# "Sensemaking in Target Costing"

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#### Abstract

Cost management methods and processes have been largely used and studied within organizations and their complexity has increased. Consider for instance the increasing amount of methodologies, tools and norms for effective organizational processes [Berliner and Brimson, 1988; Monden and Sakurai, 1989; Kaplan, 1990; Yoshikawa, Tanaka, Innes and Mitchell, 1993; Cooper, Slagmulder and Drucker, 1999]. This complexity increases the need of specialized expertise on products and cost management methods, tools and organizational processes. This scenario is characterized by the proliferation of consultants and experts in cost reduction and management that often are not employed in one unique organization, they collaborate with an increasing number of firms, have strong networks with producers and vendors, and know the new production technologies. This new scenario generates the proliferation of outsourcing processes of costs management which rise the need for consultancy firms specialized in different kinds of knowledge on cost management methodologies, technologies, products and services. As a result the role of knowledge becomes a very important matter and problem, unveiled by bounded rationality [March and Simon, 1958] and mainly caused by the information asymmetry between

organizations (the outsource) and consultants (outsourcers), require solving. At the moment consultants do not have the same information that workers within organizations (i.e. purchasing officers, managers, practitioner) have, and cannot autonomously decide on the selection of components and services required by the firm. In other words consultants (outsourcer), together with organization's experts (outsource), have to think, analyze, validate and combine the most favourable set of semi-processed products and services that minimize their costs. This continuous interdependency of knowledge among external experts and purchasing officers generates a new need. Cost methodology reduction, tools and processes should be analyzed from an innovative approach that takes into consideration knowledge as the discrete variable. Therefore the aim of this paper is to study some outsourcing practices of costs management with an innovative approach and starting from scratch, stressing the continuous interdependencies of knowledge among outsourcers and outsource. This new approach is based on constructivism theories, and in particular on sensemaking theories. Sensemaking refers to the cognitive and social process of developing a common or shared understanding, for example of an emerging customers' need, the system of functionalities that a product should guarantee, etc. [Weick, 1995; Weick and Roberts, 1993; Daft and Weick, 1983]. In this paper we argue that by applying sensemaking theories the mutual understanding, the emerging of innovative solutions and cost methodologies could be better understood, and new normative indications might be unveiled. We try to demonstrate these assumptions through two paradigmatic case studies analyzed in an Italian consultant organization: Creactive Consulting S.p.A.

The paper is organized as follows: Section 1 is devoted to describe the notions of cost management we intend to commit to, and presents related work. Section 2 presents the fundamentals of the constructivism approach and describes how the central notions of "sensemaking" could be used in cost management theories. In Section 3 two paradigmatic case studies in which sensemaking aspects are unveiled in typical processes of cost management, have been described, and finally Section 4 draws conclusions and sketches further work.

## 1. Cost Management methods and techniques

The debate on the relevance and future of Cost Accounting and Management in the last decade of the 20<sup>th</sup> century, highlighted by the famous Johnson and Kaplan's book (1997),

has driven much attention of both academics and practitioners towards the development of the so called "new cost management techniques and approaches". At the same time, the quest for a new approach appeared, driven mainly by the growing competition from the "fast rising Far East economies". The traditional volume-driver cost systems does not fulfil adequately emerging new needs such as: performance measurement, operational control or product costing purposes [Kaplan, 1990], examination of relationship between a firm's strategy and the design of information systems, cost control and cost management [Yoshikawa, Tanaka, Innes e Mitchell, 1993; Horngren, Foster e Datar, 1998], etc. Under the pressure of the emerging competition, accounting has been moved to cost management and has become an integral part of the planning and control system of manufacturing operations [Brimson, 1991]. Furthermore, under this perspective, cost management can be seen as a set of techniques and procedures that support decision making [Kaplan, 1990], and overall, as an "attitude and a way of life" that takes into consideration market strategies, value of products, etc. [Cooper, Slagmulder and Drucker, 1999]. Propelled by the search for solutions to the problem of the inadequacy of "traditional cost systems", researchers and practitioners have accepted the idea that in order to comply with a more complex set of needs, a wide set of possible solutions has to be selected [Dixon, Nanni and Vollmann, 1990:117]<sup>1</sup>. Therefore, various, sometimes not well coordinated, approaches and techniques have been designed and proposed, taking a great deal of inspiration from "Japanes Cost Management approaches".

The increasing complexity of cost management can be revealed by the analysis of its methodologies and techniques and the increasing interests in processes and practices that sustain effective processes of costs reduction.

For in depth analysis of these different techniques, see the Activity Based Costing (ABC) that supports decisions making on products analyzing the product life cycle according to Activity Based Management and Activity Based Management Accounting [Turney, 1991 Brimson, 1991]; the Life Cycle Costing and the Target Costing [Berliner e Brimson, 1988; Susman, 1989] that aim to enhance value and reduce costs of products throughout the product life-cycle and highlight opportunities for cost reduction [Susman, 1989]; the Target Costing in which a target price and a target profit should be achieved by products and their

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<sup>&</sup>lt;sup>1</sup> The Authors refer to the Law of Requisite Variety of William Ross Asby that states that the higher the complexity of a systems, the higher the number of information sources are needed in order to support decision making.

components [Sakurai, 1989; Cooper, 2002]; the Total Cost of Ownership that takes in consideration the overall costs of the supply chain, analyses processes within the firm and also the relationships among supplier and customers in terms of control and management costs [Ellram, 1995].

At the same time, various tools –such as Value Engineering, Variety Reduction Program, Cost Table, Quality Function Deployment, Design For Manufacturing and Assembly [Monden and Sakurai, 1989; Akao, 1989; Yoshikawa and Innes, Mitchell,1989; Yoshikawa, Innes and Mitchell, 1990; Koudate and Suzue, 1990; Gerthardt, Hutchinson and Mistry, 1991]– have been used to define the most acceptable combination of components which sustain a cost reduction [Cooper and Slagmulder, 2002; Cooper and Slagmulder, 2002b; Monden and Sakurai, 1989]. All the combinations of products, semi-processed products and services, should satisfy the functional requirements explicitly or implicitly needed by the firm and its departments, even if the combinations of various components could change products functionalities.

Finally a lot of studies and works have been devoted to the creation of some organizational norms such as the active participation of purchasing officers and vendors, the participation of members who work in different organizational divisions (marketing, production, administration), the creation of multidisciplinary teams, etc. In some studies it has emerged that the continuous interaction between experts of different functions and disciplines helps to generate innovative solutions; the vertical interactive control between top management and middle management supplements the top management's monitoring activities and helps to formulate their strategy; the continuous interplay of multiple "local technologies", and the interactions at the boundaries between different units are critical factors for innovation and for creation of new knowledge [Brown & Duguid, 1991]; the encounter of different perspectives sustains innovation [Boland and Tenkasi, 1995], etc. However, to achieve good and innovative results, it is not sufficient to organize multidisciplinary meetings and interfunctionality teams since knowledge, values and trust are not shared. Besides, if aims, beliefs and values are commonly shared and trustfully accepted, it will be easier to drive team effort, horizontal and vertical interaction, cross-functional activities, and inter-organizational cost management/supply chain activities [Kato, 1998].

#### 1.1. Cost management complexity and outsourcing processes

In these last decades, firms increasingly focuses their attention on their core competencies outsourcing a higher percentage of the total costs of their products. One of the main explanation of this attitude derive from the fact that suppliers provide products with lower costs, higher functionality, quality, and technologies. Some of these rely upon knowledge that is proprietary to the buyer or supplier, and negotiation processes are not easy to manage [Cooper, Slagmulder and Drucker, 1999]. In this scenario cost management encompasses a broader scope than in the past, and the increasing trends of partnership participation, outsourcing processes, de-localization of productions, etc. constrain organizations to accurately manage the total costs of their products even if an increasing amount of items do not rely upon their core competencies. In particular the outsource's cost reduction process is developed in a relational context (a constructive approach) that do not fall into the simple dichotomy (and determinism) of markets an hierarchy [Williamson, 1975]. Instead these relationships represent intermediate or hybrid forms of governance that enable firms to access the knowledge of their trading partners in more efficient ways, and act on it. These hybrid relational contexts are characterized by incomplete contracting as it is either impossible or unreasonable to develop standard agreements that completely specify all of the probable interactions outcomes [Cooper and Slagmulder, 2002, 2002b]. This causes a more complex system of cost management which should take into account knowledge that is buyer's or supplier's property such as technologies, functionalities, and qualities of products, semi-processed products, and services. Despite the increased interest in interdependencies and information flows that transcend organizational boundaries and their potential implication for management accounting, the topic has largely been ignored in the accounting research literature [Cooper and Slagmulder, 2002, 2002b].

In addition, the increasing complexity in purchasing procedures, network dependencies, and cost management methods, pushes organizations to cooperate with external consultants, experts in reduction and management costs, with the aim of reducing costs of non core products and services. These outsourcing processes could introduce the problem of information asymmetry between the purchasing officers and the consultants, that could obstruct in discovering an effective cost reduction solution. Therefore as in the outsourcing

processes, cooperative relationships are required, and more good results are obtained as more intensive communications and information sharing processes allow appropriate levels of learning and trust.

#### 1.2. Target costing as an outsourcing techniques

A widely diffuse cost management method used by consultant firms is the Target Costing (TC). Using the TC method consultants aim at designing products that satisfy both consumers (with specific product functionality and quality) and achieve the target cost resulting from the combination of costs of semi-processed products, components, and services [Ellram, 2002; Sakurai, 1989; Cooper, 2002]. The TC process is a system of profit planning and cost management that is price led, customer focused, design centred and cross functional. It can start at the earliest stage of product development and can be applied throughout the product life cycle by actively referring to the whole value chain [Brinker, 1995]. The two main relevant phases of TC consist in the consumer orientation realised on the basis of the market [Cooper, Slagmulder and Drucker, 1999], and in the development of new product, in which its life cycle and the value chain are analyzed in cross-functional teams. In order to achieve this cost reduction, different techniques are deployed throughout the firm (for in a depth analysis see [Monden e Hamada, 1991; Cooper, Slagmulder and Drucker, 1999; Cooper and Slagmulder, 2002, 2002b]), and members of a cross functional team have to work together in order to design products that at the same time satisfy consumers and achieve the target cost resulting from the combination of semi-processed products, components, and services [Sakurai, 1989; Cooper, 2002]. In other words:

"[...] target costing is not a cost quantification technique, but rather a complete cost reduction program, starting even before the first drawings of the product have been prepared. It is an approach aimed at reducing the cost of new products throughout their lifecycle, while meeting consumer requirements in terms of quality and reliability among others, examining all conceivable ideas relating to cost reduction at the planning, development and prototyping stage. Target costing is not a simple cost reduction technique, but a complete, strategic profit management system" [Kato, 1993].

In this practice knowledge about strategies, products, functionalities, should be trustfully shared, in a multidisciplinary and cross functional team. Even if the team members work using various tools (such as Value Engineering, Variety Reduction Program, cost table, Quality Function Deployment, Design For Manufacturing and Assembly [Monden and Sakurai, 1989; Akao, 1989; Yoshikawa and Innes, Mitchell, 1989; Yoshikawa, Innes and Mitchell, 1990; Koudate and Suzue, 1990; Gerthardt, Hutchinson and Mistry, 1991]) people need to share perspectives, create a common agreement and an understanding of promising combination of products, sustaining innovation. These significant issues are even more important if the cost management processes are in outsourcing. In this case outsource and outsourcers should share knowledge and strategic vision on products and services functionalities and characteristics. Therefore a new knowledge based approach aiming at analyzing these processes should be introduced.

## 2. The constructivism approach and the sensemaking process

According to the constructivism approach (for in depth analysis see [Berger and Luckmann, 1966; Weick, 1979]) members of a group give precise meanings to their activities and roles. These meanings are strongly influenced by (and at the same time manipulate) their actions and environment. In this scenario the sensemaking process is defined as an interpretive action in which people assign meanings to ongoing occurrences [Weick, 1995] through three elements:

- a framework: the system of mental constructions that individuals use interpreting objects or reality. In a collective sense, is the systems of values, routines, stories that are embedded in the organizational culture;
- an issue: an object that only if connected with the framework has a meaning;
- a cognitive shock: a gradual or radical interruption of the continuous flow of issues interpretations. This interruption is caused by a significant deviation between expectations an interpreted issues. Namely individuals or groups recognize issues and experiences but are not able to interpret them in a sound way as long as framework changes take place.

According to Weick to make sense means to create order and understanding among experiences by applying mental frameworks. The process of connecting a framework to an

issue, which has been introduced into the mind or into an organizational environment, is the very core of making sense. Besides routines and well established practices correspond to a specific framework, and only a cognitive shock allows to change them.

In the paper this theory has been applied to TC, and consultant practices have been studied according to the sensemaking processes. In particular during meetings and focus groups participants (experts and consultants) are stimulated to perceive the real situation within the firm (combination of products, strategies, contracts and service level agreements (SLA), etc.), confirm their framework or make new meanings (understand and change the framework), help members in changing their perceptions, unveil problems in product combinations and SLA, etc. In this context, and in particular in processes of cost management outsourcing, different frameworks (the one of consultants and the other of purchasing officers) meet. This generates cognitive shocks which are explored and adapted to new interpretations, thus frameworks change and innovation is sustained [Kezar and Eckel, 2002].

In the next paragraph two paradigmatic cases are described, the first one concerns an intervention of cost reduction in a food industry and the second refers to an automobile firm. In both a cognitive shock occurs, new frameworks are defined and innovative solutions take place.

#### 3. The case study

Creactive Consulting S.p.A. is an Italian consulting company in cost management for medium and large companies. Established in the 2000, now Creactive Consulting S.p.A. is specialised in offering cost management services such as: expense reduction projects for a specific cost area (e.g. logistics), projects for one specific expense category (e.g. express delivery) or special jobs for critical areas. The firm carried out many projects of costs reduction for over 100 different clients, both public organizations and private companies which belong to Italian and international firms. Flexibility and concrete approach together with a steady activity to develop new solutions have allowed the company to work in any area and on any category of cost: from the easier general expenses to the more complex dynamics of core business costs. The success of Creactive Consulting S.p.A. is sustained by

its system of reward (based on success fees on achieved savings), the active participation in multidivisional teams, and the ability of consultant to understand the corporate cost structure of clients (spending data models, demand analysis, strategy compliance, etc.), the capacity to find feasible deviations in the cost structure of products and services, and the ability to propose and then test innovative solutions.

#### 3.1. The case of food industry

In this first case it is described how Creactive Consulting S.p.A. operated in one of the biggest Italian food industry. This industry is the result of several operations of acquisition and fusion that have generated a proliferation of purchase offices, each one has different culture, policies, and routines. Consultants had to collect and analyze data from all the various purchasing divisions, finding solutions for cost reduction in no core products area such as packing, office materials, tools, etc. As explained above, the major cost reduction chances can be obtained only for products that present the better saving opportunities and one of these is the packing area, especially the poultry pack boxes. The first step was aiming at understanding a common framework through first analysis of packing usually bought within the firm. After this first step consultants unveiled that:

- all packs are very expensive, because they are specially made for food conservation, but their primary use is not always for food, often they are used as secondary packaging;
- 2. all packs have the same dimensions that don't always fit with the product characteristics (height, length, width);
- 3. packs have some problems: they aren't always filled up and are difficult to handle because of the fragility of packing structures and the very shoddy material composition.

The purchasing officers have never realized these problems, and continued to buy packs in the traditional way. Workers believed that these products have for long time satisfied their needs and buying the same products was a traditional practice that never changed in the past. Thus why do they need to change it now? When consultants explained them the real situation, they started to think that their knowledge on packs was not complete, but they still didn't legitimate new solutions. This caused the first step of cognitive shock that changed the organizational frameworks, made acceptable an improvement in purchasing

procedures and products, and legitimated consultants to find new ideas and solutions. Considering the system of organizational requirement, packing houses, and the market, consultant detected various solutions composed by a series of products, contracts with vendors and service level agreements. One of the more innovative solutions has been the adoption of a plastic boxes rent system, which promised excellent percentage of cost reduction for the food industry. Managers preferred to maintain the status quo, because this solution required some changes in the logistic system, and they were not ready to afford that. Other solutions have been analyzed and tested by the interfunctional team composed by Creactive consultants and organization officers, but in this particular case no kind of packing satisfied the users' requirements and frameworks. Thus through the active collaboration with vendors, practitioners and purchasing officers new kind of packing has been studied, then introduced, and finally adopted in the firm. This is made of a more resistant and less expensive material and also with different architectural characteristics that allow easier filling and transporting and are available in various measures suitable with standard pallets sizes. In any case organizational purchasing officers and practitioners didn't adopt new products since their framework didn't change, and trust among consultants, vendors and them has been shared. It happened in one special meeting, in which the CEO wanted to test the resistance of the packs. He is a very big man, and jumped on the packs that traditionally are bought by the firm. The packs broken. Then he jumped on the new packs, and they didn't brake. After that event, the CEO convinced all the purchasing officers and practitioners to buy the new packs.

## 3.2. The case study of a automobile firm

As the previous case, the cost reduction of this case study is concerning packing solutions for headlights and taillights. These are very fragile and require very expensive and high quality packing and secondary packaging. Creactive Consultant S.p.A. has been asked to find on the market or to study ex-novo a new type of packing that guarantees high protection at lower costs. From a market analysis Creactive discovered that a reasonable number of suppliers already produce suitable packing systems. The problem was to compare these systems because vendors didn't provide information on functionalities and requirements that allow products evaluation, and added every time additional special costs. Therefore consultants of Creactive Consulting S.p.A. decided to create an interdisciplinary

and interfunctional team, composed by purchasing officers, shipping agents, producers, and vendors. Through continuous trustful interactions, the team found innovative solutions and a new taillight packing system has been proposed. This presented the same, or even better, characteristics of protection, with a production process that is less complex and expensive then the other packing systems proposed by traditional suppliers. This new packing has been introduced only after very hard suitability tests which have been carried on in order to obtain a design patent. After that the commission gave the patent, and provided an objective and trustable judgment of the product, officers convinced themselves that these new taillight packing are the best solution, and now they use these within the automobile firm.

## 4. Some consideration about sensemaking in reduction cost processes

The two examples depicted in the paragraph above can be analyzed through different traditional perspectives. The cases can be studied according the cost methodologies that have been used, in particular the TC methodology in which functional and non functional requirements are defined at priori, and a target cost should be achieved through various combination of components, services and semi-processed products. Another kind of analysis can focus on tools and instruments (such as Value Engineering, Variety Reduction Programs, etc.) that have been used to design innovative products. Finally a more organizational analysis can study the relevance of having multifunctional and multidivisional teams. Although these analysis explain a lot of important aspects of cost management processes, no one can explain why and how people share perspectives, create a common agreement on promising combination of products, adopt one solution instead of others sustaining innovation. As a result a knowledge based analysis is needed and aimed at understanding how people trustfully participate, share strategic knowledge, achieve a common goal, and adopt an effective solution, in particular in outsourcing processes of cost management.

Looking at the cases of food and automobile industries, the active participation of consultants in the daily activities and the revenues based on success fee, facilitate the creation of a relaxing and informal environment in which people feel free to share knowledge and help consultants to make understandable the outsource's framework

(mainly understood through the analysis of practices and needs). The scientific analysis of the sets of products, components, and services purchased by the firm, allows consultants to unveil some asymmetries between the firm needs and the functionalities of purchased services and products. This asymmetry can be used as a real information instrument that generates some inclinations for accept cognitive shocks and pushes people to think about what they really need and want, and how they can achieve these goals. Particularly, in the case of food industry, people didn't recognize that the packs were never full loaded and difficult to handle even though consultants provided a cognitive shock. The cognitive shock can be caused by the unveiling of non interpretable information or some lacks in the framework interpretation, that make people uncomfortable with their system of meanings. These status of feeling push people to think about their practices, giving often new meaning to some of the activities they automatically carry out. But only a very strong event allows changes in the framework, and encourages the acceptance of innovative solutions. In the cases above it happened in the first case when the CEO jumped on new types of packs and didn't brake them; in the second case when the commission proved the quality of taillight packing.

In the particular case of Creactive Consulting S.p.A., these cognitive shocks occur because of the consultant's ability of being legitimated to look for new solutions, that would be discussed and tested by the outsource. But not all the hypothesized solutions are automatically adopted in the firms. In the case of food industry, the less expensive and more innovative solution has not been adopted, but instead, a less convenient solution was chosen by the organization. This could be explained through sensemaking theories. The most innovative solution correspond to an issue that is not compatible with the decision maker's framework. In other words the solution was too innovative, required to many changes not only in the procedure and practices but in particular in the manager framework. It could be that the decision maker wasn't able to understand the great potentiality of this solution, or wasn't ready to radically change her/his system of meanings. Concluding we can say that even if consultants provide some alternatives, the adopted solution will be the one that is at the same time innovative and compatible with the decision makers' frameworks. In the case of the automobile company the shared framework between consultants and outsource was clear from the beginning. The principal purpose was to find out an innovative product, that satisfied users, and had lower costs. Therefore a multidisciplinary team has been settled up, with the aim at creating innovative solutions. When the new taillight packing system has been proposed, puzzlements was diffuse among members of the team. The new solution didn't fit immediately with the members' frameworks, and a cognitive shock was needed. The qualitative tests on the product represented the cognitive shock, in fact after that, members literally changed their mind, and started to require the new taillight packing within the firm.

#### 5. Conclusion

In this paper the processes of TC in outsourcing has been analyzed according to the sensemaking approach. Sensemaking is the reciprocal process where people seek information, assign it meanings, act [Weick, 1995], and collectively give sense to uncertain and ambiguous organizational situations [Weick and Roberts, 1993]. These sensemaking processes would be analyzed in particular in outsourcing processes where different perspectives are encountered, [Boland and Tenkasi, 1995] and information asymmetries persist. Even if in further works, other cases should be analyzed and stronger theories would be defined, in this paper we want to highlight some main characteristics, that according to the sensemaking approach could be used as guidelines for effective processes of cost management. These characteristics are:

- creation of a collaborative partnership. Outsource and outsourcers should become accomplices that share knowledge and strategies in a cooperative way;
- establishment of a collaborative environment in which members from both the cost management consultant and outsource feel free and trustful to share knowledge;
- agreement on a common initial situation in which some profitable solutions can be developed. For instance the eggs packing in Italy doesn't provide any reasonable advantage, because the material is the less expensive in the market, and a huge number of organizations provide the same quality and reasonable service level of service agreements;
- new solutions emerge from a cognitive shock and should create new meanings for problems and strategies, new roles of suppliers, etc. The

- cognitive shock stresses members of the interfunctional and interdivisional group to search for new solutions;
- it is not obvious that the adopted solution is the more innovative and less expensive. Even if innovative and suitable solutions are proposed, other less convenient might be implemented within the firm, only because these last ones are much more coherent and consistent with the decision makers' frameworks.

Our conclusions support the idea that without having considered the TC techniques in a "cognitive framework" the real breakthrough of the so-called innovative cost management approaches cannot be completely understood. TC does not imply necessarily innovative cost measurement techniques (like, for instance Activity-Based Costing or Transaction-Based Cost Accounting), even though more sophisticated transaction-based cost measurement reinforce the capability of understanding cost implications of product design and are, therefore, desiderable. Neither TC implies an innovative decision time sequence, because setting in advance cost target has been a practice widely used in several industries for long time, much before TC made its appearance. In this respect, Dante Giacosa, chief designer at FIAT, the Italian car maker, from the 30's to the 70's, recalls [1979] how the cost target for the new 500 Topolino was set by the Senator Agnelli, President and CEO of the company, in 1936. Consistently with a TC-like approach, at the early stage of the design stage of the car, some of the main functional characteristics of the new planned car (speed, internal space, baggage capability, gas mileage, and son on) were specified along with the target manufacturing cost. However, it emerges from the story, that the cost target was not met and the final price of the car in the market happened to be almost twice as much than planned. Cleary, this story suggests that setting the target cost along with functional characteristics at the early stage of the design process does not explain per se the potential innovation of target costing in cost management. Only by taking a cognitive approach at the interpretation of the decision making process, by understanding the importance of the different steps of the organizational process and the crucial role of both information and "players" within a "sensemaking framework", the innovation of TC, along with other "non-American" cost management techniques, can be understood and explained. Even though we do not embrace the very ambitious aim of shedding light on the real meaning of some of the then popular cost management techniques of the 90's, this paper want to suggest a partially new approach in considering cost management and accounting techniques:

including explicitly in the analysis the potentials and the limitations of "real life" decision making and therefore avoiding the overlook of many of the pitfalls of the theoretical "absolute rational behavior" in which perfect information leads to perfect decisions. Accepting the "human beings cognitive limitations" as matter of facts and not as a "pathology", or in other words, accepting the theoretical framework of bounded rationality, might not only help to understand the success (or the failure) of many cost management approaches, but also might help in designing new approaches with a better understanding of the consequences they have on actual decision making processes.

In future works, other business cases should be studied according to the sensemaking approach, and characteristics will be in deeply analyzed and selected. These would constitute some building blocks for normative rules that pretend to sustain effective strategies of cost reduction.

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