

Action Research to assess the use of the Business Model as a concept for young business leaders in the construction sector

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The notion of the Business Model first appeared with the Internet start-ups. The team that led the present research has worked on its theorization for many years in this context, relying on empirical investigations based on action research. With the current work, the team departs from a start-up context to assess the utility of their theories, translated into tools, for young established business leaders in the construction sector. An innovative action research, involving 11 researchers and 5 young business leaders, has answered the following research question: can the BM be of use to young business leaders in the construction sector? The answer to this question is positive. However, aside from its contributions, this research presents limitations (moving beyond the diagnostic framework towards counseling, the need to systematize the BM presentations,...) that call for new research.

With the first Internet *start-ups*, investors sniffing a good business opportunity needed a way of understanding a system that struck them as complicated. This complexity was the fruit of

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various factors including novelty, the specialized vocabulary used by the initiated who unceasingly invented new expressions, plus the tricks used to capture revenues when the user of a new service was not necessarily the payer. An extra effort was therefore required of project leaders to clarify not only their idea and market, but equally a host of elements concerning how they made money, their value chain, relations with stakeholders, etc. The notion of the Business Model (BM in the rest of this text) appeared in this context.

Some will say that beyond the inaccessibility of vocabulary used by the actors in this new domain, one could pronounce the well-known expression: « there is nothing new under the sun. » This is not inaccurate. Any type of project requires: showing its potential market and its capacity to generate sales orders; explaining how the offer would, on one hand, be fabricated from assembled resources and, on the other hand, delivered to market; estimating the volume of business by the level of ambition declared ; being reassuring about the quality of business partners ; etc. Yet as a buzzword, the expression BM has spread like wildfire, first in the Internet domain, then in that which can be considered “hi-tech”. Since then, one hears of the BM in all kinds of project (social economy, art, culture...), forms of entrepreneurship (business creation, take-over/recovery, intrapreneuriat, etc.), institutional forms (business, association, foundation, ... in the private or the public domain). The term has entered into the world of business where it has been adopted by the big established groups (see for example L'Oréal's end-of-year report 2010); this not without annoying certain strategy specialists who condemn the excesses of those who herald the BM as the essential concept of our times. (eg. Porter, 2001).

These specialists show caution for at least three reasons.

First, a good number of businesses (which are in creation or established) have succeeded, or will succeed, without knowing this concept and without using any tools based upon it (where they exist ...).

Second, these tools can lack specificity when produced by theoreticians, too often distant from the realities of the terrain they describe, who take it upon themselves to “invent the BM,” turning it sometimes into a hold-all concept based on anecdote rather than empirical investigation.

Third, there is a risk of rediscovering things that are already well known. Writings and practices mobilizing the BM often take shortcuts due to a lack of knowledge of particular tried and tested tools. The BM should perhaps be considered more as a toolbox rather than a tool in itself.

Researchers cannot ignore a notion that has been adopted on the ground. They are obliged to shed light both on its nature, ie. whatever it might consist of, and - with the ongoing concern of socio-economic development - what one might do with it. This objective is unimaginable without empirical research.

The research team that led the work presented here is concerned with the BM. It draws on empirical works which provide a theoretical framework based on tools employed on the ground in business creation (Jouison, Verstraete, 2008 ; Jouison, 2008 ; Verstraete, Jouison-Laffitte, 2009). One of the objectives pursued here is to surpass this context by investigating the use of the BM in the context of an existing business. A suitable opportunity arose in the construction sector. This subject could be undertaken thanks to the contribution of the French Construction Federation in the Gironde (FFBG) towards the financing of the chair of entrepreneurship at Montesquieu University - Bordeaux IV.

According to the President of the FFBG, one of the problems faced by businesses in the construction sector of the Gironde (a French administrative department) lies in their size, judged too small, which must be helped to expand.

The motivations of the researchers and actors in the construction sector come together around the BM, which becomes a tool at the service of young business leaders wishing to exploit the entrepreneurial potential of their firm. Discussions between the team's researchers and actors in the construction sector led to the following research question: can the BM be of use to young business leaders in the construction sector?

Two time-frames are required for a response. First, we return to the original context of the BM (business creation) and to its first role (a search for meaning). We will see that the creation of meaning constitutes the heart of this notion. This meaning is constructed not only by the business creator but by a group of partners who share a collectively built vision of the world. This construction leads to the emergence of a convention, making the BM in some way a medium for an expression of this “shared world” to the multiple stake holders (leaders, suppliers, clients, employees, etc.) who make up the business. Second, we present the operational frame-work and its results. The time-frame for this is an action research which mobilized a team of 11 researchers and 5 business leaders for the period from July 2009 to February 2011. The results recognise the utility of the BM.

1. Theoretical bedrock : the Business Model as the creative translation of meaning for the collective concerned

This section shows that the BM is the translation of a creative convention of meaning (intelligibility + direction) for the group of people assembled around a project.

1.1. The need to model a business in order to represent it by a translation of the entire organisation of the business' systems

Those first businesses imagined online by certain creative spirits were often incomprehensible to potential stakeholders, particularly investors who found themselves in a complex domain. We will consider the necessity of modeling this complexity so as to then model a translation that renders its representation both accessible and possible.

When it comes to complexity, systematic approaches since von Bertalanffy (1968) have insisted on the necessity of modeling complex objects to render them intelligible (Lemoigne, 1977; Morin, 1977). This means understanding how things are organized at the heart of entreties that are, to a greater or lesser degree, enormous. These entreties are made up of elements of differing natures that interoperate to produce phenomena that are hard to simplify without risk of losing an understanding of how they work as a whole. One of the key ideas of the systematic approach is to accept the impossibility of understanding the whole by a deconstruction and subsequent mechanical repurposing of its elements. The organization is more complex than that. It structures elements by allocating them a role and a function in a system which might itself be one element in a more vast system, of which it might be the whole or one part.

In considering their business as a complex system, all leaders must in fact consider its openings into other systems, and organize things accordingly, taking into account both

operational necessities and strategic goals. Organization, which is as much a dynamic as a fixed result of that dynamic, corresponds to a layout or a placing in order that will always depend on the observer's perspective (Atlan, 1979). To organize is to prescribe the evolution of certain elements (fixed assets, intangibles ... human, non-human) in a way that helps the organizer. It becomes all the more important for him to share his goal with players whom he would like to participate, by enabling them to see the order he is trying to establish to incite them to contribute. The leader must also convince potential stakeholders to bring him resources of all kinds that enable him to organize things in a way that will achieve the desired outcome. Understanding a business means reinterpreting its core, thanks to a modeling that renders the associated organization intelligible, and which cannot be reduced to a flow chart or a manufacturing process.

As for translation, in order that the image of a system (represented by a text, a diagram, a mathematical formula, a narrative or a combination of forms) can be assimilated by the receiver – no matter the system studied - it becomes all the more necessary for him to understand the language used. Making the shift from an image representing a system to a cognitive representation (ie. the generation of meaning in the mind of the person learning), requires transmission to take place in an accessible language. For a business, the meaning transmitted is relative, first, to a quest for intelligibility and, second, to the strategic direction required to reach a desired future. It does not just concern vocabulary. Translation theory that is not reduced to linguistic considerations, shows that the various component parts of a system are implicated as mediators or intermediaries that bind the whole. (Callon et Law, 1988 ; Akrich et Callon, 2006). These component parts can be human (for example, stakeholders) or non-human (for example, the Internet). Stated differently, this theory (also known as actor-network theory - ANN) considers all objects as potential actors in a network. Risking caricature, one could say that these

objects speak, that is to say they communicate or, more exactly, they can be considered as mediators that hold together the whole. Each of them poses problems, the solutions for which are provided by a series of mediations that keep the system stable.

We view the BM as an actor that can help build and maintain a business' systems (translation theory would speak of an obligatory passage point - OPP). It consists of gathering a limited “departure group” of players enlisted specifically because they consider themselves affected by a key task in hand, to act as intermediaries and, as such, to bind together a network and link other actors to it. This networking is enabled by translation – that is to say, by establishing a link between challenges that are *a priori* diverse. In our case, the human actors (suppliers, employees, entrepreneurs, local public sector) face specific challenges but they also participate in a self-stabilizing system via an essential spokesperson in the form of the entrepreneur. He is the translator of any generic problem and must gain acceptance in this role, which is facilitated when the problem encompasses collective expectations. This last point strikes us as essential in the creation of meaning that constitutes the genesis of the BM, that is to say the way in which a group shares a conceptualization of an intended business. If translation theory helps us recognize the essential role of the entrepreneur (the spokesperson) and the BM (an obligatory passage point), then conventions theory constitutes the corpus we must mobilize to explain the nature of the BM.

1.2. Conventions theory to explain the nature of the Business Model

Verstraete and Jouison-Laffitte (2010), taking up Desreumaux (1998, drawing on Barnard, 1938, and Simon, 1947), remind us that an organization's equilibrium relies on the contributions

of a group of actors who expect a reward in return (eg. a salary rewarding the work of an employee, a product as payment for clients, etc.) These relationships will last if each partner is satisfied according to his own system of evaluation. This means that an owner of resources (a financier for his money, a landlord for business premises, an employee for his work, ...) will more or less explicitly make his expectations known before providing anything. Any solution must integrate these expectations or he will not commit. Seen this way, a generic problem faced by an entrepreneur (for example the identification of an unsatisfied demand), and to which he sees a profitable solution, requires considering the challenges for potential stakeholders.

Collectives can be demanding. Verstraete and Jouison-Laffitte, who work on the BM in the context of business creation, speak of stakeholder « crystallization » (and they convoke the relevant theory). Crystallization around a business creation project is linked to a collective representation that agrees on how to conceptualize the start-up. Without this agreement, chances of crystallization are weak. The authors mobilize conventions theory to clarify this collective representation. Their departure point is the March 1989 number of the « Revue Economique » which prepares the ground for a research program on the convention. It is not restricted to co-ordinating information, but is relationship-based, envisaging an exchange of merchandise linked to a common frame of reference, namely the convention. Their revue of the literature confirms that actors in a space-time share a base of common knowledge that influences their behavior. Recurrent experiences stabilize the system by co-ordinating actors who contribute to the emergence of a collective representation that helps them interpret their own behavior with reference to commonly accepted behaviors in their space-time (cf. Orléan, 1994). Beyond this notion of intersubjective behavior, there is a mimicry phenomenon (Gomez, 1994). The idea is not to say that everyone will end up behaving the same, but the convention remains the result of

individual actions that evolve, combined with a restrictive framework (Dupuy et al., 1989). In other words, the actor decides by mimicry as well because this framework, there to help him to judge the behavior of others, guides him in so much as he is hesitant in an uncertain situation. This theory responds to uncertainty management by leaving the actor the possibility of determining his own behavior through a combination of motivations or idiosyncratic cognitive capacities, and a more collective and regulated representation, precisely by these to-ings and fro-ings between individual and system of which he is as much the product as the cause. The common frame-work authorizes agreements between active individuals; it might term itself in a variety of ways: constituent convention, paradigm, common sense, cognitive model, etc. (Eymard-Duvernay, 2006). It facilitates an understanding of how to co-ordinate human conduct (Eymard-Duvernay et al., 2006).

Thus, according to Verstraete and Jouison-Laffitte, this common frame-work authorizes the emergence of a business around the way an opportunity is conceived and, being sustained by a collective, gives birth to a convention that constitutes the business (the action of entrepreneurship), which gives way to the creation of a firm (the business as an entity). Loaded with intentions, and with a social history of rules that have forged his own experience, the individual is aware of the conventions surrounding him. He presumes that the players he meets will join his project in function of the conventions influencing their own behavior. In other words, his project must give meaning, and this takes flesh in the convention he instigates with the convinced actors who join him. In reference to the translation theory seen earlier, the BM is the translation of the convention which makes intelligible the complex system that is the enterprise (be it in creation or established).

1.3. Make «visible» the conventions's contents for the exercise of conviction : a model Business Model

With regard to the two previous sub-sections (1.1 and 1.2), we consider the BM a translation that creates meaning based on a common frame-work shared by parties who subscribe to the proposed business and participate in its construction by providing tangible or intangible resources. The nature of this meaning is conventional because it arises from the interactions of the parties concerned and, thus, from the collective representation that emerges from these interactions. The entrepreneur as spokesperson, presents the convention under construction to the owners of resources he approaches. We propose the BM as the translation of this convention. By instrumentalizing it, that is to say by transforming it into a tool, it serves for the fine-tuning of the project and the exercise of conviction that gets stakeholders to sign up. To this end, and to facilitate the understanding of the listener, the BM itself needs modeling to “make it visible” to those interested (first off, the creator himself). By make visible, we mean a capacity to generate a cognitive schema in the mind of those receiving the message, that supplies the intelligibility they require to understand the proposed business and project themselves into it. Without this meaning, there is little chance that they will participate in the project. One of the problems faced by the entrepreneur is that the individuals he addresses tend to interpret information in the mood of the moment (Cossette, 1994), based on situations they have already encountered (Moscovici, 1986), their emotions (Damasio, 1995), their commitment (Weick, 1979), etc. One must draw on theories of representation, for example causal schemata (Kelley, 1967, 1972), and of attribution (Heider, 1971, 1958) and cognitive dissonance which reveal man as rationalizing rather than rational (see Beauvois and Deschamps, 1990), and many others. We will not review the literature on the topic, but knowledge gained on our subject of research shows that the entrepreneur is confronted with the difficulty of wanting to change things whereas the individuals he addresses

have a rather more stable cognitive function, especially when social representations constitute a hard nut to crack (see Jodelet 1989 for a generic work on social representations, Abric, 1994a and b, for the theory of the central kernel). One must therefore help the cognitive structure to integrate the BM as a representation that creates meaning for the system. The creator must be able to produce, by translation, the generation of a mental image representing the BM. This is the significant image for the listener. Obviously, the entrepreneur undertakes the exercise from his own cognitive representations which are not an exact reflection of the BM under construction. The BM is the fruit of a collective representation, but one can easily accept that the entrepreneur, as spokesperson, is the one with the most complete representation of it, or at least the most coherent.

The more complex his project, the more useful its modeling (search for intelligibility). If, in addition, one wishes to help the entrepreneur realize and then maintain a convention, one should provide him with tools that help him imagine what that might be. One must, in some way, “model the model” to understand what it is (its nature) and then fill it with content. After discussing its nature (the convention described earlier), Verstraete and Jouison-Laffitte proposed a generic content for it, as summarized below. They consider, based on the literature and fine-tuned on the ground in various domains, that “the BM is a convention relative to the generation of value, its remuneration and the sharing of this remuneration. Our conception leads us to speak of the model GRS (generation, remuneration, sharing).” (Verstraete, Jouison-Laffitte, 2009, p.9).

The generation of value breaks down into three categories : the value proposition, value manufacture and the entrepreneur.

The « value proposition » is an expression already widespread in the literature on the BM (Maître et Aladjidi, 1999 ; Osterwalder, 2004). It is about generating an offer that provides value

to those it addresses, in the first place the customers who are without doubt the first people to convince if other people are to join the project (the aim of a good market study being to show the existence of a market consisting of clients inclined to buy). If an offer provides no value, there is little chance that consumers will accept it (the writings on this are clearly numerous in strategy and in marketing, one can trace this tenet back to the theses of Smith or Ricardo). It is about determining the utility of the offer for identified market segments and consumers, clearly knowing for whom the value is created, which leads to a recognition of competitors (Afuah and Tucci, 2000 ; Magretta, 2002 ; Chesbrough, 2003 ; Morris et al., 2005). The BM hence explains why, on the one hand, target clients find the offer interesting and why they accept it. Their acquisition presumes that the offer can be manufactured and effectively proposed by a player whom the system recognizes as legitimate, particularly in his ability to keep his promises (and so to manufacture the offer).

One never succeeds alone, one must generate the value stakeholders expect in exchange for any of their resources that are necessary or useful to the entrepreneurial project. And aside from the value expected by customers, one cannot ignore the expectations of suppliers, employees, financiers, etc. The generation of value is made possible by the participation of a network that provides the project with resources. This vision of business is not fundamentally new as we have previously mentioned.

As long as the partners are satisfied by the exchange, relationships will last and the business will be sustainable. Literature on the BM refers to a network of value (Shafer et al., 2005) which contributes to the fabrication of value. The BM adapts to the demands of potential stakeholders encountered, obviously without believing itself capable of integrating them all. What is needed is the support of enough stakeholders to fulfill the project's ambitions, as much in its start-up phase

as in the long-term. Ideal partners will not always sign up, but this does not put the project in danger. Nevertheless, the quality of the assembled network impacts the BM, which develops as a function of the resources captured. The BM relies as much upon considerations of the expectations of stakeholders as on the quality of the resources obtained or promised. As a consequence, stakeholder support calls on another aspect of the BM, for each party will only provide its resource in compensation for what it can get from the relationship of exchange. This aspect of sharing requires an exercise of conviction because an entrepreneur cannot rely on a spontaneous understanding of the model.

The business obviously needs to gain something from all that, particularly from the value it brings to market. Verstraete and Jouison-Laffitte (2008, 2009, 2010, 2011) speak of the remuneration of value. It deals with understanding the manner (Maitre et Aladjidi, 1999) or the logic (Linder et Cantrell, 2001 ; Morris et al. 2005), or the mechanisms (Chesbrough, 2003) or the plan (Kumar et al., 2003) that enables the capture of revenues. In brief, how does the business earn money (Petrovic et al., 2001 ; Magretta, 2002 ; Morris et al., 2005)? How does the business sell and buy goods and services and earn money (Osterwalder, 2004, p.14) ? Once the sources and volume of revenues have been identified (Timmers, 1998 ; Morris et al. 2005), it deals with assessing potential profit (Dubosson-Torbay et al. , 2002), both today and tomorrow (Rappa, 2000 ; Afuah et Tucci, 2001 ; Petrovic et al., 2001). Evaluating the profit requires revising the cost structure and profit margins. This remuneration of value is the price paid by markets interested in what is being offered. It includes *a minima* the sources of revenues, their volume and an estimation of profits (and hence clearly an estimation of costs).

The GRS model is summarized in the following table.

Chart 1. The elements of the GRS model

Generation	Remuneration	Sharing
<i>Entrepreneur (who proposes the offer ?)</i> Experience Motivations Entourage Etc.	<i>The sources of revenues</i> Revenue streams <i>The people who pay</i> Etc.	<i>The network</i> Identification of potential stakeholders Optimization of exchanges (win-win) Etc.
<i>Value proposition (the offer)</i> Idea Market Ambition Competition Etc.	<i>The volume of revenues</i> Turnover Market share (today and/or tomorrow) Non-financial elements eg. reputation) Etc.	<i>Conviction to make the exchange</i> Delivering value Oral training Editing skills Etc.
<i>Value manufacture (the organization)</i> Identification of resources Capacity to capture, to deploy resources Capacity to deliver the offer Etc.	<i>The profits</i> Financial performance (margin, break-even point...) Non-financial performance (social climate, reputation, ...) Etc.	

This chart was translated into an interview grid to research businesses in the construction sector¹.

2. An operational frame-work deployed on site in the construction sector for results showing the usefulness of the Business Model but further work is required

The GRS grid serves to collect information and represent the BM of businesses in the construction sector, and follows the protocol of AR (action research) to answer the question of the use of the BM for these businesses.

1

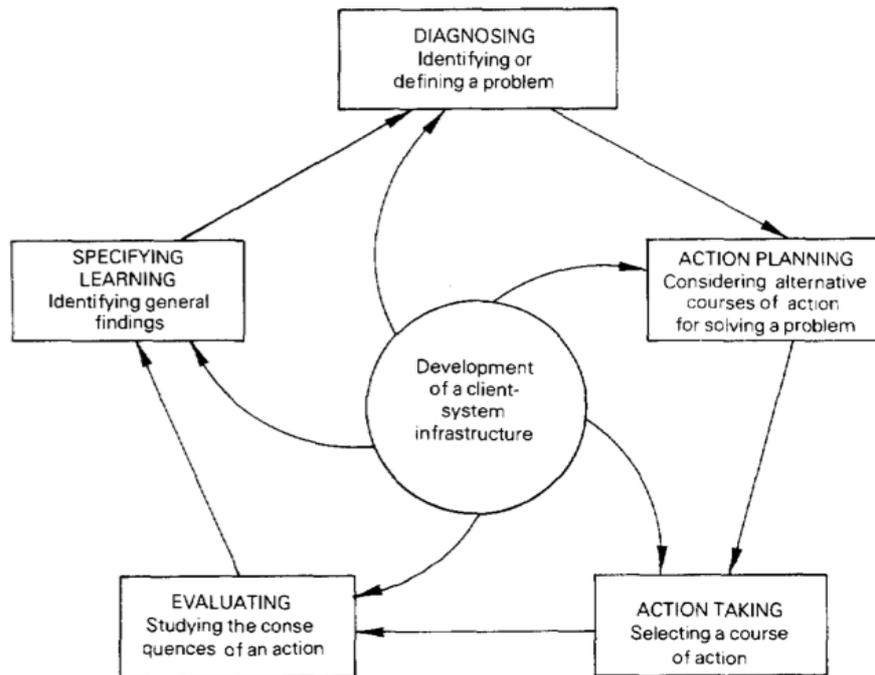
This grid can be many tens of pages long and can be sent by email to anyone who requests it.

2.1. An operational frame-work based on action research

Susman and Evered (1978), in a text which is still current, consider that organizational sciences are going through a crisis of which one of the symptoms is the growing sophistication of methods that are unusable by practitioners. These methods build up a knowledge base that cannot be mobilized by the actors involved, notably because the construction of know-how is too often disconnected from the problems encountered by these practitioners. Susman and Evered propose “action research” (AR in the rest of the text) as an alternative that enables any research undertaken to keep pace with the problems faced by practitioners. Our AR draws on the cyclical process proposed by Susman and Evered (figure 1).

The presentational demands of the organizers of the congress do not permit us to summarize the basics of the AR in a restricted format. We must content ourselves with summarizing the different phases of research and presenting the sample businesses that participated, before moving on to a related section that discusses the results of the research.

Figure 1 : The cyclical process of action research (Susman, Evered, 1978, p.588)



The following chart regroups the different stages of our research.

Chart 3. The stages of the action research

Stage	Date or period	Result
1. Identification and definition of the problem	17 July 2009	Meeting between researchers and representatives of the sector leading to an articulation of the problem, and the following question: Can the BM help young business leaders in the construction sector?
2. Discussion of the problem and action plan	22 January 2010	Meeting between the research team and business leaders to discuss the initial question and the purpose of the work, to recall the principle of action research and tackle its deployment. It was decided to pair up the researchers and partner them with the business leaders (10 researchers for 5 leaders) to revise a representation of the BM.
3. The Action underway	From January to June 2010	Fine-tuning of the protocol for accessing the ground, adaptation of the GRS. For each of the 5 sites, 3 visits of several hours on the ground to revise the representation of the BM.
4. Evaluation of the action	13 July 2010	Editing of the representation of the BM in 9 formatted pages, plus slide-show presentation. Highlighting of positive points, negative points and perspectives.

5. Learning, general results	30 November 2010 18 February 2011	Reproduction of the work at a meeting with the research participants and various representatives of the FFBG. Presentation of the research report.
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These stages were deployed on the ground with five businesses working in the construction sector.

Chart 4. Cases explored by the research

Business name	AA	SBC	AS	D	E
Leader's name	C	HN et KN	UQ	NH	DC
Business structure	SAS	3 structures SAS, SARL, SARL	SAS	SAS	SARL
Year of business creation	1981	1972, 1981, 2002	1986, takeover in April 2007	1919	2005
Specialization	Electricity Strong and weak currents	Builders of individual houses	Secondary building work (refitting of professional spaces – asbestos removal)	Building closures	Painting interiors, collective buildings
Last known earnings (excl. tax)	1 911 k€ (in 2009)	3 500 K€ (in 2009)	4 284 k€ (in 2009)	2 208 k€ (in 2009)	1 120 k€ (2009)
Annual average staff as full time equivalents (not incl. Temp staff)	15	20	23	19	16 employees + 4 TNS
Average temporary staff (as full time equivalents)	3	0	0	2 -3 (occasional stand-ins)	0

2.2. Discussion of the results: the Business Model is useful but further work is required

The five entrepreneurs who participated in the research project filled out an (anonymous) satisfaction questionnaire following the final presentation of their company's BM. The reason for

this was two-fold: to gather feedback from them about how the project was carried out and to evaluate what the BM had brought them as a tool, both personally and for their businesses. The questionnaire was auto-administered in writing.

An analysis of responses shows that the business leaders are “mostly” or “completely satisfied” with their participation in the project. They recognize the quality of meetings held with the complete working group, which united the 5 heads with the FFBG representatives and the full research team. Relations with the research team (researchers' attentiveness, capacity for discussion) are judged highly satisfactory by all participants. These results demonstrate the actors' commitment to the project and a good understanding of the rules of the Action Research. Whenever the researchers deviated from a position of neutrality, their behavior was accepted even encouraged by the project leaders, who considered it “frank” and “open-minded”.

As for the benefits brought by the project, the business leaders emphasize the usefulness of Action Research: two of them “support completely” and three “mostly support” the statement that the project was useful for them and their business. The level of buy-in rises for the written 9-page text², judged “very useful” by 3 of the 5 business leaders and “useful” by the other two. More precisely, the leaders appreciated “*the chance to think deeply and to consider management tools that inspired improvements or strengthened weak points*”. The “*diagnostic*” aspect of the BM was well assimilated for this reason. It came out spontaneously in the discourse of the respondents, who appreciated being able to “*see*” their business through the BM. The benefits of using the tool include the “*formalization*” and the “*re-transcription of information by the pair-group*” which reflect the BM's power to create meaning and enable visualization. Far from putting off the business leaders, the effort to co-edit with researchers and fine-tune slides for their

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Congress participants are welcome to contact the authors for a copy.

presentation enabled leaders to build a legible and structured version of their business. The gain in perspective was also cited by all the participants as one of the most positive points of the work undertaken (“*the time it took enabled me to see the bigger picture*”, [I appreciated having] “*to re-think from basics*”, “*a different perspective*”).

The feelings arising from the project, as expressed by the participants, convey a favorable response to our research question: in its users' opinion, the BM has served the young business leaders in the construction sector on at least three levels. It has helped them in their diagnosis of the three dimensions of the model (generation, remuneration, sharing), in their own view of their business (“*a more important awareness*”), and finally in the revelation of recommendations for the future (“*the project enabled a thorough review of a certain number of things, particularly business development*”, [to highlight] “*future axes of work*”).

Not only is the tool judged useful on an individual level, but in the discourses of the actors, it takes on a collective dimension that one could consider “industry-wide”. The respondents unanimously recommend the tool to their colleagues in the construction sector and fellow-members of the FFB. They voice an expectation of “general propositions for our businesses”. One of the business leaders, with caution, does not give an opinion on the next steps “*to be determined*”. Three others ask for a follow-up and accompaniment in the implementation of the recommendations identified (“*transformative actions*”, “*make actions happen for real*”, “*put my projects into practice*”). The wish to proceed with the project sometimes has an additional intellectual aspect (to go further “*out of curiosity*”, “*to deepen thinking*”) but also contains an implicit request for advice that the researchers cannot satisfy (“*to have shorter and more frequent interviews*”).

The way the research was undertaken encouraged the establishing of trust, despite certain reservations about communicating financial data, which were as much through humility as a desire for secrecy. Heads of SME's rarely allow themselves time to consider things from a broader perspective; a research project gives them this opportunity. Their growing involvement in research is witness to the meaning proffered by the tool. In the process, any vocabulary specific to the GRS (value generation, value remuneration, sharing) or used by experts in the BM (the value proposition, value network, ...), discretely introduced by each pair-group of researchers, was assimilated by the business leaders and integrated into their own vocabulary. It was remarkable to observe it during the final presentation of the BM's, which was held before all the protagonists of the research project. If the business leaders did not all spontaneously call upon these terms, the alternatives they each used – proposed by the researchers – demonstrated an understanding of the concepts and their constituent parts, even their nature, that is to say, the convention. It is the “S” dimension of the GRS model that seems to enable this kind of training. Clearly in tune with the business network, the BM emphasizes the importance of maintaining relationships with stakeholders through a relationship of exchange, to be aware of and sometimes improve upon. Working on the BM guides business leaders to ask themselves questions that they never or rarely ask. It enables them for example to envisage enlarging their circle of partners, that is to say to take on board the idea that stakeholders need not be restricted to close collaborators or to people seen frequently. Business can hence be redefined by a wider circle of people, in fact the rest of the AR could be dedicated to this redefinition of the BM (its regeneration, cf. Benavent et al. 2000), as certain business leaders have explicitly requested.

The remarkable co-apprenticeship seen at the final presentation of the BM's was demonstrated further upstream by the contributions business leaders made to the drafting of the BM, then by their work on the slides and discussions that demanded formal translations. By these means, the business leaders saw their BM emerge along the way. The following anecdote is in fact significant data: at the reading of the first attempt to draft the BM, one of the business leaders could not contain the emotion it provoked. This kind of reaction is rarely mentioned in Management Sciences; it is perhaps simply unusual. Modeling enables one to see, and this visualization is touching for the business leader who too often “has his hands dirty” and “can't see the wood for the trees”.

The research shows that working with the BM constitutes a training in the convention. Undertaking this work questions the other levels of conventions to which the BM refers. The conventions of a specific business sector are a good example, especially as the business leaders have requested further work at this level. The team is already researching the most appropriate terminology for defining this kind of convention, the expression BM being reserved for the level of a business, not a sector.

This work introduces a methodological contribution in the form of an AR involving 11 researchers. This is unusual. It is indeed extremely innovative regarding the BM, a subject for which experimentation is more frequent than empirical research.

When it comes to empirical contributions, the BM can unequivocally leave its original context, the *start-ups*, and be used in the context of existing organizations. The modeling of the model, namely the GRS, has proved relevant. One will remark how, as a diagnostic tool, it was necessary to define the components of the model. If the GRS is defined during the fine-tuning of

a business creation project, then in an existing business it is made up of a wealth of detail. For example for the “R” dimension (remuneration), once a frame-work for collecting and analyzing revenues has been redefined, it is always easier to use in this context, because back-data enable one to assess it in a far less speculative way. This is equally the case when it comes to the manufacturing of value (dimension G): visits to the business or to building sites enable one to see certain parts of the value chain, as the business leader takes a clear pleasure in narrating, that is to say in explaining how one part of the process or another was put into practice.

In terms of limits, one would highlight principally a certain frustration at not having advanced further in the work, for example regarding the role which the BM could play as a “thinking tool” (for the business leaders) beyond its role as a diagnostic tool. The visualization of the BM has a liberating character (following notions of cognitive map-making, cf. Audet 1994), that is to say that it helps an actor think of things he would not otherwise have considered. In this respect the BM can be used creatively, using a method yet to be conceived that would transform it into an essentially heuristic tool (see Osterwalder and Pigneur's work, 2010).

Another limit is related to sampling, for the business leaders were in some ways recruited by the FFBG.

The last significant limit became apparent during the “public” presentation of the BM's (phase 5). Each group of 3, without departing from the GRS model, built a representation of the BM according to text formats and specific graphics. There is a clear need to systematize the presentations, which the researchers felt and which the business leaders explicitly expressed.

Conclusion

This text describes an Action Research undertaken by 11 researchers investigating 5 business leaders in the construction sector, for which they mobilized the concept of the BM. It consists of three rare elements: an AR uniting 11 researchers and 5 business leaders, a sector little explored by Management Science research, and empirical research on the BM.

Follow-ups to the present research, which will clearly take place in the short-term and on the basis of the BM presented, will consist of imagining a new idealized vision, this time for the future. Now that the business leaders are aware of the GRS model, it will serve them to articulate their desired futures, which requires imagining the evolutions of the sector of their business at the heart of which the BM will have to transform itself (regenerate). The BM will be able to be used as a creative tool at the service of strategic planning.

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