

## **Outcome Based Business Model Innovation: Rethinking the Business Model Innovation**

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### **Abstract**

Even if innovation is a tricky concept to define, almost all firms need to innovate. Moreover, an innovative approach cannot be limited to the process of developing innovative products, but must encompass the concept of innovating the business model itself. This paper proposes a framework for the creation of innovative business models based on the principles of outcome-based innovation (ODI). This paper represents an attempt to structure an innovative business model capable of truly exploiting strategic opportunities in the market. The cases show that it is possible to extract valuable information from applying ODI analysis to business model bringing to successful results.

**Keywords:** innovative business model, outcome-based innovation, canvas business model

## **Introduction**

It has been acknowledged that managing innovation is an uncertain practice (Christensen, 2003) surrounded by accidental events, intuition, and heavy doses of serendipity and unconventional practices, none of which are necessarily relevant to the generation of great ideas. One alternative to this random, flailing approach is outcome-driven innovation (Ulwick, 2002). And, while innovation has traditionally been considered in terms of technology and products (Norman & Verganti, 2012), it can also be applied to the business model itself (Chesbrough, 2010; Teece, 2010; Zott & Amit, 2010). Tools have been developed to explore opportunities for business model innovation in uncertain scenarios (Osterwalder & Pigneur, 2010).

These tools help describe how organizations work and generate revenues. More precisely, they assist managers in the conceptualization and communication of the different activities their companies employ to generate value and to create innovative products and services. Thanks to such business model tools as the business model canvas (Osterwalder & Pigneur, 2010), the business model is now considered a key business lever that shapes the overall value delivered to the customer, while also shaping the cost structure that delivers that value. As such, the business model is a means of managing, improving, or even creating innovation. In this vein, the business model is also a route to a better architecture and systems for a business or an activity. Business model innovation—like any innovation—can also be disruptive, with the potential to shake whole industries. As Winter and Szulanski argue, “The formula or business model, far from being a quantum of information that is revealed in a flash, is typically a complex set of interdependent routines that is discovered, adjusted, and fine-tuned by ‘doing’” (Winter & Szulanski, 2001, p. 317)

Starting from this point, the authors have applied Outcome-Driven Innovation (Ulwick, 2002) to the Business Model Canvas (Osterwalder & Pigneur, 2010) to reap the advantages of both methodologies and create an innovative business model. The Business Model Canvas enables innovators to capture the whole picture of their business by identifying the single blocks involved, while Outcome-Driven Innovation helps innovators be innovative not only in the value proposition, but throughout the business model, by identifying strategic opportunities—jobs—that customers need to do and that no one is currently addressing properly.

### **Business model innovation: theoretical framework and question research**

Running a business is a difficult, risky, and uncertain activity, and that uncertainty is amplified by a continuous stream of innovations, constantly changing the business environment. As the rate of innovation increases and the number of organizational failures grows, new methodologies have been introduced to help organizations adapt their business models to the market opportunities.

Important frameworks such as the Business Model Canvas create the bases for a common language around the business model that can help business model creation, communication and improvement. In Osterwalder, Pigneur, and Tucci’s (2005) vision, a business model is a conceptual tool containing a set of objects, concepts, and their relationships. The purpose of the tool is to express the business logic of a specific firm. Osterwalder et al. (2005) consider which concepts and relationships allow a simplified description and representation of the value a business provides to its customers, how it provides that value, and with which financial consequences. Osterwalder and Pigneur (2010) use a systematic, repetitive, and recursive process approach to improve on Osterwalder et al.’s (2005) proposition. The iterative business model development process provides an agile method for investigating customer’s problems and needs

and reacting early enough to find new solutions.

Osterwalder and Pigneur (2010) present five phases (mobilize, understand, design, implement, and manage) as a sequence of tasks in business model innovation. In the “mobilize” phase, the manager’s task is to plan and assemble all the elements for a successful business model design and to communicate the reason and motivation behind the new business model project. The manager’s role is to create a common language to describe, design, analyse, and discuss the business model with the design team. The elements that are relevant for designing a business model are selected by observing the “understand” phase. The design and implementation phases mean action. Alternative and viable business model prototypes are brainstormed, and team’s task is to evaluate and validate the best options for testing and implementation. In the “manage” phase, the business model is adapted and modified to respond to customer and market actions. The role of the business model design team is to constantly monitor, evaluate, adapt, and if necessary transform the current business models (Osterwalder & Pigneur, 2010).

Magretta (2002) and Sosna, Trevinyo-Rodríguez, and Velamuri (2010) indicate that trial and error is the way to discover the most appropriate business model. The right business model may not be apparent from the beginning and may depend on learning and trial-and-error adjustments. Teece (2010) highlights the role of discovery learning and adaptation in the process of business model innovation, and he suggests that a business model should be evaluated against its current ecosystem of suppliers, competitors, and customers and against the ecosystem’s possible evolutions (Teece, 2010, p. 189). Chesbrough highlights technological innovation as a new way to infuse value into a business model: he warns against missing out on the potential value of exploiting new technologies (Chesbrough, 2010, p. 359).

Ries (2011) proposes a lean start-up method, in which business hypotheses are tested in advance: this can shorten the product development cycle and reduce market risks before moving into the next stages of business development.

These experiments provide firms with the necessary information on when it’s appropriate time to shift resources from established business models to new business models. Kijl et al. try to identify external influences that drive business model change or have a disruptive effect on a firm’s business model (Kijl et al., 2005, p. 4). The authors also classify the type of innovation that is at the root of a firm’s business model. A distinction is made between incremental and radical innovation, though both radical and incremental innovations can lead to changes in a firm’s business model. Sosna et al. (2010, p. 384), like Achtengahen, Melin, and Naldi (2013) and Kijl et al. (2005), view continuous business model innovation as a dynamic capability for reacting to market changes and thereby surviving in the longer term. Sosna et al. seek to contribute to the emerging view in business literature, which considers business model development as an experiment, followed by revision and adaptation based on trial-and-error learning (2010, p. 384). Trial-and-error learning is characterized by its iterative nature, whereby actions that produce wanted results are retained and actions that produce negative results are discarded (Argyris & Schön, 1978).

Through their examination of Naturhouse, a Spanish dietary-products business, Sosna et al. (2010, p. 384), show that the metamorphosis of a business model can be categorized into four different stages: initial business model design and testing, business model development, scaling up the refined business model, and sustaining growth through organizational learning (Sosna et al., 2010, pp. 388–96). Table 1 summarizes the literature on business model innovation.

Author	Year	Business model innovation	Description	Driver
Chesbrough	2010	Technological approach	Exploit new technologies	Technology innovation
Kijl et al.	2005	Incremental or radical approach	A process based on different types of innovation	Incremental and radical innovation
Osterwalder and Pigneur	2010	Iterative process	Iterative process involving five phases: mobilize, understand, design, implement, and manage,	Customer change
Ries	2011	Lean approach	Testing business hypotheses, product iteration, and validated learning	Customer – product
Sosna et al.	2010	Trial-and-error approach	A process based on: <ul style="list-style-type: none"> <li>• design</li> <li>• testing, business model development, scaling, sustaining</li> <li>• growth</li> </ul>	Environmental circumstances
Teece	2010	Learning approach	Discovery and learning adaptation	Current ecosystem of suppliers, competitors, and customers and their changes

Table 1 Literature on Business Model Innovation

### Methodological approach: outcome-based business model innovation

In the previous section, we showed the importance of business model innovation. The approach can be driven by different factors, as shown in Table 1. Since we believe that an innovative business model must be able to define and identify opportunities for innovation, we need a framework richer than a simple business model framework, one that is able to inspire continuous innovation instead of merely refining, evolving, and iterating a first draft of a business model. To that end, we combine a methodology that is normally used in product innovation—Outcome-Driven Innovation (Ulwick, 2005)—with Osterwalder and Pigneur’s (2010) business model canvas. Below, we first describe our methodology and then discuss its application to some practical cases.

### A Methodology for an Outcome-based Business Model Innovation

According to Osterwalder et al., “A business model is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm. Therefore we must consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is performed and with which financial consequences” (Osterwalder et al., 2005, p. 5). In an initial proposal, these authors identify four main pillars—the product, the customer interface, the infrastructure management, and the financial aspects—around which they identify some “building blocks.” In a later paper, Osterwalder and Pigneur (2010) directly propose a “nine building blocks business canvas,” the nine building blocks being value proposition, channels, customer relationships, customer segments, revenue streams, key activities, key resources, key partnerships, and cost.

Outcome-driven Innovation predicts more precisely the value created redefining the market concept based on the “job to be done” theory. This theory is based on two very simple concepts: first, that customers hire products and services to get a job done, that the job is the stable unit of analysis, (Christensen, 2003; Ulwick, 2002), and that customers will adopt products and services that help them get the job done better (Christensen, 2003; Ulwick, 2002) and that let them get the whole job done on a single platform (Ulwick, 2005). The second concept is that customers measure how successfully they are able to complete a job in terms of outcomes (Ulwick, 2002). These metrics must be captured and measured so as to obtain an objective and quantitative assessment of market opportunities, i.e., where value can be created.

This value is defined through an opportunity algorithm, which is a function of the importance of each outcome and the satisfaction of customers with their ability to achieve each outcome. Using the opportunity algorithm, it is possible to prioritize the outcomes and place them into one of three categories: underserved (customer unhappy with how well they can achieve this outcome), well served (customers are satisfied with their ability to achieve this outcome, though there may be ways to improve satisfaction further), and overserved (customer not only are satisfied with their ability to achieve this outcome, but there is room to simplify solutions—there is room for disruption).

Outcome-driven Innovation defines these metrics as customer needs and builds upon them. For example, it is possible to identify segments of opportunity by clustering respondents according to needs similarity (outcome-based segmentation), discovering in this way new segments of opportunity that could never be unveiled by traditional segmentation methods.

When we consider Outcome-Driven Innovation in conjunction with the Business Model Canvas, we observe that the two theories address complementary aspects of innovation strategy. The Business Model Canvas allows for understanding in a holistic way the system set up by a company to provide its value proposition to customers, without assessing the value created for the customer. Outcome-Driven Innovation measures the value created for the customer, without directly elaborating on how this value proposition is created and made available to customers.

In the new business model perspective that we are proposing, the advantage derives from addressing existing opportunities, not only by identifying innovative product or service solutions, but extending the ideation to the business model around these product or service solutions, by considering for the entire model the potential impact on customers’ satisfaction metrics—namely, their desired outcomes. As such the entire business model is innovative and may be considered an outcome-based business model.

The outcome-based business model innovation is applied as follows (along the nine blocks of the Business Model Canvas):

(1) Value Proposition. An innovative value proposition is addressed using the outcome-driven innovation approach. The problem that customers are trying to solve or the goal they are trying to achieve (and for which they will hire this value proposition) is described as the core job to be done. The job has to be described from the job executor’s (customer’s) point of view (what the customer is trying to achieve) rather than from the product point of view (what the product is actually doing). As an example, what a weed killer does is kill weeds, but the job for which a farmer “hires” the weed killer is growing a crop.

The job is analysed by means of the job map (Bettencourt & Ulwick, 2008). A job map gives a picture of how thoroughly the job is covered by the current solutions, offering an early insight into expansion areas for the company itself and/or entry opportunities for competitors. Customer needs—the outcomes described earlier, which executors are trying to achieve—are

catalogued for each step of the job (Ulwick & Bettencourt, 2008). Outcomes must be expressed as solution-independent statements, formulated in an unambiguous and actionable way. In addition to the core job, there are also adjacent jobs (other things executors do in connection with the core job) and emotional jobs (how executors want to feel), as well as consumption chain jobs (what executors must do in order to get and use the proposed solution).

The complete set of outcomes and jobs are obtained through qualitative interviews with job executors and will normally contain between 50 and 150 “need” statements. Through a quantitative survey of job executors, all these statements will be rated in terms of importance and satisfaction. These values will be translated into opportunity values by the opportunity algorithm.

(2) Customer Segments. The quantitative nature of this analysis allows for the clustering of respondents according to the kind of needs they have (“factor and cluster” algorithms are applied, based on the opportunity scores). This leads to the discovery of segments of opportunity. A strategy may be defined for each segment, and decisions may be taken on which ones to address and on how to tailor the value proposition for each one.

(3) Channels and (4) Customer Relationships. These bring value to the way customers receive the proposed solution, learn to use it, get it installed (when applicable), maintain it (when needed), to repair it (if necessary), and so on. The consumption chains jobs—and in some case their outcomes—will give an indication of what creates value in this part of the model.

(5) Key Partnerships, (6) Key Resources, and (7) Key Activities. This portion of the model describes how things are done. ODI focuses on what to do and for whom, but from ODI we obtain also a clear picture of the value components. It is a logical strategy for controlling what creates value (directly or indirectly) and not bothering about what the nonessentials. We get a strong indication of what we have to focus on, and conversely, we don’t get direct information about what to “make or buy,” although we do have the elements that will support us in those decisions.

(8) Revenue streams. Without making too hasty a generalization, we can say (as a general guideline) that the customer is prepared to pay for each individual value component, and only for that. In complex value chains, the elements of value may lie with different players in the chain. This model gives us a better understanding of who is creating more or less value for the customer, and we can use this information to decide who in the chain should manage which revenue stream.

(9) Costs. The cost structure is mainly determined by the internal blocks in the canvas.

## **Practical Cases**

In accordance with case study methodology, our cases are chosen for theoretical rather than statistical reasons (Glaser & Strauss, 1967; Yin, 2002), with the specific purpose of extending emerging theory (Eisenhardt, 1989). We use a multiple case strategy to obtain “more robust theory because the propositions are more deeply grounded in varied empirical evidence” (Eisenhardt & Graebner, 2007, p. 27). However, choosing right and accurate cases in very small samples is a challenging endeavour (Seawright & Gerring, 2008). In order to justify the choice, the cases have to represent some quite unique and outstanding phenomena or practices in relation to the subject undergoing study (Siggelkow, 2007). We have selected two organizations where the proposed methodology has been applied to identify new areas of value creation. The first case (MacMillan & McGrath, 2005) has been shown in literature to have evidence of the applicability of this approach: it is a case in which, in a mature market, a new business model has been developed around a recognized “new element of value” in the value proposition.

The ready-mix concrete industry is very mature. Companies offer standardized products and play by well-established rules. In this industry, the value proposition consists of a commoditized product, charged by volume. Still, even in this situation it is possible to identify needs that are not appropriately served.

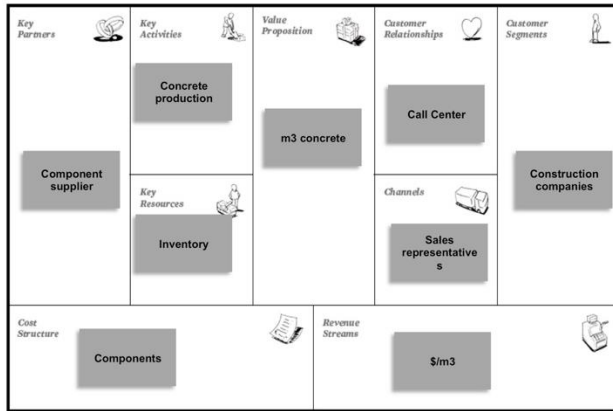


Figure 1 CEMEX: Canvas Business Model

CEMEX realized that although customers considered concrete a commodity product, they valued deliveries: in other words, the right amount of concrete at the right time. In ODI terms, that outcome could be written up as “minimize the likelihood of having idle staff due to a delay in ready-mix concrete delivery” and “minimize the likelihood that ready-mix concrete perishes because it is delivered at a time it cannot be used.”

Building a system to respond to these key needs required acting deeply on the business model. Having deliveries as the key source of the value meant learning from companies in other industries—companies such as FedEx or pizza delivery companies. “Short-notice delivery within a time window” is an additional value proposition that can be charged separately. In Business Model Canvas terms, CEMEX acted on the value proposition and created an additional revenue stream.

In order to sustain the promise, CEMEX had to make the delivery system a core element of the organizational structure, so the company made the logistic system a Key Resource and raised fleet management to the rank of Key Activity. The new proposition was also reflected in new elements in the cost structure, in particular the fleet cost itself and the disposal of the surplus needed to handle short-notice orders.

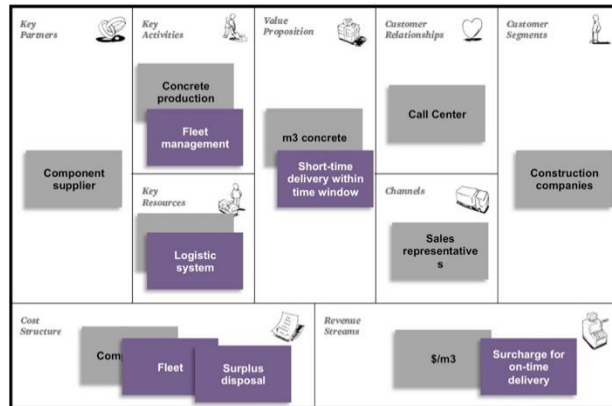


Figure 2 CEMEX: Outcome-Based Business Model

This reorganization proved to be very successful, and CEMEX grew from a regional player to “the third largest ready-mix concrete business in the world, with plans to capture the number two spot.” (MacMillan & McGrath, 2005).

Note that the risk in undertaking such a transformation depends on the level of uncertainty regarding underserved outcomes. Because ODI provides quantifiable data on those outcomes, the risks are dramatically reduced.

The second case, which is drawn from our research, offers direct experience of ODI practice. A major domestic appliance manufacturer was trying to identify breakthrough innovation opportunities for washing machines in the consumer market. In job-to-be-done terms, a solution-independent description of the job can be relatively general: the job is “cleaning a dirty item of laundry at home in order to make it usable again.”

As in the CEMEX case, this market is very mature, and solutions have been developed for several decades now. One might suppose that the basic needs have been clearly understood and that real opportunities may come only from adjacent jobs and new fancy functionalities. But this is not the case.

When studying the market of people cleaning dirty items of laundry in order to make them usable again, and understanding all the outcomes that these job executors are trying to achieve, we identified a large number of underserved ones—including, surprisingly, in areas that we expected to be better covered.

In particular, users are very concerned about the potential for clothes to become damaged during cleaning and are still unsatisfied with the ability of current solutions to handle stains that are difficult to remove. In fact, there is a market segment that we may call “stain freaks” that is surprisingly large and that is highly dissatisfied with everything relating to stains. On second thought, perhaps this should not be surprising, as we are daily overwhelmed by detergent advertising. But if this is a key area of unmet needs, why should the appliance manufacturer surrender it completely to the detergent manufacturer?

It comes out from the technical analysis that significantly better cleaning results may be obtained when the program of the machines closely matches the temperature curve requirements of the selected detergent. That is, an appliance could promise a measurably higher level of performance if it were employed with a known detergent, expressly matched to a program.

This is achievable in technical terms. But this solution doesn’t fit at all in the current business models of the two industries. To determine the viability of this approach, we undertook a business model ideation session. Thanks to the ODI analysis, we knew in advance that there



was a significant amount of value to be created for the customer by offering a credible improvement in stain removal. The initial tile in the mosaic was to assume an additional value proposition constituted by a “program-optimised detergent.” This value could be built internally or externally. A key partnership with a detergent manufacturer might be the fastest way to that goal, but in that case, the question was how to leverage the Business Model Canvas blocks related to channel, customer relationship, and revenue stream.

Even if a detergent manufacturer were interested in providing a dedicated detergent to an appliance manufacturer, it is difficult to imagine that the latter taking ownership of promotion and distribution, because that would take the appliance manufacturer away from its core business. On top of that, the promotion would have to overcome customers’ existing expectations regarding how they buy detergent and washing machines (i.e., not in tandem: customers are used to choosing their own detergent) and make them aware of where they could get this marvellous solution.

For this reason, a focused brainstorming session was given over to generating options for the different blocks, like for example alternative value propositions (a personalized detergent, branded as the appliance, or by a prime brand), alternative channels (service point network, company website, third-party website such as Amazon), and so on.

An overview is given in Figure 3. Most of the options shown are self explanatory, and it is beyond the scope of this paper to go into more detail.

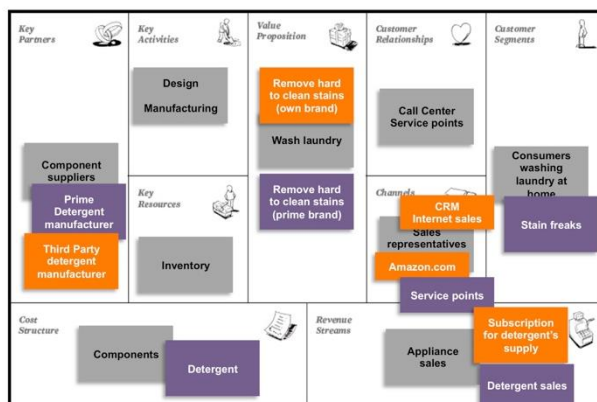


Figure 3 Washing Machine: Outcome-Based Business Model Options

The prime criterion for selection is that the option will get the job done better. Having acknowledged that there is no chance that an appliance manufacturer will become a leading detergent provider (with the exception of buying one, which is not a viable option in this case), a partnership is the obvious solution. We developed two partnerships ideas (one, partner with a leading brand, or two, partner with a third-party manufacturer) and two value-proposition approaches: providing the solution under own name or under joint naming (“detergent brand” for “appliance brand”).

From the perspective of the job to be done, there is a preference for the leading brand, which will be able to bring to the venture the experience and the know-how to create the winning detergent; but the leading brand may not have the motivation to enter the venture if it doubts its ability to get a good return on its name. Even if it believes it will get returns, the leading brand still may not be motivated to distribute the product through its channels, at least in the initial phase. An alternative is distribution shared between both partners, along with a Web portal, which can provide the information customers need to use the product correctly. This solution has

the added benefit of addressing the customer’s interest in learning how to use the product correctly, which was identified as an adjacent opportunity.

Adopting this option doesn’t close the door on distribution via other Web portals (such as Amazon) or directly via the detergent’s own channel if the product should experience huge demand. But as a starting point, we thought it best to focus on informing the customer of the existence of the solution, giving them reasons to try the new solution (respect for the detergent brand will help in this), making it easy to get (Web sales when no service point is in reach), and teaching them how to use it correctly.

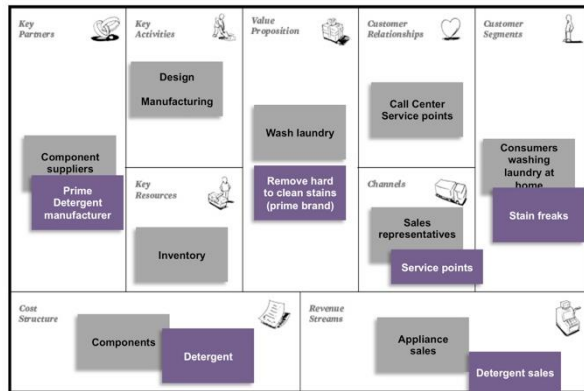


Figure 4 Washing Machine: Outcome-Based Business Model – Initial choices

The revenue stream choice is driven by a clear connection between a revenue factor and an element of the value proposition. The solution for removing hard-to-clean stains, as additional value element in the proposition, can be billed independently. The billing mode will depend on factors such as loyalty goals, buying threshold, etc.

As for costing, it will depend primarily on the nature of the partnership.

One huge benefit of ODI analysis is that it reveals the impact of different approaches on all the other affected outcomes of the core job, on the consumption chain jobs, and on the adjacent jobs. We can assess and compare in an objective way the value created for the execution of the core job and the jobs around it, so not only can we trust that the value created by the improved stain removal will be appreciated, but we can also get a reliable guide to the different options for the creation of a new business model.

Our work with the washing machine manufacturer is ongoing, so we cannot provide more information on the decisions that the company will take, going forward. But already we see similar solutions coming to the market, and soon the market will reveal which choice is the most successful.

## Results and significance

Developments in the global economy have altered the traditional balance between customer and supplier. New communications and computing technology and the establishment of reasonably open global trading regimes mean that customers have more choices, a wide variety of customer needs can be satisfied, and supply alternatives are more transparent. Companies strive to assess the value a given product or service has for customers. Until recently, there was no way find out other than to make a real product and then try and sell it.

But over the past two decades, companies have begun to adopt the ideas and principles associated with the customer-driven approach: understand what the customer’s needs are, and

then to invest in the creation of a new product or service that can satisfy those needs. But even having embraced customer-driven thinking, US companies still suffered failure rates of 50%–90% when they attempted innovation (Ulwick, 2002).

Entrepreneurs must recognize that their business model may affect the way a good product delivers value to the customer, to the extent that a bad model may even prevent the company from innovating successfully and serving emerging needs. The job-to-be-done theory, extended with outcome methodology, provides tools to identify (all the) individual elements of dissatisfaction in the execution of a job, and so to assess how well a new solution (innovation) improves satisfaction. This is a value creation assessment. For its part, the Business Model Canvas teaches us that the solution is not just the delivered product or service, but includes the overall setup that makes the solution available to the customer. It is then natural to extend the outcome-based assessment of the value created by the product to the entire business model.

### **Conclusion**

This paper presents an innovative business model capable of truly exploiting strategic opportunities in the market. The cases presented give some evidence of its usefulness in at least two respects: using ODI analysis, it is possible to extract valuable information for the finalization of many aspects of the business model. As the CEMEX case shows, basing business model decisions on the optimization of elements of value creation may bring very successful results.

We are applying this approach to other industries, in order to better validate the assumptions, and to streamline processes that will make application of the concepts easier. Meanwhile, we continue to monitor the present implementation in order to see if longer-term developments proceed as we expect. So far, our expectations have been confirmed.

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