

Understanding emergence in business model development: how companies interact with stakeholders to deal with environmental ambiguity.

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Résumé :

Cette recherche explore le caractère émergent du développement d'un business model en adoptant une perspective sensemaking. Une majeure partie des approches du business model adopte une vision rationnelle, considérant de manière prépondérante les choix délibérés au détriment de phénomènes émergents. Par conséquent, nous interrogeons ici les mécanismes d'émergence intervenant dans le processus de développement du business model.

À partir d'une étude de cas longitudinale, nous examinons le développement d'un business model sur une période de 22 mois. Nous identifions des mécanismes de sensemaking émergents et délibérés qui forment trois 'patterns'. Ces derniers peuvent être 'enactés' par les acteurs pour le développement du business model et l'affinement des tactiques.

Mots clés : Business model, Sensemaking, Emergence

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1 INTRODUCTION

Business Model (BM) development has become an area of main interest, as it raises both issues concerning the content of BM ideation, design and change, as well as the process through which BM is ideated, designed and changed (e.g. Linder & Cantrell, 2000; Sosna, Treviño-Rodríguez, & Velamuri, 2010). Managerial cognition has been identified as a key driver for understanding business model innovation and change (Foss & Saebi, 2016). Although most approaches of BM position it as an intentional set of choices (Casadesus-Masanell & Ricart, 2010) or a rational configurations of components (Osterwalder & Pigneur, 2010), the cognitive view of BM considers it as the mental representation of the activity system that enables the company to create, deliver and capture value (Baden-Fuller & Mangematin, 2013; Doz & Kosonen, 2010). As Mintzberg and Waters (1985) depicted that realized strategy is constituted by an interplay between deliberate and emergent strategy, we question here the emerging moves in business model development.

Understanding emergence in business model development is crucial to better understand how business model is actually set in companies. Indeed, focusing on the rational and deliberate view of BM leads to over considering the deliberate choices at the expense of emergence in the way companies run their business. Moreover, in time of deep changes in ambiguous environment, firms have to evolve and renew their businesses in order to remain competitive (D'aveni & Gunther, 1994). Considering the autonomy that can be given to middle managers in strategy implementation through adaptation (Wooldridge, Schmid, & Floyd, 2008), strategy making at the periphery (Regnér, 2003), or the need for resilience in complex and ambiguous situations (Sutcliffe & Vogus, 2003; Williams & Shepherd, 2016), it is crucial to understand how business model and the afferent tactics (Casadesus-Masanell & Ricart, 2010) can evolve through emergent processes and practices in order to lead companies to success.

The sensemaking perspective (Weick, 1995) that place interaction at the core of the action is well adapted to consider how business model evolution may emerge from actors' actions and understandings. It draws on the possibility for actors to develop action and take decision in ambiguous situations and when actors do not quite fully understand the situation they face.

Consistently, in this paper, we address the following question: what are the cognitive processes that underpin emergence in business model development?

In order to answer this question, we provide a longitudinal view of alternative BM development in an incumbent consulting firm, through an ethnographic stance. In our study, we distinguish BM emergence – as the process through which a BM is built for the first time – and BM evolution, which refers to modifications of an already defined BM. Thanks to our analysis, we identify six sensemaking mechanisms and three patterns that allow to understand how BM got enacted by actors.

We contribute to the BM literature in three ways: first, we highlight the social ongoing process that enables emergence in BM development. Second, we argue that tactics are not totally predefined by business model choice and actually influence business model development through the interaction they generate. Third, we show that sensemaking patterns can inspire managers to deal with BM development process.

2 THEORETICAL POSITIONING

2.1 BUSINESS MODEL AS AN ACTIVITY SYSTEM

Since it's democratization in the context of internet and e-business emergence (Amit & Zott, 2001, Demil, Lecocq, Ricart, & Zott, 2015), the business model (BM) has become a very popular concept which has interest for both researchers and practitioners (Pateli & Giaglis, 2004). Despite the sharp discussions, the multitude of definitions (Brink & Holmén, 2009; Dahan, Doh, Oetzel, & Yaziji, 2010) and heterogeneous conceptualizations (e.g. Chesbrough, 2010; Osterwalder & Pigneur, 2010), academic literature increasingly converge to stand BM as a system of activities through which a firm creates and captures value – “*a set of interdependent organizational activities centered on a focal firm, including those conducted by the focal firm, its partners, vendors or customers, etc..*” (Zott & Amit, 2010, p. 217). In other words, how a firm ‘does business’ at a system level (Zott, Amit, & Massa, 2011). In that definition, BM articulates the performed activities, their responsible and the way they are linked (Zott & Amit, 2010) with the reason the BM creates value, i.e. the revenue model (Amit & Zott, 2001) into an activity system (Zott, 2016)¹.

Although some authors considered the concept of BM without theoretical interest – as a simple aggregation and reformulation of other strategic concepts (Porter, 2001), other conceive it as new opportunities for understanding strategy (e.g. Brea Solís, Casadesus-

¹ C. Zott has presented an integrated model at the Strategic Management Society annual conference plenary session “the Art & science of (disruptive) business model design”, Berlin, 2016.

Masanell, & Grifell Tatjé, 2015; Demil & Lecocq, 2010; McGrath, 2010). BM represents a *meso* level of analysis (Rousseau & House, 1994) of the firm by putting into perspective elements of strategy and operational dimension (Morris, Schindehutte, & Allen, 2005). In that perspective, we're in line with Casadesus and Ricart (2010) and differentiate BM from tactics. While BM refers to "*the logic of the firm, the way it operates and how it creates value for its stakeholders*", tactics are defined as "*the residual choices open to a firm by virtue of the business model it chooses to employ*" (p.196).

Notwithstanding academic literature agree to consider BM as systems of activities, researchers differ about the understanding of such systems development. BM development has quickly emerged as a main area of interest, as it raises both issues concerning the content of BM change (e.g. Linder & Cantrell, 2000), as well as the process through which BM can change (e.g. Demil & Lecocq, 2010; Svejenova, Planellas, & Vives, 2010). BM change dynamics are strongly interlinked with innovation process (e.g. Giesen, Berman, Bell, & Blitz, 2007; Pateli & Giaglis, 2005) and the quest to remain competitive (Wirtz, Schilke, & Ullrich, 2010). If these studies show and qualify BM changes a posteriori, there is still a lack of knowledge about transformational factors and development mechanisms (Sosna et al., 2010). When BM is considered as a link between technical and economic domains (Chesbrough & Rosenbloom, 2002; Dmitriev, Simmons, Truong, Palmer, & Schneckenberg, 2014), BM development primarily comes from technological innovation. However the latter is not the only trigger, other elements as a quest of creative freedom (Svejenova et al., 2010) or response to disruptive BM innovation (Osiyevskyy & Dewald, 2015) can generate BM development.

In line with a rational view of BM, several studies are interested in BM development dynamics without considering their emergent aspect (Dahan et al., 2010; Velu & Stiles, 2013). As for strategy field – which the paucity of research on emergence is admitted (Mirabeau & Maguire, 2014) – there is a lack of understanding of emergence in BM development.

2.2 WHAT ABOUT EMERGENCE IN BM LITERATURE?

In strategy formation research, Mintzberg (1978) has introduced the distinction between deliberate strategy – "*intended before being realized*" (Mintzberg, 1979, p. 582) – and emergent strategy – "*realized despite or in the absence of intentions*" (p. 582). While the deliberate view in BM development is admitted and knowledgeable (e.g. Casadesus-Masanell

& Ricart, 2010; Pateli & Giaglis, 2005), the emergent one has to be explored to understand how it can drive BM development (e.g. Byerly, 2014). The Chef Ferran Adrià's BM development process (Svejenova et al., 2010) give illustrations of the emergent aspect of such processes. While nothing predestined him - no family context, no will - to work in the restoration sector, it is military service that triggers his vocation. In the Naturhouse case (Sosna et al., 2010), a crisis due to environmental factors countered the deliberate initial BM in favour of the gradual emergence of the new one.

In line with Martins & al. (2015), we recognize that the three BM perspectives – based on theoretical schools in strategy research – offer limited insights for understanding BM development and emergence in such processes. The rational positioning view considers managers as rational decision-makers that do not allow to apprehend emergent activities while the evolutionary learning school focus on trial-and-error learning process (Gavetti & Rivkin, 2007). Well, the cognitive view concentrate on managers' cognitive constraints (Ocasio, 2011; Porac & Tschang, 2013). To address this gap, we propose to explore an additional perspective on BM – a social interactionist one – based on interactions. Indeed, these ones can be vectors of emergence in BM development.

2.3 BUSINESS MODELS, INTERACTIONS AND SENSEMAKING

Several studies on BM show the implication of interactions between various stakeholders for emergence in BM development process (e.g. Demil & Lecocq, 2010; Saebi & Foss, 2014). The interactions' role for emergence in BM development can be enlightened by returning to the previous examples. In Ferran Adrià's BM development process (Svejenova et al., 2010), two interactions are decisive for the start of his career: first, in the navy a colleague introduced him to the French cuisine, then a friend convinced him to take a job in a restaurant. Naturhouse's BM development is identified as "*a constant process of fine-tuning, in which [his] managers' feedback was key*" (Sosna et al., 2010, p. 388).

Taken together, these studies show the way interactions with various entities (considered as actors, partners, etc.) can be integrated in the understanding of emergence in BM development. However, too little attention is paid to the social and cognitive processes at play and underlying the BM development process. Contributions don't allow understanding how actors from inside the company make sense of these interactions for BM development. Further, actors' cognition and sensemaking are identified as crucial inputs for such processes

(Sosna et al., 2010). Consistently, we explore here the potential of the sensemaking perspective (Weick, 1995) in order to address emergence in BM development.

Sensemaking is usually understood as a process in which individuals or groups attempt to interpret ambiguous situations and considered as a critical activity for organizations (Weick, 1995). In much empirical research on change it is generally conceptualized as a social process of meaning construction and reconstruction through which actors understand, interpret, and create sense for themselves and others of their changing organizational context and surroundings (Balogun & Johnson, 2004; Gioia & Chittipeddi, 1991; Rouleau & Balogun, 2011). At a strategic level, sensemaking consists to apprehend and analyze the environment to construct a reasoning in order to take strategic and organizational decisions (Gioia & Thomas, 1996; Thomas, Clark, & Gioia, 1993).

Beyond the cognitive aspect, the process of sensemaking is a way for actors to deal with uncertainty and ambiguity thanks to the creation of mental structures and enable action (Maitlis, 2005). Sensemaking allows to comprehend the strong and non-linear relation between understanding and action: actors are engaged in intertwined phases of interpretation and action where interpretation shapes action and vice versa over the time (Balogun, Pye, & Hodgkinson, 2008). Moreover, sensemaking constitutes an interactionist perspective and is a fundamentally social process: actor's interpretations and actions are influenced by interactions with others that allow people to comprehend their environment and take action collectively (Isabella, 1990; Maitlis, 2005; Weick, 1995).

Most *“environments [are] characterized by high complexity and ambiguity”* (Chesbrough & Rosenbloom, 2002, p. 536). As such, companies do not face issues related to information gathering but rather situations where information is abundant, which lead companies to develop various plausible interpretations of what takes place. In other words, they struggle with making sense of the situation they face (Weick, 1995). In this view, BM development is intertwined with Weick's (1995) notion of sensemaking (Chesbrough & Rosenbloom, 2002). Considering these elements from the literature, the sensemaking perspective constitutes a framework that allows to understand how actors make sense of a situation to design a BM.

The use of sensemaking for studying emergence in BM development implies a focus on three main elements. First, empirically, sensemaking is an ongoing process. As such, sensemaking implies a constant reconsideration of the possible logic of the way the company operates. Second, enacted sensemaking *“produce[s] structures, constraints, and opportunities that were not there before they took action”* (Weick, 1988). Consequently, it stresses the performative effects of companies' action in their environment. Third, as a framework,

sensemaking is inherently a social interactionist perspective. Therefore, using sensemaking to study emergence in BM development implies to study the interactions through which actors make sense of a situation.

Founded on this literature analysis, our study explores how the sensemaking perspective, which interlinks cognitive processes with social activities, sheds light on the BM development process over time. We specify our research question accordingly: what are the sensemaking mechanisms that underpin BM development process?

3 METHODS

As little attention has been given to the sensemaking process underlying emergence in BM development, we chose to investigate this issue through an explorative study relying on a qualitative and interpretive approach. Being interpretive does not mean that we are engaged in totally subjective interpretation but that we have tried to analyse the subjective understanding of the flow of events. Our research reporting tries to maintain the interpretations and experiences of the actors in the foreground (Gioia, Thomas, Clark, & Chittipeddi, 1994). For that purpose, this paper is grounded on the case of the company Consultix and explore how a new BM emerged and evolved over a 22-months period.

3.1 RESEARCH SITE.

Consultix is a French management consulting firm founded in 2010 and based in Paris. Its main activities are consulting missions on transformational projects for multinational companies. The company is growing since the beginning and has reached, in 2015, more than 4 million € revenue and 32 consultants compose its staff. In 2013, Consultix's top management has started to develop with two partners a new offer for a special market segment to differentiate from competitors. The main idea of the project is to propose a turnkey service for customers, which includes management consulting and IT services. The development of this new offer is quite different from Consultix's current activities even if the main activity remains management consulting. Several key points of the offer's BM are different from Consultix's one: (1) it involves partners: IndieITix, an Indian IT development firm and SoftOffix, an international software editor; (2) it targets a different customer segment: the SMEs which implies an adapted customer relationship; (3) the value proposition meets to specific customers' needs; (4) the offer's purpose implies to have the appropriate resources (especially human ones) to realize projects and missions. This new offer project constitutes the development of an additional BM for Consultix and therefore represents an

appropriate context for exploring the sensemaking process that underlies emergence in BM development.

3.2 DATA COLLECTION.

The single-case design of the study follows the ethnographic type (Atkinson & Hammersley, 1994). Through an internal position in the company, the first author has spent three days a week in the field during twenty-two months (from the project beginning) participating in activities related to the project, working with others implicated actors and also attending social life of the organization (informal conversations, events, etc.).

In order to understand BM development mechanisms, we have studied the first stages of this new BM development. The development mechanisms are informed by both primary and secondary data. First, thanks to his internal position, the first author has made observation: participant observation that led to taking systematic notes via a diary (e.g. Mallinger, 2013) and informal observation. Over the data collection period, the researcher has assisted to 72 events related to the offer project (meetings, workshops, etc.) and share the everyday life of the organization's members. Moreover, part of the offer development events has been recorded (audio records). Second, formal semi-structured interviews have been realized (and recorded) with various stakeholders in the project (Consultix's members, partners, etc.). The project has started and has been studied from the end of 2013 (simultaneously with the arrival of the first author in the company), but the case analysis reveals that previous events are concerned so a little part of the process has been studied retrospectively thanks to the interviews. Finally, documents related to the projects (minutes, correspondence, etc.) or to the company (web site pages or articles, corporate presentations, etc.) have been collected and archived. Table 1 summarizes the collected data.

Table 1: Data collection and use in the analysis

Data sources	Type of Data	Use in the analysis
Observations	Field notes from 72 new offer development events (about 300 pages): Detailed records of interactions, conversations and consequences	Analyse the sensemaking process, capture changes in the way the offer is developed
	Informal observation of everyday activities in the company	Familiarize with the context, orientate data collection on relevant meetings and interactions
Meetings	Transcribed audio records from meetings 30 meetings (about 35 hours – 950 pages) on the new offer development.	Trace precisely the words used, the interactions during meetings, the elements that are used later in the development of

		the offer
Interviews <i>8 taped interviews (about 7 hours – 105 pages)</i>	Transcribed interviews with different stakeholders in the new offer development project	Investigate people's representations of the new offer, and their representation of the interaction with other people
	Informal interviews with people from Consultix	Understand the context Grasp informal elements in the relations between people
Archival data <i>(about 50 pages of company-related documents and 200 pages of project-related ones)</i>	Company related documents: web sites, corporate presentations, internal presentations.	Consider the identity and economic context in which the new offer is developed
	Project related documents: minutes, correspondence with stakeholders, customers' presentations, others.	Trace the steps of formalization of the new offer, its modifications, and completion

3.3 DATA ANALYSIS.

Our analysis has gone through two main phases. In the first phase, in line with the ethnographic stance that we used, we led a thick description of the whole process of business model evolution through a sensemaking perspective. We used a narrative strategy of process analysis (Langley, 1999), in which we put stress on the storyline and the richness of the case study as the researcher on the field could experience it.

In the second phase, we used a more analytical perspective in order to put the stress on sensemaking patterns in the business model evolution. Following our literature framework, we used four main dimensions that appear relevant to answer our research. Considering the sensemaking perspective (Weick, 1995), we used the interactionist stance of this perspective in order to draw on two main categories: internal interaction – interactions that only concern Consultix team members – and external interaction – interactions of Consultix's members with external actors (such as partners or customers). Considering the business model perspective, we draw on Casadesus-Masanell and Ricart (2010) dichotomy: business model evolution – changes in the logic of the offer and the way the company operates – and tactical changes – residual choice for plans of action that are determined by a business model. These categories enable us to grasp and categorize systematically the main elements of our research framework throughout the process. Table 2 shows the elements that we used at this step.

Table 2: Analysis grid from the literature and empirical elements associated

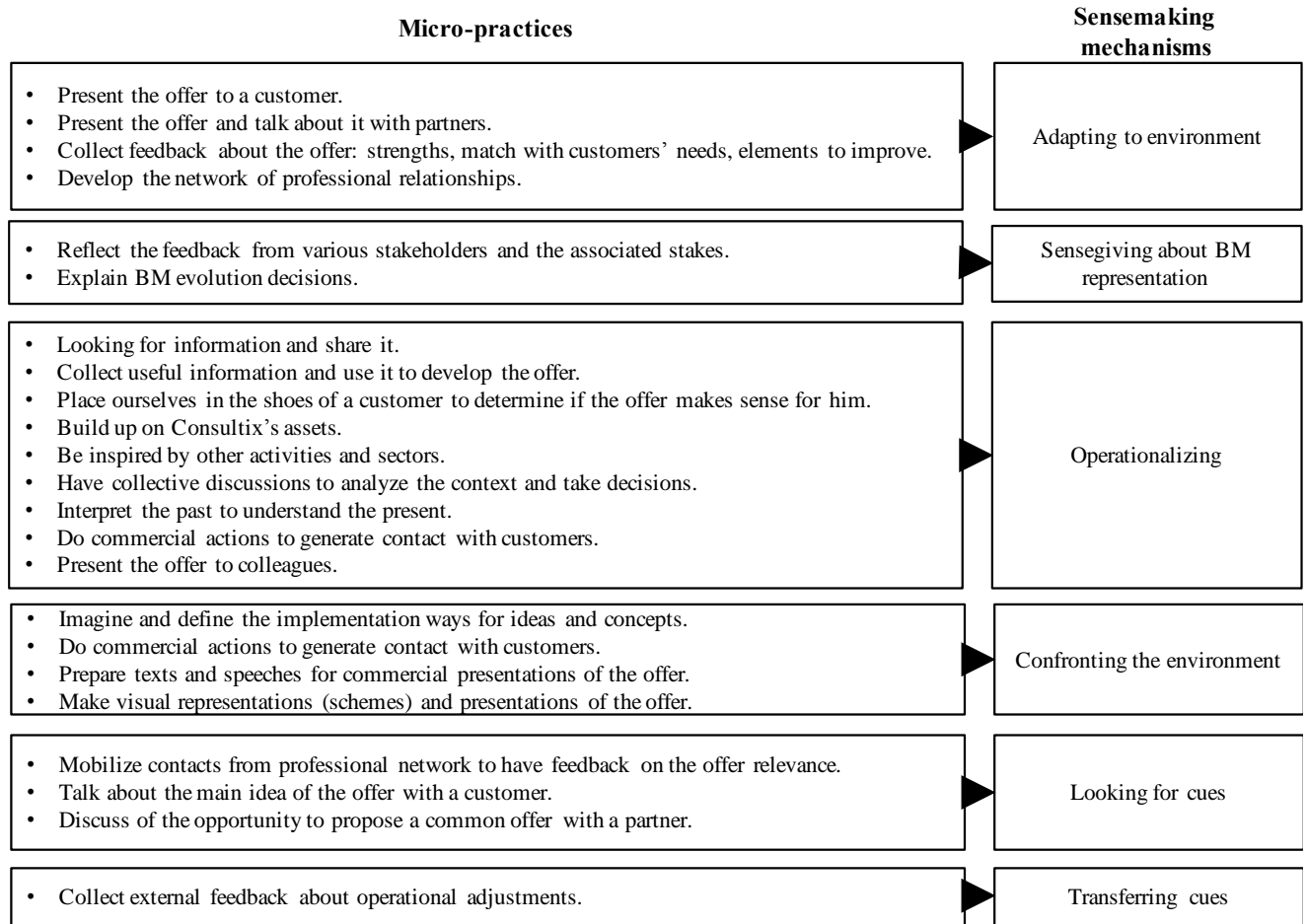
Dimensions	Sub-categories	Empirical Elements
Internal interactions	People	Consultix's top management (two partners) Consultix's consultants which belong to the team which works on the offer. Consultix's consultants.
	Activities	Build up on Consultix's assets. Collect useful information and use it to develop the offer. Looking for information and share it.

		Present the offer to colleagues. Interpret the past to understand the present. Be inspired by other activities and sectors. Have collective discussions to analyze the context and take decisions. Place ourselves in the shoes of a customer to determine if the offer makes sense for him. Reflect the feedback from various stakeholders and the associated stakes. Explain BM evolution decisions.
External interactions	People	Actual Consultix's customers Potential Consultix's customers Partners on the offer Potential partners to work with People from professional relationships network Research directors
	Activities	Present the offer to a customer. Present the offer and talk about it with partners. Collect feedback about the offer: strengths, match with customers' needs, elements to improve. Develop the network of professional relationships. Work with partners. Talk about the main idea of the offer with a customer. Discuss of the opportunity to propose a common offer with a partner. Generate external interactions to build the offer. Collect external feedback about operational adjustments. Mobilize contacts from professional network to have feedback on the offer relevance.
Business model changes		Integrate feedback from various stakeholders in the offer conception. Take decision on the offer design.
Tactical changes		Prepare texts and speeches for commercial presentations of the offer. Imagine and define the implementation ways for ideas and concepts. Do commercial actions to generate contacts with customers. Innovate on the project management methodology used for the offer. Make visual representations (schemes) and presentations of the offer.

Whereas the previous step is based on a deductive logic, drawn on the literature dimensions, we needed a more inductive approach considering the sensemaking mechanisms that were at play in the process. Indeed, as the previous studies do not provide sensemaking mechanisms we had to develop these mechanisms from the data we collected. In our research, the mechanisms are the dynamic relationships between the categories that we used in the previous step. Speaking in classic boxes and arrows term, the sensemaking mechanisms are the arrow that set into motion the four dimensions considered via the conceptual framework. As longitudinal process research generates a huge quantity of data that can be difficult to manage, we used visual displays as a prevalent way to deal with this complexity (Miles, Huberman, & Saldana, 2014). Based on the collected data, we have reconstituted the development process of the new business model through a graphical representation of these four categories (cf. Appendix 1). We have organized the whole set of data on the timeline through the four categories. Thanks to it, we have listed all the interactions that have influenced the BM development process. This work enabled us to identify 21 interactions which lead to a BM evolution or a tactical change (see Table 4 in the findings section). For each interaction, we pay attention to the interaction content that feeds the sensemaking

process (called here sensemaking input), and to the results of the process (called here sensemaking output). This analysis led us to conceptualize the sensemaking mechanisms that we see in each interaction. As some interactions appeared to be recurring, we could organize them through a data structure (Figure 1) in which six mechanisms appear to be central in the way the company makes its business model evolve over time.

Figure 1: Data structure for sensemaking mechanisms



The final step of the analytical phase consists in identifying the pattern of sensemaking through a visual mapping strategy (Langley, 1999). For each interaction, we compressed the whole set of elements into sequences based on our four categories of the theoretical framework and the six sensemaking mechanisms identified. This led us to identify three typical patterns of sensemaking that we present in the second order findings section.

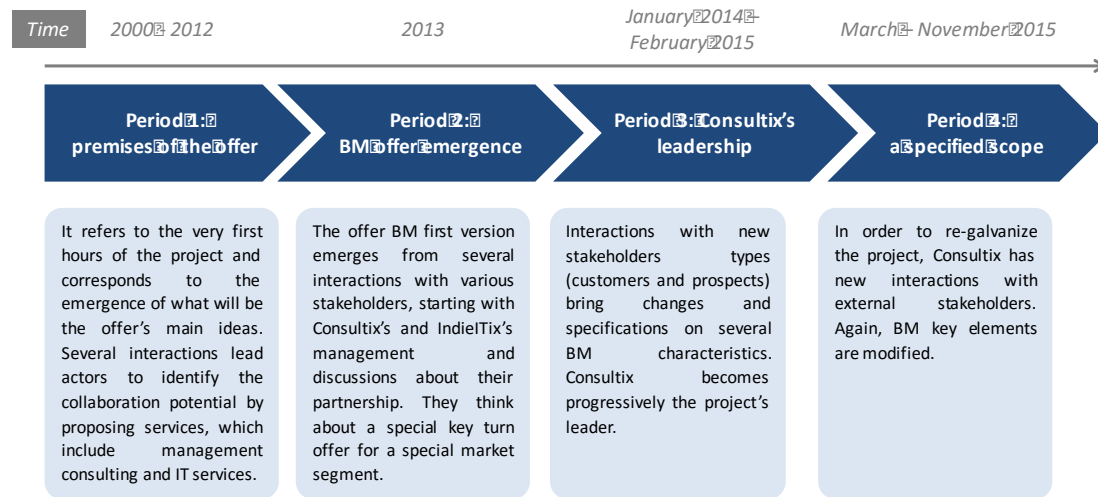
4 FINDINGS

The findings are presented in two different perspectives: (1) a first-order view from the ethnographer's perspective; and (2) a second-order and more theoretical view that is induced from the raw data and the first-order findings.

4.1 FIRST ORDER FINDINGS: THE PROCESS OF BM DEVELOPMENT

The ethnographer's perspective is framed according to four different periods identified through the reconstitution of the BM development process (figure 2). These periods cover about 22 months, and constitute the emergence and first evolution of the new BM.

Figure 2: Timeline of Consultix's new BM development



This perspective is represented mainly by direct ethnographic data and framed around verbatim quotes from interviews. The following sections refer to various actors implied in the offer development, table 3 presents them and their positions.

Table 3: Descriptors of the actors implied in the story

Actor's name	Company	Position
François	Consultix	Partner 1
Amélie	Consultix	Partner 2
Charlotte	Consultix	Consultant 1
Antoine	Consultix	Consultant 2
Julie	Consultix	Consultant 3
The researcher	Consultix / University	PhD student & Consultant 4
Nicolas	Leisure Park	Customer 1
Michel	Healthcorp	Customer 2
Jacques	Big4	Former François' colleague in a consulting firm
Arun	IndieITix	CEO

4.1.1 Period 1: premises of the offer (2000 – 2012)

At the beginning of the 2000s, Consultix didn't exist yet and one of its future founders (François) is working for another consulting company. One day, a former colleague (Jacques) advises him to meet Arun - IndieITix's boss. As an Indian IT services company, its activities could be complementary to management consulting. François accepts and Jacques arranges

the meeting (#1)². François and Arun's first discussion represent the first step of the offer development. Both of them present their respective company and identify a potential for collaboration (#2).

“The main origin [of the offer] is the meeting with the potential partner that told me ‘we have to do something together’ [...] and frequently, the members who compose the partnership define naturally a part of the offer” (François – interview).

Based on that good feeling, Consultix and IndieITix try to work together and make business proposals to potential customers (#3). If these attempts were unsuccessful, the first collaborations and discussions with prospects contribute to specifying the offer: build up on both companies' expertise, in other words, ally management consulting and IT services. These elements represented the first lines of the new BM: the offer's proposition and partners involved. Afterwards, it's an impediment that led Consultix and IndieITix to specify their offer concept: neither partner can work for any type of customer. Indeed, big companies' rules for providers (indexation for example) prevent them to work on that kind of projects for big companies.

“[...] to do IT in huge French groups, you have to be an indexed provider, in order to be allowed to work on their information system and IndieITix have no chance to be. For that they have to be bigger and probably present in France but they are not. Therefore, this offer with IndieITix has no sense for big companies.” (François – interview)

“That kind of project is [in big companies] really huge projects which need plentifully of consultants therefore clients do not think to us or to the Indians like IndieITix to do these jobs” (Amélie – interview)

At this time, François mainly did missions for huge firms but several projects for new customers, which are small and medium companies (#4). Thanks to these missions he discovers and understands constraints and needs of this type of company, which are different from big companies' ones. Based on this new understanding, he develops the belief that to satisfy this kind of customer, Consultix have to adapt its services.

“ [...] combined with partnership structure, the experiences with SMEs have fed the process [of the offer construction]” (François – interview)

François shares his experiences in SMEs and his thought about a special offer with Arun (#5). The positioning makes sense for both partners. IndieITix has already done several jobs for this type of client so has relevant references. François and Arun are convinced that such

² The numbering refers to the interactions of table 4.

partnership and the offer configuration can seduce SMEs. Through these events, another BM characteristic emerges: small and medium companies constitute the customer segment.

“We’re small, IndieITix is unknown [...] we have to target a CIO which can sign [a contract] with a unknown duo [...]. We don’t have any brand to get the job, we only have trust [...] It’s easier to convince SMEs’ directors with that kind of approach” (Amélie – interview)

At the end of the first period, the new offer’s BM is partly ideated: doing consulting activity founded on a partnership to target SMEs. The offer’s proposition is based on both partners’ complementary activities.

4.1.2 Period 2: BM offer emergence (2013)

For a time, the new offer development project was not the two partners’ priority, each of them had their own business to run. In 2010, François creates his new management consulting company: Consultix. These few years were not totally useless for the offer project because other experiences with SMEs reinforced François’ belief and diversified his experiences. In 2011, a former colleague (Amélie) joined François in the Consultix’s adventure. They develop Consultix’s activities (essentially for big companies) until 2013 when the idea of a common offer with IndieITix is reactivated for the following reason. Despite a healthy business, competition on the consulting market is hard, François and Amélie feel the need that consulting firms have to propose innovative solutions to their customers (#6). They apprehend the offer with IndieITix as a solution to do so and they make progress their thought: the alliance of the two expertise is not enough. Consultix has to innovate on the consulting part.

“Once the offer is defined at a first level, we thought that it was a little common. [...] We won’t get the jobs by saying to a customer, ‘trust me, we will make you something wonderful’. That is this thought that decided us to improve the offer with innovations that we implement progressively [...] Innovation came from a market constraint. [...] With the innovation embedded in the offer, we raise the probability to interest a customer” (François – interview).

At summer 2013, the researcher integrates Consultix for a six-month internship. He is issued from a research master degree so is familiar with management research. François and the researcher’s collaboration reveals a common appetite for social sciences research. At the end of the internship, the researcher is hired to do a PhD at Consultix and construct the subject together (#7). François and Amélie apprehend management research as a way to improve the offer’s consulting part which will include research insights (#8). Considering innovation on the consulting part was acted before the PhD, using management research represents a change of tactics.

At this stage, a point remains undiscussed in the offer design: IndieITix’s part on IT service suggests knowledge on technologies and software. For added value on SMEs’ projects, the

offer must be based on a particular software. IndieITix is a SoftOffix's – a software editor - privileged partner and has expertise on its products which can be used for the offer. As a consultant's reaction, François considers that IndieITix's skills constitute a good base on which to build up (#9).

"It's IndieITix that brings SoftOffix in the discussions, because they belong to best SoftOffix's partners. There is a global logic with IndieITix's references in France on the SMEs segment, global segment or in the luxury sector, they work with SoftOffix software. All this comes together logically. Because when we meet a customer, we need assets to show to him. The reason why we propose SoftOffix software is that IndieITix has assets." (François – interview)

Thanks to an Amélie's acquaintance at SoftOffix, Consultix holds several meetings with SoftOffix to present the offer project (#10). This one makes sense for SoftOffix because its business and environment currently face change, and management consulting firms are apprehended as prescribers to sell their technologies:

"Our ecosystem of partnerships is changing. [...] because before we were products oriented while today we're solutions oriented so we have to be closer to consulting firms. Moreover, these companies want to assist their customers in their digital transformation so they need to complete their knowledge with a technology company like us." (SoftOffix director of partnership – interview).

Moreover, the chosen market segment is relevant considering their own market analysis. SoftOffix proposes to become a partner on the offer project and advises to specify the target on all organizations of small and middle size (independent firms, multinationals' business units, etc.) which seems to be a good choice for economic and structural reasons. SoftOffix's propositions are accepted and its involvement is perceived as positive for the offer. Additionally, the target specification makes sense with IndieITix's jobs references. As an output of this interaction, several BM characteristics are specified: the service proposed to customers, partners involved and the target of the offer.

During a work session on the offer, François and the researcher questioned how to talk about the offer. Until there, its name was an acronym, which evokes the first target (SMEs). Considering the new target specification, the researcher suggests modifying the offer's name to find a new one that reflects the change (#11).

"I propose to modify the offer name: stop speaking about SMEs but about SMOs: from enterprises to organizations because the offer is not only dedicated to enterprises but globally to organizations of that size: associations, business units, etc. François thinks it's a good idea, adapted to communicate about the offer, the team adopt the name" (notes from diary relating a work session on the offer).

This internal interaction involves changing part of the communication tactics. Events of this period lead to develop the BM: a new partner joined the project and causes modifications on

the value proposition, on customer segment and adding a technological aspect. These changes are adapted into tactics.

4.1.3 Period 3: Consultix's leadership (January 2014 – February 2015)

François is concerned about the way customers will perceive the offer concept. He's convinced that the best way to create an appropriate offer to customers' needs is including them in the construction process. To do this, he arranges a meeting Nicolas - a former colleague and almost a friend who works for a company that belongs to the offer target - in order to present him the offer project (#12). Nicolas' feedback is very constructive for the offer development. According to him, the project is a good idea but he thinks that the involving IndieITix and SoftOffix is a discriminant point: IndieITix's intervention includes IT development offshoring, and using SoftOffix's software belongs to technological choices.

Both of these points are a matter of internal and political decisions of a company. It is difficult for a consulting firm to impose his vision on these touchy subjects. This feedback it is firstly a bit disconcerting for François because distinctive features apprehended as strengths of the offer may be blocking points. To conserve partners' participation as advantages of the offer, Nicolas advises proposing it as options for more speed and efficacy.

"François relates us the customer's feedback [...] François has presented him the main ideas of the offer [...] the customer feedback is very positive and encouraging: he considers the idea as very relevant [...]. The discussion allows to identify a key point: partners' roles. These constitute discriminant points for the offer, which can be positive or negative, and concern to sensitive and political subjects for companies (offshoring and technological choices), it can't be imposed by a service provider. The conversation with the customer leads to identify a solution: to consider partners as options for speed that customers can choose to use or not. François speaks about an adjustable offer with 3 levels, Consultix is an unavoidable level. Associations of partners will depend of the customers' choices." (notes from diary relating a work session on the offer)

François is convinced by these arguments and now considers partners as options for the projects. Moreover, Consultix is more involved in the offer development than the partners, therefore for François, to consider them as options makes sense with their contributions. In that new conception, Consultix is the leader of the offer project and his role (consulting) is the only one unavoidable. Consequently, the offer's BM is modified: Consultix proposes a new consulting service for a specified market segment, involving partners as options.

In order to develop the offer and to innovate on the project management methodology, Consultix has reunited a little team composed by François, the researcher and a manager consultant (Charlotte). In accordance with previous discussions, the offer team tries to use management research knowledge to construct the new project management methodology.

During several workshops, the researcher brings some insights from research (articles, parts of the thesis, etc.) that the team reads and interprets collectively (#13). Construction of a few project management tools constitute the main outputs of these work sessions, which we consider as tactical changes.

In order to propose to customers to work with SoftOffix's software, Consultix needs qualified resources in his own team (the partnership with IndieITix is not enough) because according to François these resources represent a key point to make connection between consulting part and IT part, in other words, between Consultix and IndieITix. Training actual Consultix's consultants is unthinkable, it would take too long so the plan is to acquire an external resource. After a few times of work on that point, the solution came thanks to an old friend of the researcher. His friend explains to the researcher (#14) he works for a recruitment agency (Recruitix) specialized on resources for SoftOffix's software. It's obvious that, for the researcher, this news makes sense with the offer project. the researcher presents to his friend Consultix's project and the seek of adapted resources. According to his friend, there is no problem: Recruitix can propose to Consultix independent workers specialized on SoftOffix's software. This new element revitalizes the offer project: Recruitix's services is a way for Consultix to mobilize quickly adapted resources on missions. In addition, this point contributes to the BM development: a key resource can be outsourced.

Now the Consultix's team considers that they're ready to meet potential customers. Consequently, they start a commercial phase during which they have to get in touch with prospects and try to plan meetings. The commercial strategy constitutes the purpose of several workshops of the Consultix's team (#15). During these work sessions, they define the way to present and talk about the offer (elevator speech, brochure, etc.). This work on marketing constitutes tactical adaptation.

"That is the kind of subject that we can discuss during a lunch. The plan is: first, at the aperitif, speak about a first easy subject; second, at the end of the starter if we feel that we are ready we can talk about the offer but we can't to begin the conversation with that subject. First, we have to show our credibility [...] it needs time to discuss about that [the offer] so we have to be in the middle of lunch, not at the coffee it's too late in order that the interlocutor assimilate the right information [...] that is why it is complicated." (Amélie – interview)

Once again, the BM development is led by emergent elements from the various interactions: partners are proposed as options and a key resource can be outsourced. In parallel of BM development, tactics as commercial ones and project management innovations are defined.

4.1.4 Period 4: evolution of the BM – a specified scope (March – November 2015)

Since Consultix has decided to consider IndieITix as an option for offshoring, relationship between the two partners got very low. At the beginning of 2015, thanks to an Arun's visit in Paris, Consultix's team arranges a lunch with him to discuss about the offer project. During the lunch, Arun presents IndieITix's expertise on SoftOffix's software and its technological innovation skills (#16): they have developed several innovations to deliver more value added to customers on their information system projects. Consultix's team admits that these innovations are very interesting for the value proposition. Arun suggests that Consultix and IndieITix should do a first small mission to learn how to work together. This new IndieITix's characteristic (IT innovators) changes François' perception and representation about IndieITix. Since the beginning of the offer project, Consultix's team, founded on François' presentation of IndieITix, sees it as a "simple" IT services company with no more details. The conversation with Arun modifies that vision.

"Arun presents IndieITix and its activities [...] they work on SoftOffix's technologies and he explains that his teams have developed methods and programs to improve their customers' information system performance. Arun try to convince us with examples that their solutions are very innovative and effective [...]. There is a gap between the way we consider IndieITix and what Arun presents today. Our representation was only based on short presentation François has made at the beginning of the offer project. We have considered IndieITix as a simple partner that we can mobilize if we need [...] this representation suited us and we never try to have another." (notes from diary relating a work session on the offer)

The Consultix's team agrees Arun: they have to do a first mission together. IndieITix's innovation constitutes an enrichment of the value proposition so a BM evolution. Following the meeting with Arun, the Consultix's team looks for a customer's project (with an IT part) to try to work with IndieITix. During a work session of the Consultix's team to find a test mission, it appears as a touchy point: some customers can consider it as a kind of training for Consultix and therefore not want to pay for it. Considering the sensitivity of the subject, François decides that the best way is to do this first mission for free (#17). The key idea is to make the customer feel involved in an innovation development process in order they accept the proposition. This way to find and do for free a first mission constitutes a tactical choice.

Consultix has not found yet the right project to do a test mission with IndieITix that makes stagnate the offer development. In September 2015, François and the researcher arrange the annual steering meeting of the research project (the researcher's PhD) with the supervisors. During the conversation, they talk about the "research field" which includes the offer project (#18). Exchanges about the offer development until now lead to highlight key practices, especially interactions with stakeholders and their feedback. Moreover, it also leads to

identify a lack of resources in the project team. The meeting permits to remind to François the need to confront the offer with other points of view. Strong of this analysis, he decides to reactivate several contacts.

“The conversation with research directors allows to show to François some changes and evolution of the offer plans between the beginning of the project and now. [...] During the discussion, François has agreed to carry out some corrective actions: regular frequency of work sessions; strengthening the offer team with new resources; recovery of a dynamic co-construction of the offer (with partners, with prospects, customers) [...]. At the end of the meeting, François thanked the research directors for this encouraging talk. The meeting allows him to have a clearer vision on the offer work. He suggests doing a new meeting in six months.” (notes from diary relating a work session on the offer)

To progress on the offer development, François involves two new Consultix’s consultants (Antoine and Julie). Antoine has commercial skills from his previous job, which are very useful for the new offer development. Based on his own experiences, he proposes number of tricks to improve commercial tactics (#19). Antoine and Julie’s introduction in the Consultix’s offer team brings a strengthening of resources and improves the commercial tactics.

The meeting with research supervisors was an occasion for sensemaking so according to the way he makes sense, François arranges interviews with several contacts to collect their feedback on the offer (#20). In such way, he discusses with a potential customer he knows well (Michel). Michel is very positive about the offer: the concept is interesting and answers to a real need of the target. However, according to him, Consultix can’t pretend that its offer is a generalist one. In the sake of credibility, Consultix has to define a scope of the offer (for example a function or a department of the firm). This choice is equivalent to choose a specialty for the offer. Consequently, this choice has an impact on subjects of missions and on the offer’s customers, in other words, on two BM aspects: on the value proposition and customer segment. François is receptive to this feedback, explains it to the Consultix’s team and asks that they identify the offer’s scope. The team tried to make sense by analysing synergies between experiences, customers and skills, in order to identify an appropriated scope for the offer. Considering these elements, the finance function seems judicious (#21).

With that choice, the team aligns his tactics to the BM development. Finally, through this discussion, the Consultix’s team assimilates Michel’s feedback and makes sense with the project development.

“it [to choose a scope] clarifying everything: for the offer development, for the actors targeted in companies. We will meet appropriate directors. It challenges absolutely not the methodology, it reinforces the speed argument” (François – notes from diary relating a work session on the offer)

This period reveals a double modification of the offer's proposition: integration of the technological innovation brought by IndieITix and the choice to specify the scope of the offer. Strengthening the Consultix team work, looking for a test mission and choosing a scope of the offer constitute works on tactics.

At the end of these four periods, the offer proposes an innovative project management consulting service for small and middle organizations in the luxury market. This project involves three partners: Consultix which is the main one and two others as options. The required resources are divided between the partners or can be outsourced.

We can make three important observations thanks to the reconstitution of the story. First, in the process of the offer development, representation of the offer configuration has changed several times according to the actor's perceptions. Moreover, caused by emergence from interactions, BM development is asynchronous: some aspects have been modified several times (the offer's proposition or partners' role for example) whereas others have never been discussed (revenues and costs for example). Along the process, tactics are modified according to the BM development (commercial tactics for example).

4.2 SECOND ORDER FINDINGS: THE PATTERNS OF BM SENSEMAKING

First-order findings contained a number of substantive findings about sensemaking process that drives the BM development process. But, to tease out deeper the sensemaking mechanisms, it requires not only reference to the "story" but also an analysis from a second-order level. Such an analysis does not discount the first-order findings, but employs an alternative view to gain insights using a more "theoretical" perspective. At this level of analysis, we began by treating the first-order findings as data (Gioia, Thomas, Clark, & Chittipeddi, 1994). It is in that section that we mobilize the data structure through which we have made emerged the sensemaking mechanisms and sequences of events. First order findings allow us to identify that 21 interactions were determinants in the BM development process (Table 4).

Table 4: interactions analysis through BM development process.

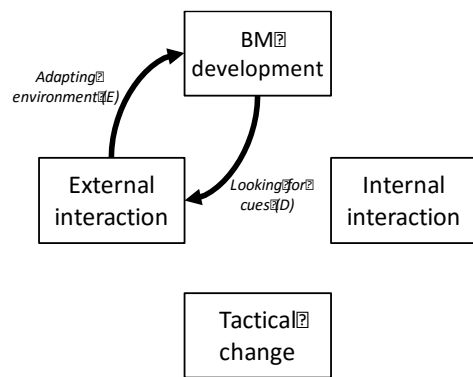
Period	#	Initial situation	Interaction type	Interlocutors	Subject of interaction	Sensemaking input	Sensemaking Output	Change type	Impact on BM / tactics
Period 1: premises of the offer	1	François and Jacques were colleagues in a consulting firm. They appreciate each other and have kept contact together.	External	François, a former François' colleague (Jacques)	Business opportunities.	Jacques knows an Indian IT company with which he had worked. Its activity is complementary to management consulting.	François trusts Jacques so he's interested by his proposition. Jacques will arrange a meeting with François and Arun.	No formulation of BM yet.	
	2	François and Arun don't know each other. They worked in complementary businesses.	External	François, Arun	First meeting between and discussion.	Presentations of François and Arun's activities. They think how to combine it.	François and Arun's discussion lead them to identify a good potential for their collaboration and several possibilities to work together.		
	3	François and Arun have a good feeling and want to try to work together.	External	François, Arun	Project of a common offer.	The confrontation to customers through business proposals leads Consultix and IndieITix to better understand their respective experiences and skills and also their complementarity.	The collaborative project is emerging. François and Arun consider that combination of their two businesses will allow to propose a better value added to customers. The business proposals lead to define main characteristics of the common offer.	BM development	Two basic aspects of the BM emerged: the proposition to combined management consulting and IT services; the partnership.
	4	François and his company intervene principally to big companies.	External	François	Interventions to SMEs.	Diversification of the experiences to companies of another market segment.	During missions, François discovers and understands these companies' constraints and needs. The idea of a special consulting offer is emerging in his mind.	No formulation of BM.	
	5	François and Arun agreed to propose a common offer that will combine Consultix and IndieITix's activities.	External	François, Arun	Project of a common offer.	François presents and explains to Arun his experiences to SMEs and thus proposes that their common offer targets SMEs.	The proposition is accepted by Arun because it makes sense for him in two ways: first, IndieITix is able to work for this type of organization (in terms of organization size); second, IndieITix already has several jobs references on that market segment.	BM development	The customer segment is defined: the offer targets SMEs.
Period 2: BM offer emergence	6	Competition is hard on consulting market. To continue its development, Consultix has to propose differentiating solutions.	Internal	François, Amélie	Project management innovation.	The offer has to be a way to differentiate from competitors: partnership with an IT services company is not a real differentiation factor.	Consultix's management understands that partnership is not enough to be different, so plan to innovate their own part of the job.	No direct tactical change.	
	7	Consultix will ensure the consulting part and wants to innovate on the project management methodology.	External	François, Amélie and the researcher	Proposition of PhD with Consultix.	Familiar to management research, the researcher is hired to do a PhD at Consultix.	The researcher's PhD makes sense with the previous considerations on innovation.	No direct tactical change.	
	8	the researcher has done a proposition to do a PhD at Consultix. François and Amélie want to	Internal	François, Amélie and the researcher	The offer in the scope of the PhD.	François and Amélie discuss about the researcher's proposition. They think about a subject which can be interesting for Consultix: they make the link with	Consultix's management perceives management research as a way to improve the project management methodology by including research	Tactics change	Differentiation of the offer by innovation on the consulting part.

		make innovation for the common offer with IndieITix.				the offer project.	insights.		
	9	Consultix and IndieITix are partners to construct the offer which is targeting SMEs. No special choice on software solutions to use on the projects.	External	François, Arun	Discussion on technologies to work with.	IndieITix is privileged partner of SoftOffix, a software editor. IndieITix has expertise on a SoftOffix's product which can be adapted to the offer targets' needs.	The discussion rises questioning about technology. As a consultant's reaction, François considers that IndieITix's skills constitute a good base on which to build up. A meeting with SoftOffix will be arranged.	No direct BM development.	
	10	Amélie has contacts at SoftOffix. She arranges a meeting with adapted interlocutors.	External	Amélie, François, SoftOffix	Presentation of the offer project to SoftOffix.	François exposes to SoftOffix the offer's purpose and objectives. He implies the need to rely on adapted technologies. SoftOffix is receptive to and interested in the offer project. Based on its market analysis, it advises to Consultix and IndieITix to specify the offer target: the luxury industry seems to be a good choice.	The offer project makes sense for SoftOffix because it's consistent with analysis for future of their business: first, management consulting firms are the partners of tomorrow to sell their technologies; second, the attraction for the chosen market segment is coherent with SoftOffix's analysis of the market. After the interaction, Consultix considers that SoftOffix's participation in the offer is interesting. SoftOffix becomes a partner and its targeting proposition is accepted. It makes sense with IndieITix's references.	BM development	A new partner and evolution of the offer's proposition with a technological aspect. Customer segment targeted evolved.
	11	The offer name is based on the former target name.	Internal	François, the researcher	The offer name and target.	the researcher proposes to modify the offer name depending on the target.	Considering the target specification, François understands and accepts the researcher's proposition to change the offer's name.	Tactics change	Change of vocabulary adapted to the target and the purpose of the offer.
Period 3: evolution of the BM – Consultix's leadership	12	The three partners have conceived on their own an offer for a special customer segment.	External	François, Nicolas	Presentation of the offer plans. Customer feedback on it.	Nicolas is positive toward the offer, but considers that partners are discriminant points. Partners' participation includes IT development offshoring (India) and SoftOffix's technology adoption: two touchy decisions for customers. Proposing it as options for speed and efficacy is relevant but imposing it is risky.	François is convinced by Nicolas' feedback and understands that imposing partners can be blocking points for customers. He now considers it as options, which can activate according to customer requirements. Moreover in François' conception, considering Consultix's leadership on the offer work, it's a Consultix's offer thus Consultix's intervention is the only part unavoidable.	BM development	Partners and Consultix's roles and the offer's proposition evolve.
	13	Consultix wants to improve the project management methodology for the offer.	Internal	François, the researcher, Charlotte	The management project methodology.	the researcher proposes several research insights that can be mobilized for the project management methodology construction.	During workshops, the offer team interprets collectively the research inputs brought by the researcher and builds the innovative project management methodology and its associated tools.	Tactics change	Construction of the innovative project management methodology.
	14	Business skills on SoftOffix's software represent a key point to discuss with customers. Consultix needs French qualified resources. Someone able to do the connection between consulting and IT parts.	External	François, Charlotte, the researcher, the researcher's friend	Resources' seeking.	Thanks to the researcher's contact, the project team discover Recruitix, a recruiting firm specialized on SoftOffix's technologies skills. Recruitix proposes workers to hire or freelancers.	François considered French qualified resources on SoftOffix's software as a key point and a difficulty to find. The Recruitix's services represent the missing piece that permits to François to make sense of the situation on the offer: it's a way to find and mobilize quickly adequate resources to do missions.	BM development	A key resource can be outsourced.

Period 4: evolution of the BM – a specified scope	15	The Consultix team considers that they're ready to meet customers. Have to contact prospects and try to plan meetings.	Internal	François, the researcher, Charlotte	Commercial tactics to contact customers.	The offer team discuss in order to imagine ways to present the offer to customers and to win missions.	By their interactions and based on their experiences, the offer team's members define tactics to contact customers and promote the offer.	Tactics change	Commercial and marketing tactics.
	16	IndieITix is considered as an offshore option. Consultix not expected innovation from IndieITix on the IT part.	External	François, the researcher, Charlotte and Arun	Future of the partnership and the offer.	Arun presents to the Consultix's offer team IndieITix's innovation skills and its expertise on SoftOffix's software. Arun argues that Consultix and IndieITix have to do a first test mission.	New information about IndieITix change François' perception and representation. In addition to the offshoring option, IndieITix can bring innovation on the IT part. François is convinced that Arun is right: need a first test mission.	BM development	Enrichment of the offer's proposition with innovation in the technical part.
	17	Consultix needs to do a test mission with the offer (and IndieITix). Have to find a first project to do.	Internal	François, the researcher, Charlotte	Search for a test mission.	The team is thinking about the way to do a test mission. The proposition of a test mission to a customer is a touchy point: some of them can consider it as a kind training for Consultix and don't want to pay for it.	Considering the complexity of the subject, François decides that no Consultix's fees will be asked for the test mission. In such way, some customers may feel involved in an innovation project and thus motivate them to accept.	Tactics change	No fees improve chances to find customers agreed for a test mission.
	18	Work on the offer stagnates because Consultix has not yet found a customer for a test mission.	External	François, the researcher, research directors	Annual point of the research project.	The discussion with research directors leads to highlight practices which have advanced the project: having interactions and collect feedback. The conversation also leads to identify that the actual offer team may need some renewal.	François becomes aware of the need to confront the offer to other views, even in advanced stages of development. He will reactivate several contacts.	No direct BM or tactical change.	
	19	The offer team is composed of three persons since the beginning of the project. Reinforcement is needed to progress.	Internal	François, the researcher, Charlotte, Antoine, Julie	Commercial tactics to contact customers.	François has thought about the team renewal and proposes to introduce two new Consultix's member. One of them has commercial skills and experiences which can be very useful on the offer work.	Based on a series of tricks illustrated by his own experience, Antoine makes propositions in order to improve commercial tactics. This point of view shows to the team new possibilities on commercial methods.	Tactics change	Commercial tactics are improved.
	20	François knows the IT director of a company which is in the offer target.	External	François, Michel	Presentation of the offer. Michel's feedback on it.	Michel is positive toward the offer. According to him, there is an aspect to modify: for the sake of credibility, the offer can't be general. It can't be applied to all functions of the firm. It has to focus on a functional scope.	François is receptive to Michel's feedback and is now convinced that the offer has to focus on a function/ department of the firm. He comprehends the stake of a scope choice: it will impact jobs' subjects and offer targets.	BM development	Another evolution of the proposition value and the precision of the customer segment.
	21	The offer is planned for any functions/departments of the firm.	Internal	François, the researcher, Charlotte, Antoine, Julie	The offer scope.	François reports to the offer team the customer's feedback and explains his decision to focus on a functional scope. The team is questioning about the scope to choose. Consultants' experiences in customer firms are discussing in order to identify clues and arguments to make a choice.	The offer team tries to build a collective reasoning in order to choose a functional scope. They take into consideration the homogeneity of practices and tools from one customer to another. Considering these criteria, the finance function seems to be a good choice. It makes sense with IndieITix's experiences and skills, which are especially on the finance part (accountability, budgets, reporting).	Tactics change	The offer's scope will focus on finance functions.

The study reveals a link between types of interactions and types of changes. External interactions trigger BM development whereas internal interactions generate tactical changes. Based on dynamic patterns between the four main categories of our analysis, the interactions' examination highlights what we consider as three patterns of BM sensemaking (Figure 3). This section presents and details these patterns.

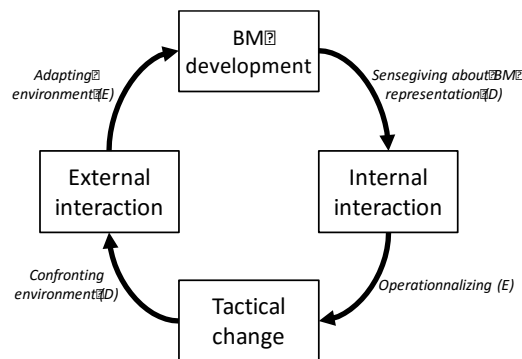
Figure 3: the three patterns of BM sensemaking



Strategic Ambiguity Reduction

External interactions allow internal actors to better understand expectations of external stakeholders. Integration of information from the environment is generating modifications of BM main characteristics. BM is then confronted to new external stakeholders.

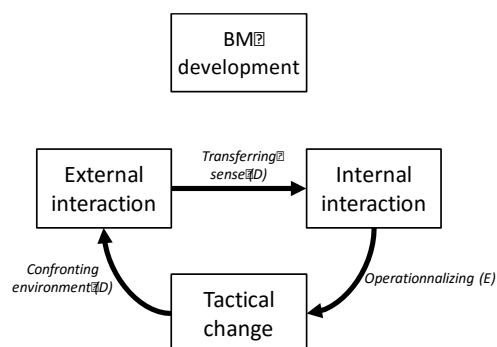
Related interactions: #1, #2, #3, #4, #5



Business Model Full Enactment Loop

After an understanding of the external situation, and the definition of BM main characteristics, internal interactions allow to design tactics. These ones are enacted within the environment that generates feedback from external stakeholders.

Related interactions: #10, #11, #12, #13, #14, #15, #16, #17, #20, #21



Adaptive Tactical Sensemaking

When perceived ambiguity is reduced, and BM main characteristics are stabilized, feedback from environment is directly discussed through internal interactions to generate tactical adjustments, then confronted to the environment.

Related interactions: #6, #7, #8, #18, #19

Strategic Ambiguity Reduction

This pattern represents an actors' mechanism to analyse the environment and reduce its ambiguity; it appears at the beginning of the BM development process to define the BM main characteristics. First, as an external interaction, internal actors meet external ones - as

potential customers or potential partners – and talk about business - opportunities to work together or customers' consulting needs. Second, the sensemaking process consist to extract cues from the environment through the external interaction, it's the 'adapting to environment' mechanism. Third, the collected cues are integrated by actors that make sense in order to base on it the BM changes. Finally, main characteristics of the BM are not considered strong enough therefore actors go back to the environment to looking for cues. Experiences and analysis of the environment through external interactions permit to progressively understand the market needs and generates broad ideas about the way the company could respond to them. We call this pattern Strategic Ambiguity Reduction because collecting information through interactions with external actors constitutes a reduction of ambiguity that the people from the company sense in the environment. As the environment is highly complex, various interpretations can be developed in order to make sense of it. While going external, internal actors can grasp cues from the interaction with external stakeholders, which lead to grasp cues from the multiple external interactions.

Whereas all possibilities of BM development could be imagined, cues indicate which elements seem more relevant and drive initial emergence of BM. That is, external interactions in the pattern enable to decrease the ambiguity of the environment and set main logics of BM. Therefore, external interactions play a central role for the BM emergence because allow actors to sense the environment and progressively shape the BM.

BM Full Enactment Loop

This second sensemaking pattern is more related to BM change sequences. First, internal actors meet external ones to present the offer. External interlocutor gives his feedback on the offer like consistency with the market needs or strengths and weaknesses. Thanks to the external interaction, emergent cues from the environment are collected and integrated to adapt the BM. Then, based on these hints and according to their sensemaking process, internal actors change the BM. Fourth, these actors share the environment feedback and explain BM changes to other internal actors. This step is not only an information transfer but a real exercise of sensegiving in order to collectively share the same level of understanding and to unite internal actors around the same vision. Fifth, internal actors are in interaction – like they discuss, analyse situations based on their respective backgrounds and experiences - in order to make sense of the BM change and to operationalize it. Sixth, BM is transformed into a set of tactics or tactics are adjusted according to the BM changes. Finally, internal actors want to collect new feedback on the BM by confronting it to environment therefore external

interactions are generated. We call this pattern full enactment loop because the sequence of actions shows that the process of sensemaking and BM change is somehow complete in the pattern – which does not mean completed, or finalized. Indeed, as it starts with external interactions which drives BM change, then going to internal interactions that enable tactical decision, and these tactics in the new BM are proposed to external stakeholders. The process creates a loop in which sensemaking and enactment of BM and tactics takes place. As a loop, the new external interaction will generate new feedback so potentially new BM change: this pattern reflects the principle of enactment where environment influences actors' actions and vice versa. Such described, the BM full enactment loop seems the most complete pattern we identified. Nevertheless it describes a circular pattern that generates major changes in BM – as the way the internal actors make sense of the logic of value creation and capture – which creates instability in the internal team. The third pattern, more based on tactical changes provides more stability for actors in the BM development.

Adaptive tactical sensemaking

Indeed, the last pattern refers to sequences of no BM change. First, as for the other patterns, internal actors meet external ones to collect feedback on the BM. This feedback is not interpreted as decisive for the BM so generate no change, but it is more related to an operational level and therefore concerns tactics. Second, internal actors which have met external interlocutors are transferring the sense of the feedback to other internal actors in order to, through an internal interaction, collectively make sense of it and operationalize it. Fourth, operationalization actions lead to change tactics. Still focused to collect new feedback, BM is confronting to environment to generate new external interactions. The sensemaking process drives to adapt tactics. We called this pattern adaptive tactical sensemaking as it does not draw on business model change but only tactical one. Internal actors interact with external stakeholders and transfer cues from external interaction to internal interaction, leading to modification of tactics. These tactical changes are proposed (either via discussion or via prototyping) to external stakeholders that can react on them.

The whole process overview (cf. table 6 and appendix 1) shows no linearity in the succession of sensemaking patterns over time. If the Strategic Ambiguity Reduction pattern is the beginning of the BM development process of our study, the Adaptive Tactical Sensemaking pattern not constitutes the end. Sensemaking is an ongoing process in which actors are continually engaged in and which shapes BM development. The succession from BM Full Enactment Loop to the Adaptive Tactical Sensemaking patterns can illustrate this point, e.g. in our study, an external interaction leads to allocate new adapted resources in the offer team.

If this sequence permits to define tactics on few aspects of the BM, the team wishes to have feedback on other points. In that way, they provoke an external interaction which generates a new BM change as the first steps of the BM Full Enactment Loop pattern. Sensemaking patterns are complementary and succeed one another without linearity but depending on to the situations that actors faced. Moreover, the change of pattern from Adaptive Tactical Sensemaking to BM Full Enactment Loop shows that BM emergence is intertwined with tactics definition. The BM is not yet entirely defined that actors already begin to work on its declination into tactics, it seems that there is a no linear relation between phases of BM construction and implementation.

4.3 EMERGENT AND DELIBERATE SENSEMAKING MECHANISMS

In these patterns, we distinguish between deliberate and emergent sensemaking mechanisms. Table 5 describes these mechanisms and shows that deliberate mechanisms aim at triggering interactions. On the opposite, emergence is generated from interactions and results in content changes in BM and tactics.

Table 5: Sensemaking mechanisms which occur in patterns

Category	Mechanism	Definition	Role in patterns
Emergent	Adapting to environment	Interpretation of environment's elements for BM change.	BM alignment to emergent inputs from the external interaction.
	Operationalizing	Operationalization of environment's elements for tactics design.	Tactical adaptation to BM changes (Business Model full enactment loop) or tactics refinement according to external interaction (Adaptive tactical sensemaking).
Deliberate	Looking for cues	Search for cues in order to apprehend the environment.	Produces external interactions to design BM main characteristics.
	Sensegiving about BM representation	Practices to explain and justify BM changes.	Insures a collective shared understanding of the environment and vision of the BM within the internal actors.
	Confronting the environment	Will to confront the BM with the environment's reality.	Generates external interactions to gather feedback on the BM.
	Transferring sense	Sharing the external interaction feedback inside internal actors.	Leads to a collective interpretation of feedbacks inputs through an internal interaction.

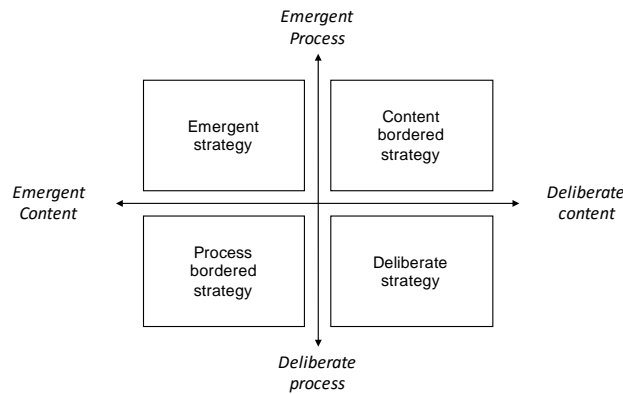
5 DISCUSSION

5.1 THE ONGOING SOCIAL PROCESS UNDERPINNING EMERGENCE IN BM DEVELOPMENT

Our study shows that the sensemaking perspective provides insights on the way BM is developed. It intertwines the managerial cognition aspects of BM innovation and change (Doz & Kosonen, 2010; Foss & Saebi, 2016), with social activities of interactions that led to BM change (e.g. Demil & Lecocq, 2010; Sosna & al., 2010). Indeed, we show that interactions between internal and external actors feed the sensemaking process, which enables BM development as well as tactical refinements. That is, the use of a social interactionist view on sensemaking provides new insights on the way BM are developed. We see here that BM development can be considered as a process that is inherently social and that relies on the environmental characteristics of BM developers, whether they are top managers, middle managers or operational people. As internal stakeholders interact with each other and with external ones, they create the dynamics through which top managers consider their business model. Therefore, the sensemaking view sheds light on the fact that new BM development in situation of high ambiguity is a) more than a rational decision making issue (Casadesus-Masanell & Ricart, 2010), b) more than a try-and-error learning process (Sosna et al., 2010), c) more than an understanding issue as framed by the cognitive view of BM (Doz & Kosonen, 2010): it implies active co-authoring of stakeholders and decision makers in the way BM is enacted.

We identified four intentional sensemaking mechanisms and two emerging ones. We highlighted that the intentional mechanisms are based on the purpose to interact whereas the two emerging mechanisms unfold through BM development or tactical construction. That is, the deliberate mechanisms are process oriented whereas the emerging ones are content oriented. Consequently, the emergence of the content in the process of BM ideation, design and change is created via the deliberate interactions intended by actors. Compared to Mintzberg's view of emergence (Mintzberg, 1978), our study provides a finer view on the emergence in BM development. We reconsider the emergence vs. intended strategy through the content process dichotomy, leading to a new framework in order to better understand the nature of emergence in BM development. We propose a 2x2 matrix in which we show that both the process and the content may be emergent or deliberate.

Figure 4: A new framework to understand emergence



Our study has implication when considering BM development workshops. Our study reveals that in a case where no formal BM workshop is developed, external interactions generate BM development whereas internal interactions generate tactical change. In this view, our study challenges the widespread practice that focus on internal workshop that aim at designing new BMs (e.g. Osterwalder & Pigneur, 2010). We do not suggest that designing new BM internally is impossible but we clearly see that this practice has inherent limitations: first, it may reduce the scope of potential BM novelty and second it appears as inherently sequential. Opening strategy (Whittington, Cailluet, & Yakis-Douglas, 2011) through deliberate repeated interactions with external stakeholders (partners, customers, etc.) leads to continuous emergence in BM and tactics development. In that view, emergence in BM development is an ongoing, potentially never ending process. Indeed, through iterative interactions, actors continuously assess the relevance of the current BM conception they have, and change it. Consequently, the continuous development of BM over a long period of time, that has been identified on a lifelong period at the individual level (Svejenova & al., 2010), seems to be relevant for organisations' BM.

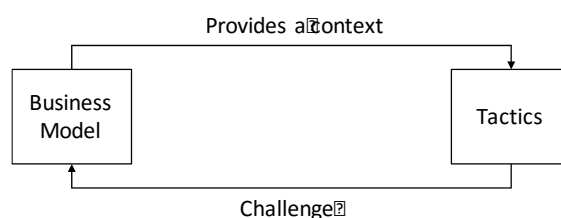
5.2 THE INTERPLAY BETWEEN TACTICS AND BUSINESS MODEL RECONSIDERED

In order to develop our study, we built on the difference between tactics and business model. In the initial development of our analysis, tactics appeared coherent with Casadesus-Masanell and Ricart's (2010) view as "residual choices open to a firm by virtue of the business model it chooses to employ" (p.196). But when considering the patterns of sensemaking, it appeared that tactics implementation take part in the ongoing business model development process. Indeed, when tactics are constructed in line with a business model, they materialize operational elements that can be presented or proposed to external stakeholders. Subsequently, they generate feedback from these stakeholders, which may lead to refining tactics (in the Adaptive tactical sensemaking pattern) or to change the business model (in the

BM Full Enactment Loop pattern). Consequently, tactics cannot be considered only as the residual choices possible in a business model. They also appear as a nurturing emergence in BM development.

We explain this difference of approach of tactics in that way that Casadesus-Masanell and Ricart (2010) lie in a rational positioning view of BM (Martins et al., 2015). In this view, managers make optimal choices in line with their understanding of the situation and define their operating implications. Tactics are then considered as operating implications of BM choices. In the social interactionist view of sensemaking (Weick, 1995), such a rationalist approach does not stand. BM preexistent choices can be the context in which tactics are enacted. But tactics can also be a trigger for reconsidering business model when these tactics are confronted with stakeholders. Our research leads us to redefine tactics as the functional arrangements made in order to operationalize value creation, delivery or capture. In that view, tactics may depend on BM design as shown by the rational positioning view of BM. But they can also coevolve with an emerging BM, as the tactics interplay with BM through challenging the inherent logic of value creation, delivery and capture. Moreover, the interplay between BM and tactics is enacted in a cyclical ongoing way all along the business model development process.

Figure 5: The interplay between BM and tactics



5.3 DEVELOPING BUSINESS MODEL THROUGH THE SENSEMAKING PATTERNS

Considering that BM are identified as complex systems (Baden-Fuller & Mangematin, 2013; Baden-Fuller & Morgan, 2010) - in other words complex representations of how the company creates, delivers and captures value - they represent difficulties for managers to generate a complete representation from scratch, which requires to take into consideration all the attributes and interrelationships of such a complex system (Martins et al., 2015). This situation may lead to cognitive inertia, preventing the company to develop or make its business model evolve (Doz & Kosonen, 2010; Sosna et al., 2010). Such inertia is especially apparent in established firms that try to develop new business models (Berends, Smits, Reymen, & Podoynitsyna, 2016; Mezger, 2014).

We show in our study that mechanisms and patterns of sensemaking enable to iteratively take into consideration the various components of such complex systems. The strategic ambiguity reduction pattern enables to progressively structure the main characteristics of the BM. Moreover, this pattern may be repeated many times through interactions with various external stakeholders for a sequential and iterative improvement. The full enactment loop pattern enables to consider the coherence between the general logic of value creation, delivery and capture and the tactics that can be considered in order to implement this logic in operational ways. The adaptive tactical sensemaking pattern focuses on the adaptation of operational dimension to external stakeholders' expectations. We show here that deliberate interactions either with external or internal stakeholders generate emerging mechanisms that influence BM ideation, design and change as well as tactics construction.

We also show that three patterns of sensemaking do not appear in a linear way (sequence of Strategic Ambiguity Reduction followed by Business Model Full Enactment Loop and then Adaptive Tactical Sensemaking), which could be considered as a rational view of BM design and implementation (e.g. Shafer, Smith, & Linder, 2005). We identified that Full Enactment Loop can succeed to Adaptive Tactical Sensemaking. Indeed, the enactment of tactical changes generates feedback that lead to reconsider the whole logic of the BM. The patterns of sensemaking appear to be in line with specific situational stakes rather than a linear process that would be guided step by step by minimization of ambiguity. That is, the patterns can be used in order to sequentially address various aspects of the BM, providing managers a method to iteratively fix and manage the interplay between BM and tactics, and nurture a BM development process.

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7 APPENDIX 1: VISUAL REPRESENTATION OF THE BM DEVELOPMENT PROCESS

