and adaptation to new market environments and

the lack of definition in their BM management. Although the research is focused on Spain, specifically Catalonia, this situation is similar across the world. For instance, The Economists article (June 1999)¹, entitled “*Business and the Internet: The rise of the infomediary*”, pointed out that “*most bosses know what they should be doing regarding having presence on Internet, [...] a coherent e-business strategy is one thing, getting one is altogether more difficult. And until you decide precisely what your strategy should be, it will not be clear what kind of IT infrastructure investments you will need to make*”. Currently, the situation has not changed since a special report on social networking at The Economists (January 2010)², entitled “*A peach of an opportunity, small businesses are using networks to become bigger*”, highlighted a survey of 500 small businesses in America conducted by Citibank on October 2009 that found that most of them had not use online networks at all, because they thought they would be a waste of time.

Some of these thoughts are common today in Catalan micro-retailers as well as small American companies. These could be explained through the literature, since SMEs are perceived as being limited by resource constraints [3], especially in terms of human, organizational (size and lack of procedures) and financial [4, 5]. According to [6], although SMEs are being limited in terms of resources they rely on the personal involvement of the entrepreneur to effectively deliver their business concepts and the meaning of their transformations to the market.

Literature Review: Business Model & Social Media

In the 2000s, some scholars attempted to understand the ever-changing global context of businesses due to the New Economy era driven by the Internet entrance. Particularly, the mid-1990s was a period that the Internet and the World Wide Web (WWW) had rewritten the basic rules of the economy and hence made novel strategies for commerce possible [7]. As a result, a dynamic, systemic, cognitive and holistic framework was required. This holistic and dynamic approach attempts to integrate how firms compete and select their own resources by developing the ability of learning and adapting to a competitive environment.

This literature review is distributed through the organizational and environmental context. The organizational context is related to the Business Model concept and its activity system. The environmental context is related to the technological changes, particularly Social Media, and the new pattern of customer participation.

1. Business Model

BM concept has acquired prominence in the lexicon with the emergence of e-commerce businesses at the Internet era, even though the origins of the expression BM can be traced back to the writings of [8]. Later, [9] defined a BM as “*stories that explain how enterprises work*” (pp.87). She intended to answer “*Peter Drucker’s age old questions: Who is the customer? And what does the customer value? [...] How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?*” [9] (pp.87). In short, what business does and how businesses make money.

During 1975-2000 years, the usage of the BM term was changing according to the context. [10] stressed that the BM concept had essentially been related to value creation,

revenue model, e-commerce, tacit conception and relationship management. Each of these elements represents a local interpretation of the global category of BM.

In the 2000s, BM concept had essentially been related to value creation and appropriation. For instance, [11] tried to highlight the drivers of value creation of a firm (novelty, lock-in, complementarity and efficiency) by analyzing a sample of 59 American and European e-businesses; [12] tried to emphasize the blend of the value stream for buyers and partners, the revenue stream, and the logical stream (the design of the supply chain); [13] tried to stress the operating BM that explains the firm's core logic for creating value for the customers within an organization; among other authors.

In an attempt to integrate BM components with a firm's environment, [14, 1] among other authors proposed a holistic approach. Particularly, [1] defined BM as a conceptual tool that could be expressed as a business logic relating to the way in which businesses are driven.

Currently, BM is essentially a matter of value and revenue generation. According to [15], BM is defined as 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...). These choices encompass resources and competences to value, products and/or services supplied. In addition, [16] defined a BM as "*a set of choices made by the firm and the set of consequences derived from those choices*" (pp. 2). Choices are relevant since they identify the way the management would like the firm operates.

In sum, these definitions of BMs share an emphasis on how a firm makes money through the configuration of value chain [17], the formation of strategic networks among firms [18], or the exploitation of firm-specific core competences³ (Teece, Pisano and Shuen, 1997).

1.1 Activity System of the Business Model

[11, 20] were the first authors to conceptualize a BM as a set of interdependent activities⁴. Particularly, [20] define BM as a '*system that is made of components, linkages between the components, and dynamics*'. They added that the BM overall goal consists of satisfying consumers' needs and creating and capturing value for the firm and its stakeholders. This goal is reflected in the customer value proposition [9, 21], which is made up of both the firm's key partners and firm's key resources. Additionally, [22] defined the activity system as "*a set of interdependent organizational activities centered on a focal firm, including those conducted by the focal firm, its partners, vendors or customers*" (pp. 217). In sum, BM activity perspective is relevant for managers and academics, since it allows researchers to focus on the focal firm.

Only authors such as [1, 16, 22, 23] have emphasized the interdependencies between components showing insight on how they enable BM evolution over time to create and capture value. Those responsible for creating these interdependencies are the managers, who shape and design both the organizational activities and the links between activities [22].

[23] research attempts to reconcile static and transformational approaches to consider BM evolution. They build on the RCOV framework (inspired by a Penrosian view of the firm) to identify the BM's components (resources and competences, organizational structure and proposition for value delivery) and deduce how these components change at the organizational level. The organizational structure encompasses

the organization's activities and the relations it establishes with other organizations to combine and exploit its resources.

According to [16], the BM concept provides the opportunity to describe the relevant activities of a company in a highly aggregate way. As it is said before, they defined a BM as a set of choices and consequences. As in the world of physics, causes have effects and choices have consequences. These relationships or links are fundamental in defining the way the firm operates. These authors developed a dynamic framework since they included choices and consequences in the BM definition. Choices drive consequences and, in turn, these consequences may reinforce the firm's ability to persist in those choices and even create conditions for new choices to emerge generating some amplifying or reinforcing feedback cycles.

[1] categorized the BM activities in nine building blocks - distribution channel, customer relationship, customer segments, value proposition, key resources, key activities, key partners, costs structure and revenue stream - that allow for conceiving a business model. These building blocks cover four main areas⁵ of a business that constitute the essential business model issues of a company: customers, offer, infrastructure, and financial viability. These nine building blocks are based on a synthesis of the existing business model literature (see figure 1) and attempt to show the logic of how a company intends to make money through a set of transactions or interdependencies as [11] pointed out. Additionally, the four areas describe how firms do business and the interdependency among these areas seeks to satisfy market needs creating and capturing value to BM participants.

In sum, a BM can be viewed as a blueprint of how a firm conducts business, how it delivers value to stakeholders (e.g. customers, partners, etc.) and how it links factor and product markets. The activity system of a BM addresses all the activity interdependencies, which address how the nine building blocks are linked to each other and how to both create and capture value with and from the market.

Additionally, [24] argues that the growth of the firm is a result of the interaction between its resources, its organization and its capacity to build up new value propositions in markets. So, firm's activities can help us understand how BMs operate and how a firm can generate revenues while changing its BM. [1, 23], as well as, [16] show the ongoing dynamics, which come from the interactions between and within components of the BM.



Figure 1 BM nine building blocks from [1]

As a result, BM may evolve in response to both external and internal factors. External factors refer to environmental changes and internal factors refer to deliberate choices, independent paths in the development of an element and the dynamics within or between activities of the BM (e.g. the revenues generated from value proposition enable to acquire new resources).

2. Environmental context: Social Media

Businesses are transformed by the way both how they create and capture value and how they face external pressures from markets and technology, since they are continuously facing external pressures (e.g. internationalization, globalization, growth of information technologies use, customer behavior and networking). These external pressures force businesses to face the challenge of improving their competitiveness. If businesses want to survive in an environment with extremely high competition, they must constantly adapt and innovate their businesses in order to compete differently. Additionally, changes can be initiated due to both external and internal influences.

The environment includes the technological, regulatory, economic and social context. Particularly, the technological context is an important determinant of the environment. For instance, the rise of the Internet forced companies to start adopting new distribution channels. Also, the fall in communication and coordination costs due to cheaper technology have forced companies to become more efficient. The technological context is a major force of business model innovation. In some cases, technological changes may even challenge the mere existence of a particular BM.

According to the IBM Institute for Business Value report (2007)⁶, almost all the companies of its sample make adjustments to existing BMs in order to deal with new technologies or customer needs. Recently, according to IBM Institute for Business Value report (2011)⁷, customers have become the primary force behind digital transformation in all industries, since they have higher access to online information through different channels increasing their expectations.

At the beginning of 1990s, [25] described the web as a '*collaborative medium*', which allows information providers in remote sites to share ideas without boundaries. Initially, Internet was focused on the command and control of information itself that enabled daily communications and increasingly cheap ways to transmit large amount of one-directional information. Later, David Weinberger, one of the authors of the Cluetrain Manifesto [26], suggested that a new wave of Internet would allow users keep conversations that they simply never could have done before. The main difference between this new wave of Internet and the '*old*' one is based on user's participation.

According to a report written by Forrester (2010)⁸, Web2.0⁹ fosters fundamental changes in consumer behavior and enables business efficiency. Social Media enable consumers' interaction with content and with each other whenever and however they like. Additionally, these tools enable firms to enhance stronger relationships with their customers, improve their loyalty and redefine their business relationships. As a result, Social Media are making human-centric processes more efficient and flexible by not only providing easy access to data, content, and co-workers expertise, but also allowing businesses to make better decisions. Particularly, the ability to collaborate with users may be a competitive advantage as the ability to deploy the Web2.0 technologies.

2.1 Customer interaction levels

The participation or interactivity is probably the single most important attribute of Web2.0. On one hand, Web2.0 is all about consumers, and whether business products or services suit their needs, solve their problems, and does it in a special, innovative or remarkable way. And on the other hand, interactivity between people is a central part of the commercial Internet.

What is new about Web2.0 interactivity is that it now goes far beyond messaging. It's not just about people interacting with other people. It is people modifying websites in the process of interacting with other people, such as posting text commentary and opinions, uploading and tagging photos, creating videos, audio streams, online conferencing, and collaboration and visiting the 3-D virtual worlds of multiplayer online games.

People using the Web and publishing on it today have the power to create new content, effortlessly launch new websites, and make blog posts or comments. Call it the 'social web', or the 'participatory web' [25]. The customer himself is the main actor to be concerned by his participation. Under the values of the *participatory web*, consumers bypass the marketing department, cut through the hype, and talk to each other directly through user-submitted product reviews influencing customer perceived service quality and satisfaction, their intention of purchase and leading to new ideas of product. For instance, a number of studies have found that word-of-mouth endorsement – the recommendation and reviews of 'customers like me' – are the single biggest influence on purchasing.

Particularly, this paper measures user participation through four levels of interaction. These levels come from the Methodology of Collaborative Modeling and Collaborative Groups [27, 28]. On the one hand, they define that there is collaboration once there are interactions between two parts. On the other hand, they say that collaborative systems are defined by the nature of interactions, the human dimension, the space/time dimension and the exchanged data. Particularly, the nature of interactions goes from informative, negotiative and collaborative to cooperative. Informative is the weak interaction while cooperative is the strong one.

This research attempts to describe the influence of social media on the activity system of the micro-retailer's business model. To explain this influence we focus on the nature of the interactions (figure 2) generated through the social tools between the consumer and the company.

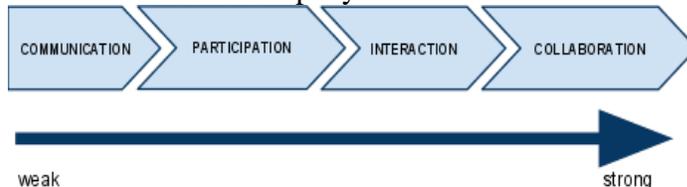


Figure 2. Levels of Interactions

Figure 2 shows the nature of consumer interaction in four consecutive levels of interaction. The first one is communication and refers to a unidirectional channel, which enables the spread of product information. The second one is participation and refers to a bidirectional path, which enables the entrepreneur to achieve interaction with the consumer through a direct incentive. The third one is interaction and refers to the

dialogue established in a natural manner with the consumer. Lastly, the fourth level is collaboration in which the consumer participates as a “*partial employee*” in the business model. This means the consumer has a central player role in the business instead of being a simple buyer; the consumer acts as a partner taking part in the business decisions or as a participant organizing the activities.

Those interaction levels are evaluated in one structured interview done in May. In this interview we try to see how the four interaction levels influence the transformation of the building blocks of the micro-retailers’ business model as a consequence of the implementation of social media.

Methodology: Participatory Action Research

The research has been conducted as an epistemological study that attempts to describe and understand the incidence of Social Media on family micro-retailers (2-3 persons) by actively participating in the research process and designing and monitoring the implementation of the situation using Participatory Action Research (PAR) methodology.

Due to my involvement in all the phases of the project and the close friendship with the involved employers, I may bring certain biases to this research. Although every effort will be made to ensure objectivity, these biases may shape the way I both view and understand the data; and, collect and interpret the businesses experiences. For this reason, a second researcher has been involved in the transcription of the interviews with the micro-retailers and results discussion.

1. Study Research

This research is focused on businesses in the municipality area of Cerdanyola del Vallès. Cerdanyola is a small town near Barcelona, Spain, with nearly 59,000 residents. Currently, it has four Local Commercial Associations, one of them being part of our research, called *l’Eix Comercial Estació Centre Cerdanyola*. Its main aim is to change the perception of consumers of all the shops that belong to the Association and see them as an open shopping center and bring consumers closer to the shops that belong to the Association by offering promotions and actions within the metropolitan area of Cerdanyola.

At the end of 2009, due to the crisis and exacerbated by the new buying trends of the user, *l’Eix* along with other Catalan institutions (Generalitat de Catalunya and La Cambra de Comerç de Catalunya), have signed a collaboration agreement to promote actions to improve competitiveness and business services for SMEs in the town of Cerdanyola. To promote these actions, the Association has designed an action plan that seeks to stimulate commercial activity in Cerdanyola, including training courses, individual and personalized expert assessment for the interested retailers of the Association.

My assistance was requested to carry out several activities as designing, implementing and assessing the Social Media strategy. My task is based on instructing, advising, assessing and motivating *l’Eix*, as well as, its interested retailers in the design, implementation and monitoring of the Social Media strategy. Specially, the Association came to me because they were concerned on both the fast-changing environment due to

the appearance of the Web2.0 phenomenon and the new trends in customer purchasing. Specifically, this research involves four micro-retailers (2-3 employees) and the Local Commercial Association, *l'Eix*.

2. Research Design: Social Media Strategy

During the research (April 2010 up to June 2011), I will conduct a serial of training activities related to Web2.0 and Social Media strategy design, giving expert advice and collecting data (forms, surveys and interviews) along the different steps of the PAR process. The type of data collected was mainly structured and unstructured open-ended interviews to the employers, which have been recorded and transcribed. This included one questionnaire after each training activity¹⁰, three recorded face-to-face interviews during the Social Media strategy implementation (one at the beginning and two at the end of the process) and an active observation of their Social Media actions through their Web2.0 tool of communication. From the interviews I obtained relevant information about the story of the micro-retailers both before and after the research process implementation.

It is important to be aware of the practical limitations that are inherent in a PAR research. For instance, PAR research is related to real situations in which people are absorbed with solving immediate and pressing problems. The pressures to achieve results are great, and the researcher can seldom grant long pauses to think or extensive data collecting without the utilitarian value being clear. According to [29], this suggests selecting simple designs and methods that serve several ends. Another limitation is related to researcher degree involvement, since they can often be trapped by the situation and it may be difficult to get an adequate perspective on what is happening. In such cases, it is an advantage to have ready-established structures that ensure that one is confronted by other experienced researchers.

To reduce these limitations, this research has confronted cases interpretation with an experienced researcher who makes contributions, provides and contrasts the assumptions and interpretations and addresses the non established structures.

3. Design of the Social Media Strategy

Based mainly on a Forrester article (2009), I have designed a retailer Social Media Strategy that encourages businesses to start with a specific initiative as nobody has yet established a general design for it. It includes eight steps: identify online audience, specify online objectives, choose a realistic strategy, select appropriate Web2.0 technology and measure the achieved objectives.

This strategy is a back and forward process, as each business develops its own strategy based on a trial-and-error learning [30]. The strategy follows the Deming cycle (Plan-Do-Check-Act), since the businesses have to follow four stages: (1) design the strategy, (2) select the Social Media tool and implement the designed strategy, (3) measure the proposed goals, and finally (4) compare the desired goals with the attained results and suggest improvements.

4. Case Study

The samples of this research are four Catalan SMEs as well as *L'Eix Comercial Estació Cerdanyola Centre*, a Commercial Association.

4.1 L'Eix, the Commercial Association (1987-2009)

Historically, "*l'Eix Comercial Estació Cerdanyola Centre*", a local commerce association, stems from the desire to give solutions to the needs and concerns of the retailers in Cerdanyola. It started as a small closed association, later as a federation of commerce and finally as an association within an established urban area. It includes more than 100 establishments, which offer expertise, excellence and close commercial service. The set of establishments are placed on the metropolitan area of Cerdanyola and they attempt to re-create an open-air mall at Cerdanyola.

L'Eix has two fundamental reasons for existence: (1) to strive for Cerdanyola to become an area of commercial excellence, thus meaning the administration should take care of attractive and friendly urban areas, provide pedestrians with suitable priority, services and street furniture making them feel safe, etc. and, (2) to stimulate trade in the urban area (promotion, energisation of *l'Eix*, running campaigns to raise awareness of the association).

On the one hand, to organize meetings with the partners to announce the collective actions, review the criteria and settle the objectives, *l'Eix* makes personal visits to them. On the other hand, Cerdanyola citizens know about the two or three events in the town via paper.

4.2 Grau Gent Fashion Shoe Shop (1986 – 2009)

Grau Gent is a family business that came from a small shoe store placed at Ripollet with a big warehouse. Later, it acquired two renting shops at Cerdanyola, one was the current shoe store. *Grau Gent* business has been evolving up to day, and now it is in a wide fashion store without warehouse. It is focused on youth fashion women (20-25 years old) that will not spend more than 50€ and older people that are looking for comfort. Everything at *Grau Gent* is seen at a glance. Customers can try on one shoe and ask for the pair. Its friendly atmosphere characterizes the shop. Customers can request freely for advice to find what they are looking for and what fits better on them. Additionally, it has a swinging mammoth to entertain customers' children that creates a comfortable atmosphere among customers when they are making their purchases

4.3 Torre del Pi Hardware Store (1965 – 2009)

At 1965, *Torre del Pi*, a family business, was formed by three establishments around Cerdanyola del Valles (Ripollet, Cerdanyola and Les Fontetes). At the 1980s, Miquel and his brother acquired one of the hardware stores, the one that was placed on the middle of Cerdanyola del Valles. The other two were closed after three years of the transfer.

During these 30 years, the hardware store has evolved to a domestic store, even though it has maintained the industrial style from its origins. It stresses its personalized advice since the store wants to help people and solve customer problems. This closer treatment increases customers' loyalty, because as Miquel said "*his purpose is to make customers thing on them when they have a problem*". Additionally, Miquel pointed out that the main difference between malls and proximity stores is based on service and qualified employees but not on price.

4.4 Florist Morera Shop (1949-2009)

Florist Morera stays in its fourth generational grade of family business. It is placed on the center of Cerdanyola without warehouse. The owner noticed that the audience was looking for advice, transparency and personalized treatment. To add value to its product and engage customers, Morera family sells innovative florist products with competitive prices. Additionally, the way they manipulated the flowers and its excellence of service increase the loyalty of its customers. However, they try to offer good, nice and cheap products for all the customers. During its 61 years of story, they have been evolving up to day and they have learned that everything has to be seen at a glance, because the half of its sales are compulsive.

4.5 Centre Optic Cerdanyola Shop (2008-2009)

Centre Òptic Cerdanyola (COC) was transferred in September 2008 to the current owner, Yolanda Flores. The store was originally part of a group of optical stores under a different name and using a promotional model.

This store differs from the others as it offers complementary and personalized services. These complementary services are special in that they require specific training and are in many cases carried out by ophthalmologists and highly specialized centers. For instance, visual training therapy for children offered as individual sessions throughout the store's opening hours. Regarding on personalized attendance, Yolanda highlights her philosophy of not entering in a pricing policy as her main interest is to retain an audience which values her tips, advice and information on the use and care of the glasses, lenses and accessories. However, she offers competitive prices, which are even below the suggested retail price, since she forms part of an association called CECOP, which offers a group of certain brands with special discounts and deals. Other elements that added value are the location, exclusive products, etc.

The only existing communication channel until now has been the mouth-to-ear, which has helped spread the brand in the town of Cerdanyola over that year. Indeed, some suppliers have included COC in their websites within their list of stores selling the products.

Theoretical contribution

To have a better understanding on which building block of the micro-retailer's BM is more influenced by the customer level of interaction by means of the social media, table 1 shows the results taken from the structured interview. These results allow us to observe how big is the transformation of building blocks according to the levels of interaction.

The column "average" indicates the mean average of the answers of the different micro-retailers for each building block. The answers were rated on a scale from 1 to 5, 1 meaning little or nothing and 5 meaning always. In the column "building block" we find the name of each building block. Below each of the building blocks we can see the sum of the mean average of each interaction level. This value tries to show how much influence the interaction of the user has on each of the building block. Values lower than 4 indicate that the building block is not affected by the interaction of the consumer as all the answers got a low value. Values between 4 and 8 indicate that the building block has

been affected in an almost imperceptible manner. Values over 8 indicate that that particular block has some transformation. An important transformation is considered to happen when the sum is over 12. Specifically, the building block whose value is over 8 indicates that a level of interaction stands out (the sum is higher than 3 in its individual mean average) and this level of interaction has influence in the first level of transformation of the of the micro-retailer's business model.

As observed in table I, we have a first stage of transformation in the following building blocks: customer segment, customer relationship, distribution channel (the customer's area), value proposition (the offer area) and cost (a part of the financial viability area). In all those blocks the level of interaction, which stands out is communication. Besides, in the costumer and offer areas some incipient values of participation and interaction levels (second and third interaction levels) can be observed.

Table I: Incidence of the interaction levels in the building blocks

BUILDING BLOCK	INTERACTION LEVEL	AVERAGE	Comments (Green > 3 (influence) and red < 2 (not influence))
CUSTOMER - Customer segment	Communication	3,9	Customer Segment is positively influenced by the communication level, since it is important to spread the information by means of social media to capture new customers and enter inside new markets.
	Participation	2,5	
	Interaction	2,7	
	Collaboration	1	Customer segment is not influenced by the collaboration level since this level is not exploited by the micro-retailers. Particularly, they want to be small and they do not want to bring the customer as an actor of the business since they don't have enough resources to deal with that.
CUSTOMER - Customer relationship	Communication	3,6	Customer relationship is influenced positively by the communication level, since it is important to establish contact with the customers by launching 1 click campaigns, even though there is a low rate of participation.
	Participation	2,4	
	Interaction	2,4	
	Collaboration	1	Idem as Customer segment
CUSTOMER - Distribution channel	Communication	4	Distribution channel is influenced positively by the communication level, since it is a new channel of communication. This new channel allows the firm to communicate easily and quick with the customers.
	Participation	2,4	
	Interaction	2,3	

	Collaboration	1	Idem as Customer segment
OFFER - VP	Communication	4,2	Value Proposition is influenced positively by the communication level, since the firm could spread its information and offer its value proposition easily and be touch with the customer.
10	Participation	2,6	
	Interaction	2,2	
	Collaboration	1	Idem as Customer segment
INFRASTRUCTURE - VC	Communication	2,4	
6,6	Participation	1,8	Value Configuration is not influenced by the participation level, since the firm does not integrate the customer inside the value chain of the firm.
	Interaction	1,4	Value Configuration is not influenced by the interaction level, since the firm does not allow the participation mode.
	Collaboration	1	Idem as Customer segment
INFRASTRUCTURE - Partner	Communication	1,8	Partner is not influenced by the communication level, since the firm does not integrate the customer inside the value chain of the firm.
5,8	Participation	1,6	Partner is not influenced by the participation level, since the firm does not allow the communication mode.
	Interaction	1,4	Partner is not influenced by the interaction level, since the firm does not allow the participation mode.
	Collaboration	1	Idem as Customer segment
FINANCIAL - COST	Communication	4	Cost is influenced positively by the communication level, since the firm spread information easily through the social media and get more customers than with the normal distribution channel.
8,6	Participation	1,8	Cost is not influenced by the participation level, since the firm switch their own costs and the customer does not contribute in that reallocation.
	Interaction	1,8	Cost is not influenced by the interaction level, since the firm does not allow the participation mode.
	Collaboration	1	Idem as Customer segment
FINANCIAL - PROFIT	Communication	2,4	

6,2	Participation	1,4	Profit is not influenced by the participation level, since the firm does not integrate the customer inside the value chain of the firm and use them as a "partial employee".
	Interaction	1,4	Profit is not influenced by the interaction level, since the firm does not allow the participation mode.
	Collaboration	1	Idem as Customer segment

1. What can we interpret from the results of Table I?

The customer area, which includes the customer relationship, distribution channel and customer segment building blocks, is positively influenced by the first and second level of customer interaction, since the micro-retailers have started increasing their visibility on the Internet mainly by communicating and sharing information (distribution channel), getting comments and opinions about their actions by posting on the wall or sending emails (customer relationship) and promoting and encouraging the participation of new user groups using the same social tool (customer segment).

The first and second level of customer interaction positively influences the offer area, which includes the value proposition building block, since the micro-retailers have designed social media strategy to enhance and capture customers' interest and interactivity. This customer captures and enhancement is done by a storytelling, which adds value to the customer. Currently, micro-retailers perceive only the first level of interaction, communication, because many of them have still not found the emotive thread or story to boost within the social channel. To summarize, the value proposition is mainly affected by the way the story is spread through the social media and by how it encourages customer interest. For instance, the entrepreneur of the hardware store points out that the comments from the users on their Facebook wall helps him to improve the quality of the information and allows him to incorporate new products onto their shelf. That implies an improvement of their value proposition.

The infrastructure area, which includes key resources, key activities¹¹ (value configuration) and key partners building blocks, is slowly influenced by the customer interaction levels, since (1) they want to be small and (2) they do not want to bring the customer as a central player in the business because they do not have enough resources to deal with it.

The financial viability area includes cost structure and revenue stream building blocks. The cost is the only building block influenced by the first level of customer interaction, since micro-retailers have shifted some of their offline advertisements into online actions (e.g. hiring external resources or increasing their sales efforts). Micro-retailers have noticed they can reach a wider segment of customers while keeping their cost structure. However, they have not reported any significant change in their revenue stream structure by means of social media implementation.

Figure 3 shows the transformation of the business model of the micro-retailers. Red is used to highlight the building block that has not been influenced at all; its value is below 4. Orange is used for building blocks with values between 4 and 8 meaning there is an almost imperceptible transformation, and green indicates that a first stage of

transformation is starting to appear; its value is, as said before, over 8. White is reserved for the building block, which has not been evaluated in this particular research.

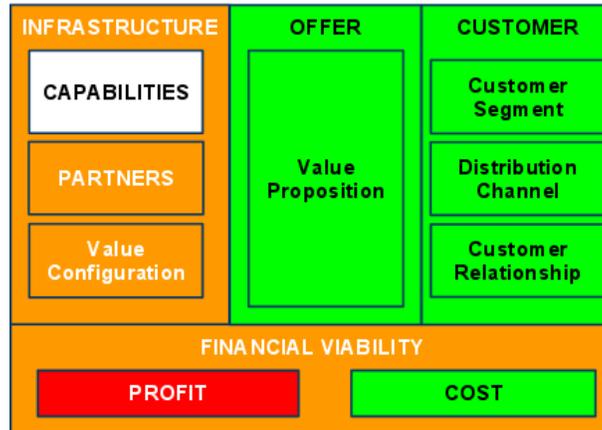


Figure 3. Building blocks transformation influenced by customer interaction

In micro-retailers as the literature said, the importance of the consumer’s role grows after the delivery stage. According to [31, 32], this kind of participation, named “*co-marketer*”, becomes important with the Internet because the consumers have the possibility to describe their own experiences by tagging or leaving their comments. The current structure of the micro-retailers does not allow the integration of the consumer as a participant and/or player in the business model.

On the one hand, the micro-retailers have observed that thanks to the implantation of the social media it is possible to reach a bigger number of users by spreading information and by increasing their visibility on the Internet (initial level of interaction). On the other hand, the micro-retailers can engage the consumer community members as participants through intuitive activities (e.g. tag your name, guess the situation of a signal, etc.). In order to encourage the participation of the users in the energized activities, they must be attractive for their economic value (l’Eix case) or for their emotive value (hardware store case). Besides, the participation of the user may influence other consumer participation and so on (second interaction level).

According to the entrepreneurs, before being able to obtain comments and opinions from the consumers’ experiences with their products or with the energized topics (third level of interaction) first they need to involve the consumers in the participation (second level of interaction) and, obviously, they need to know them beforehand (first level of interaction). The entrepreneurs point out that the interaction will only appear (1) if the dynamics cause a participation of the consumer and (2) if there is an emotive thread, which encourages the consumer to express his opinions. As a consequence, most of the micro-retailers could only end up in the initial level of interaction.

Conclusions and Limitations

From PAR, we have found facts on the transformation of the micro-retailer’s BM as a consequence of the implementation of Social Media. Although the research showed a scarce transformation of Catalan micro-retailer’s business model sample, it was

significant enough to be considered as more than just a simple adoption of an alternative channel of communication. This incipient transformation point out the emergence of a *Participatory micro-retailer Business Model* that would help micro-retailers to adapt and rethink their business models in turbulent times using social media as a communication channel.

From the research, we have found evidence on how the customer influences the activity system of the micro-retailer's business model. The studied cases are in an incipient stage of transformation as far as only an initial level of interaction on five of the nine building blocks of the business model is observed (customer segment, customer relationship, distribution channel, value proposition and cost). This incipient stage of transformation can be justified by a lack of effort made due to the small size of the business and a lack of a team, which can easily adapt to change. It can also be justified by the fact it was only carried out by the micro-retailers a short time ago.

Particularly, the Social Media Strategy implemented has helped the employer in the task of defining, planning and verifying the achievement of the planned objectives as well as implementing the Social Media. That is why we believe the employer finds the monitoring of a planned strategy as extremely helpful. It also helps the design of an action plan and a clear view of the objectives to be achieved. The definition of a Social Media Strategy, however, is not enough to lead to the micro-retailer's transformation. Micro-retailers consequently need other mediating factors that help them in the change.

This research was carried out for approximately 14 months. This period has been enough to observe and understand how the transformation of the micro-retailer's BM is made. However, to be able to see the consolidation of this transformation as well as the influence of the customers in the businesses, I would need to continue evaluating and measuring the development progress of the Social Media strategy, since it is a trial-and-error process.

Further research areas have been identified, for instance, conduct a longitudinal PAR in order to observe the consolidation of the transformation inside the BMs of the current micro-retailers; and, contrast the results obtained with the PAR methodology with other successful Catalan micro-retailer cases such as "La Fornal del Ferrers".

References

1. Osterwalder A, Pigneur Y. and Tucci A. (2005). Clarifying Business Models: Origins, Present, and Future of the Concept. *Communications of Association for Information Systems*, 16, 1-25. doi: 10.1.1.167.2213.
2. Callado J. F., Cañizares C., Muñoz M. D., Utrero N. and Xabadia A. (2008). *Col·leccio d'estudis Barometre de l'empresa familiar catalana*. Col·lecció d'Estudis, Vol. IV. Barcelona.
3. Carson D. (1990). "Some exploratory models for assessing small firms' marketing performance: a qualitative approach". *European Journal of Marketing*. 234(11): 8-51.
4. Bjerke B. & Hultman C. (2002). *Entrepreneurial marketing: the growth of small firms in the new economic era*. Cheltenham: Elgar Press.

5. Schindehutte M., Morris M. H. and Kocak A. (2008). "Understanding market-driving behavior: the role of entrepreneurship". *Journal of Small Business Management*. 46(1): 4–26.
6. Huang Z. and Brown A. (1999). "An analysis and classification of problems in small business". *International Small Business Journal*. 18(1): 73–85.
7. Kotha S. (1998). In *Competing on the Internet: how amazon.com is rewriting the rules of competition*. In *Advances in Strategic Management*, Baum JAC (ed). Vol. 15: JAI Press: Greenwich, CT; 239–265.
8. Drucker, P. (1954). *What is a Business? The Practice of Management*. Ed. Harper and Row Publishers, New York: Harvard Press.
9. Magretta J. (2002). Why BMs Matter. *Harvard business review*, 80: 86-92.
10. Ghaziani, A. and Ventresca, M.J. (2005). Keywords and cultural change: Frame analysis of business model public talk, 1975-2000, in: *Sociological Forum* 20 (4), 523-559.
11. Amit, R. and Zott, C. (2001). "Value Creation in E-Business". *Strategic Management Journal*, 22: 493.
12. Mahadevan B. (2000). "BMs for Internet-Based E-Commerce: An Anatomy". *California management review*, 42: 55-69.
13. Linder J.C. and Cantrell S. (2000). "Changing BMs". In *Institute for Strategic Change*, Accenture, Chicago Press.
14. Afuah A. (2004). *Business models: A strategic management approach*. New York Press: McGraw-Hill/Irwin.
15. Lecocq X., Demil B. and Warnier V. (2006). "Le BM, un outil d'analyse stratégique". *L'Expansion Management Review*, 123: 96-109.
16. Casadesus R. and Ricart J.E. (2011). "How to design a winning Business Model". *Harvard Business Review*. 89(1/2): 101-107.
17. Porter M.E. (1985). *Competitive advantage: creating and sustaining superior performance*. Macmillan, New York: Harvard Press.
18. Dyer J. H. & Singh H. (1998). "The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage". *Academy of Management Review*, 23: 660-679.
19. Teece D. J., Pisano G. and Shuen A. (1997). "Dynamic Capabilities and Strategic Management". *Strategic Management Journal*, 18: 509-533.
20. Afuah A. and Tucci C.L. (2001). *Internet business models and strategies*. New York: McGraw-Hill.

21. Johnson M.W., Christensen C.C. and Kagermann H. (2008). Reinventing your business model, *Harvard Business Review* 86(12).
22. Zott C. and Amit R. (2009). Designing Your Future Business Model: An Activity System Perspective. IESE Working Paper - WP-781. Retrived from: <http://www.iese.edu/research/pdfs/DI-0781-E.pdf>
23. Demil B. and Lecocq X. (2010). Business Model Evolution: In Search of Dynamic Consistency, *Long Range Planning* 43, 227-246
24. Penrose T.E. (1959). *The Theory of the Growth of the firm*. New York: John Wiley.
25. Berners-Lee T., Cailliau R., Luotonen A., Nielsen H. F. and Secret A. (1994). “The world-wide web”. *Communications of the ACM*, 37(8): 76-82.
26. Levine R., Locke C., Searls D., Weinberger D. and Jake M. (1999). *The Cluetrain Manifesto, the end of business as usual*. Perseus Publising, Cambridge, Massachusets.
27. Gaudou B., Marilleau N. and Ho T.V. (2011). *Toward a Methodology of Collaborative Modeling and Simulation of Complex Systems*. In Intelligent Networking, Collaborative Systems and Applications from Santi Caballé, Fatos Xhafa, Ajith Abraham, Springer, p. 27-53, Vol. 329, Studies in Computational Intelligence Ed.
28. Stahl G. (2006). *Group Cognition: Computer support for building collaborative knowledge*. Cambridge, MA: MIT Press.
29. Karlsen J. I. (1990). Action Research as a Method, in *Participatory Action Research* by Whyte W.F. Sage Publications Inc.
30. Argyris C. (1985). *Strategy, Change, and Defensive Routines*. Boston: Pitman Publishing Co.
31. Gouthier, M. H. J., and Schmid, S. (2003). Customers and customer relationships in service firms: the perspective of the resource-based view. *Marketing Theory*, 3(1): 119-143.
32. Chervonnaya, O. (2003). Customer role and skill trajectories in services. *International Journal of Service Industry Management*, 14(3): 347-363.

¹ The Economists. (June 1999). “*Business and the Internet: The rise of the infomediary*”. Retrieved from: <http://www.economist.com/node/215703>

² The Economists. (January 2010). “*A peach of an opportunity, small businesses are using networks to become bigger*”. Retrieved from: http://www.economist.com/node/15350940?story_id=15350940

³ Core competence will be called distinctive competence only if they are based on a collection of routines, skills, and complementary assets that are difficult to imitate [19].

⁴ An activity fulfills a specific need or objective, and involves human action and interaction. Organizational activity can thus be conceived as collective, goal-oriented action, is a social process that is shaped by its context and that in turn shapes the context. This concept could be helpful to analyze and better understand the origin and evolution of business model, and the dynamics of business model change. (Blackler F. and McDonald S. (2000). Power, mastery and organizational learning. *Journal Management Studies*, 37, 833-851; Jarzabkowski P. (2005). Strategy as Practice: An Activity-Based Approach. London UK: Sage, 216 pages. Reviewed in *Academy of Management Review*, 2007, 32(3), 986-990; Spender D. (1995). *Nattering on the Net: Women, Power and Cyberspace*. Victoria, Australia: Spinifex)

⁵ *Customer interface* refers to who is the company's target customers, how it delivers them products and services, and how it builds a strong relationship with them. *Infrastructure management* refers to how the company efficiently performs infrastructural or logistical issues, with whom, and at what kind of network enterprise. *Offer* refers to which business area is the company in, the products and the value propositions offered to the market. *Financial viability* refers to which are the revenue model, the cost structure and the business model's sustainability.

⁶ IBM Institute for Business Value. (2007). Paths to success: These ways to innovate your business model. Retrieved from: <http://www-935.ibm.com/services/us/index.wss/ibvstudy/gbs/a1028552?cntxt=a1005266>

⁷ Berman S.J and Bell R. (2011). Digital transformation. Creating new business models where digital meets physical. IBM Institute for Business Value, Executive Report, IBM Global Business Services.

⁸ Young G. O., Daley E., Driver E., Koplowitz R., Rymer J. R. and Lo H. (April 2010). "Why Web2.0 matters". *Forrester Research Media report*. Retrieved from: www.forrester.com

⁹ O'Reilly officially introduced the term Web2.0 as a set of online web-based collaborative tools, commonly referred as 'Social Media', that encourage and enable people to interact, communicate, participate, collaborate, share, create, add to and edit the information easily and in real time (e.g. social networks, blogs, wikis, RSS (Really Simple Syndication), etc.). O'Reilly Media Inc. 2005. "What is Web2.0: Design Patterns and BMs for the next generation of Software." Retrieved from: <http://oreilly.com/web2/archive/what-is-web-20.html>

¹⁰ The training activities are related to: (1) raise awareness about the changes in the pattern of customer participation and how companies are changing their way of doing businesses through the use of Social Media; (2) explain what Web2.0 is and its benefits; (3) explain the design of the Social Media strategy to follow; and (4) explain which type of Web2.0 tool is the most appropriate for each case and its deployment.

¹¹ Key activities are referred to what allow the micro-retailer to better disseminate their product information to their customers.

Acknowledgement

I would like to acknowledge Prs. Garcia-Almiñana for his unconditional support and for offering himself as the second researcher discussing with me the different decisions at the different steps of my dissertation. I fully appreciate any suggestions or notes regarding this work, at the following correspondence address:

silvia.rodriquez.donaire@gmail.com