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The impact of ABC costing systems to solve managerial cost problems: a real improvement, a fad or a fashion?

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ABSTRACT

One of the main problems of management profession is that there is not yet a corpus of theories and knowledge that can assist professionals to take adequate choices for solving the problems they actually have. Initially, we can assume that the inherent reasons for the explosion and diffusion of ABC are that these systems improve the efficiency of the selected strategy. However, a significant number of failures reveal a situation that can be attributed to other potential reasons, for instance a bad implementation. The existence of this paradox, lead us to investigate alternatives reasons for the diffusion of ABC. We show that there are alternative reasons for the diffusion of ABC, which may be a "fad logic" rather than a "problem solving logic" that we think should dominate management. We also argue that ABC systems are not introducing a revolutionary improvement in terms of the conceptualization of costs, as ABC is simply a way of using a full cost approach with a different conception of a cost center. Then, it can be useful mainly in cases where the decisions to be made can be better made using a full cost instead of other cost measures.

1. Introduction

The logic behind globalization has been the first reason to justify that management accounting practices have converged into a common set, shared by most organizations (Shields 1998). Globalization implies a new scenario in which the economic activity is redistributed and concentrated, therefore, to sustain competitive advantage companies would need to reduce transportation costs, improve telecommunications and use intensively information technologies; hence, management accounting is also affected by this process of convergence in which local frontiers disappear and practices associated are homogenized (Shields 1998).

Grandlund and Lukka (1998) state that "the world of management accounting practices seems to have become small and getting smaller [...]. Even though there certainly still are notable differences in management accounting practices at the micro level from one country to another, due to, for instance, cultural factors or government regulation, there is reason to believe that convergence plays more and more of a role today" (Granlund and Lukka 1998, p 155). In their research, Granlund and Lukka observe that seemingly similar managerial ideas or system designs (and it is the case of activity-based costing (ABC) or balanced scorecard (BSC)), have gained an increasing foothold all over the industrialized and post industrialized world. They argue that convergence drivers have started to dominate those of divergence, and identify four convergence drivers (labeled pressures in their study): economic and institutional pressures (e.g. global fluctuations, increased competition or advances information technology), coercive pressures (e.g. transnational legislation or headquarters influence), normative pressures (e.g. management accountants' professionalization or research and teaching), and mimetic processes (e.g. from the imitation of leading companies practices and the international or global consultancy industry) (Granlund and Lukka 1998). For our purpose here, the most interesting driver is the mimetic process. The authors consider that when companies face uncertainty tend to copy management models or practices from the most successful companies, identified as those with a good reputation. Therefore, followers copy these practices in order to get as much legitimacy as possible for their own companies' operations. As Granlund and Lukka mention, ABC costing systems, could have gained the reputation of being a strategic resource, and therefore possibly being a subject of mimetic processes.

Apart from the more neutral concept of mimetic process that we have already presented in the previous paragraph, a mimetic process can be considered a less positive process, in those cases of management practices that have been introduced as fads or fashions, which have not always been tied to improvements of effectiveness. Other authors are stronger in claiming that current empirical research in Managerial Accounting has added few findings or real contributions to the actual body of knowledge (Ittner and Larcker 2001, Luft and Shields 2002, Zimmerman 2001). Looking at the case of implementing ABC systems, Malmi (1999) finds that, once the diffusion of an innovative model starts, the mimetic processes amongst the rest of the organizations are crucial to make possible the diffusion process to continue over time.

From a broader perspective, Porter (1979) also questions the danger of adopting new management accounting systems without the appropriate strategic reasons behind, which would make them mere operating systems. And following Porter, this lack of strategic reasons to underpin new management accounting system's implementation is considered to be one of the main causes to explain why many ABC's implementation process have failed.

In organizations, the adoption of potential improvements in management control is done in business through several approaches. The rational approach in problem solving entails the existence of a problem that it is firstly perceived; then, some potential courses of action to solve this perceived problem; after this a potential solution, and finally how this solution is presented to the management audience to convince them about the benefits of adopting it.

Consultants and management professors have been seen as the guarantors of this rational approach in problem solving, and have influenced managers to adopt their own solutions. Looking at the consultancy industry we can observe that it has been the proponent of many innovations and we can easily think of examples of some of these innovations that have solved real problems, while others have created additional problems while not really solving anything real (i.e. balanced scorecards for instance have been proposed as "the tool" to match strategy with decision making processes, through a myriad of measures of indicators, achieving a great complex system, more focused in these indicators than in the strategy itself, creating other consequences in the meanwhile (see, for example the dysfunctional consequences of some of these systems in Cugueró-Escofet and Rosanas 2013)).

The objective of this paper is to investigate the Activity Based Cost systems (ABC from now), and how these systems have evolved towards a useful tool or not in terms of helping companies managing costs. In doing so, we think it is important to understand the nature

of potential costs problems and organize them depending on the tools that exist to assist managers dealing with them. We organize those in a framework that match possible cost problems with tentative solutions that could be of potential help to tackle them. We also question ABC costing system, as a universal cost accounting tool, and we arrive to the conclusion that solving a problem that implies investing a lot in companies' new systems, need to be approached in a more rational way. Not approaching the solution in this rational way, would put managers in a situation that does not allow them to understand the real problem, and therefore implementing the "fashion" solution (which is usually quite expensive). At the end, this possibly means not achieving a proper management approach to the problem at hand. Or even worse, it may create new problems that were not there in the beginning: i.e. in case of the ABC costing system, when there could be a need of separating costs between fixed and variable, and not doing so, while being obsessed on the full costs calculations, that might not be the important issue to be addressed.

We are going to proceed first by overviewing briefly the diffusion of ABC systems and who have been their promoters. Second, we examine the nature of the main cost problems, and we show which have been the main approaches to solve them, including here ABC as one of the possibilities. We also show how the introduction of new solutions could be a 'fashion', a 'fade' or the result of a more rational choice. Finally, we are going to show how the abuse of the ABC toolkit can create more problems than the ones solved, and we extend this reasoning to future new solutions. We conclude about the role of management schools, and we encourage them to be critic enough when facing the pressures of incorporating new magic answers. And, following this, we show what must be under our view, the appropriate role of management professors as the ones that assist managers to improve their evaluative knowledge in deciding over the adequacy of these alternatives, so helping the managers they teach to improve their rational process of decision making. Even Kaplan, the original proponent of ABC, considers that so often a forgotten aspect in the discussion is the role of evaluating solutions. Following this, Kaplan asks the following question: "How students would evaluate if a new management conceptual proposal, as is the Activity-based costing, or the balanced scorecard, is a good idea to create value into the organizations?" And after asking the question he assumes that he does not have a completely satisfactory answer for that (Kaplan 1998). We are therefore trying to show precisely this, that it is important to consider a critical approach to expensive new tools that are introduced in management practice.

2. Diffusion of the ABC

Initially, we can assume that the inherent reasons for the explosion and diffusion of ABC are those that justify the existence of the ABC system, that is, that ABC increases the efficiency of the selected strategy. According to these criteria, the argument that would have convinced academicians, publishers and companies to introduce the content of the system is that the expectations of benefits would, in all cases, be higher than the implementation costs of ABC.

However, since the start of its expansion, the percentage of failures attributed to the implementation of the system has been significant. Numerous cases have been analyzed and published that reveal a situation in which, despite of the generally recognized soundness of the model, the levels of success associated with its implementation have not been in agreement with the model itself. The impact of this apparent paradox on the future viability of the ABC system leads us first to reconsider, at this point, the patterns of diffusion that can help us to determine the source of the failures.

In the initial stages, ABC could be seen as an appropriate tool, because it helped to promote in companies the process of pairing the strategy with the specific set of activities necessary to fulfil the strategy and measure the costs associated to it. Managers could consider this very appealing and it could perfectly make ABC system to look as "the" tool that would solve this problem of measuring what is adequate for the company by at the same time providing the relevant indicators to monitor performance. Academicians and consultants have given support from the beginning to ABC systems, some examples of which is the myriad of seminars offered in the most influencing business schools, lots of papers in specialized journals explaining ABC, some papers in more professional journals, and also case studies that guide the solution towards this type of cost systems. At the same time, some of these journals pointed out the ABC paradox: if academicians and professionals consider its benefits are high, then, why are there not more successful case stories of implementation available? Is it a matter of company training? Is it a lack of strategy planning? Some of these questions were asked to reflect about ABC.

But, the fact that something is a "fashion" does not entail being useful, as we will try to prove in the following lines (defining useful as the effectiveness in solving the problems that managers had when deciding to implement that specific solution). Fads in management exist and have been extensively documented (Abrahamson 1996, Brickley et al. 1997). The most important issue about them is that management fads have lots of implication for managers themselves, for the science of management and for the

organization as a whole. We attempt to show here that ABC is a useful tool but not "the" tool that all companies need for solving all the problems presented in the cost accounting literature. For some problems ABC proposes no solution, and for others the solution is too expensive and, therefore, inefficient. We show that the diffusion of this technique has followed more a logic of fad evolution than the logic of "problem solving" that should dominate managers and management thought. But we go one step further in indicating that this tool does not introduce a revolutionary improvement in terms of the conceptualization of costs that already existed in managerial accounting, which is even worse. ABC is a way of using a full cost approach with a different conception of a cost center, and, thus, it may be useful only in cases where the decisions to take are approached better by using a full cost instead of other cost measures.

When a fad is diffused, it gains consolidation, which means importance, and this process occurs rather quickly. And from the beginning, it is very difficult to understand the reasons behind this explosion that justify its existence. Is it that a company thinks that ABC is the appropriate tool to match activities with strategy? If this were the reason for most of the companies, then, it would follow that efficiency is behind the explosion of ABC. Alternatively, is it that the company has followed the advice of an assumed expert that is saying to everyone that they should implement an ABC system? Or is it a case of a company considering implementing an ABC system because, as in a contagious process, other partners or rival companies are doing so? In this case, the logic that is behind of the decisions is more a logic of fashion. This is not that easy, because, in principle companies are being convinced with argumentation that the technique is appropriate for them or not; so, in general, the fad logic in management is not equivalent to the spread we can see in the domain of aesthetic fashion. In management, there is some need of criteria that imply some argumentation to really serve as a convincing device for the community of managers, so it seems necessary to find some process of rationalization that illustrates that the benefits it brings are greater than the costs of implementation.

Moreover, a decision like implementing or not an ABC system is also considered an important one, as it has long term effects, so we need to decide today on a matter without fully possibly evaluating its adequacy and future performance. And, moreover, in terms of personal expectation, we cannot arrive to the conclusion today that we are going to be completely satisfied with the potential future performance that would entail implementing that solution.

In fact, since the ABC has started to be implemented, the percentage of failures has been significant. Typically, this has been attributed to its implementation (Anderson and Young 1999, Malmi 1999, Mc Gowan and Klammer 1997). In general, cases documented attributed this failure mainly to the implementation part, and they leave apart considerations of whether the model is sound from the start or it has to be challenged. This is also remarkable as in management the model and the implementation need to be paired at some point, as in general implementation costs money, and some companies decide plainly not to implement a solution (even if they found it is sound) just because it is costly and make no sense in terms of a simple cost benefit analysis.

Abrahamson (1991) discusses in a seminal paper the variables that are crucial in the diffusion and rejection of innovations in management systems. Following Abrahamson's paper, Malmi (1999) wrote another paper analyzing the elements that influenced the expansion of the ABC systems by looking at the process of diffusion. In that analysis, it seemed that the reasons behind choosing an ABC would be efficiency, fashion and fad. We are going to explain them further later on.

Abrahamson (1991) considers that in general the position that a model holds in processes of diffusing innovation is generally due to the selection of the most effective option, but in organizations, the context is clearly different. For the process of Abrahamson to be possible, two conditions have to be met; that "organizations choose freely and independently" and that "organizations are clear about their objectives and about which management systems would lead to these objectives". Unfortunately, these two conditions are seldom met in real-world management. Under bounded rationality (Simon 1991), pressures are of a different kind, and managers face these pressures in their decision making processes. There are also several studies that have analyzed other forces that affect managers and therefore, the diffusion processes (Abrahamson 1991, Ax and Bjørnenak 2005, Granlund 2001, Malmi 1999). In addition to them there are also pressures coming from economic and social agents who also impact the dissemination of management systems (Lapsley and Wright 2004, Soin et al. 2002).

The fact that many agents can potentially influence the decisions combined with the fact that organizations may not have clear objectives, makes the level of uncertainty of the decisions increase. Then it seems plausible that the criteria adopted to select the ABC can be for reasons other than purely an efficient choice. This is problematic, and managers need to be aware of it, otherwise they would enter in deciding things just for the pressure of some problem that is overwhelming, or because competitors or other important agents

do that, and they must feel as lagging than leading management progress in their own business (Abrahamson 1996). It is important then to look into the cost problems and which are the available potential solutions to solve them, and further into the adoption of new solutions following other logics than that of the rational choice (that can be considered as fads in the end).

We are going to revise cost problems and possible approaches to solve them next, by at the same time, trying to understand the propositions ABC is making and how can realistically help managers in solving some of the cost problems presented.

3. Cost problems and potential approaches to solve them

A way to evaluate which is the level of contribution of ABC in relation to other cost management tools, is to explore the measures that are taken to determine if an implementation has been successful or not. According to previous literature, a summary of measures for the ABC success is presented in Table 1, in which we show the measures, empirical evidence of a possible causality mechanism, and the empirical papers that contain evidences.

Measure	Causation	Authors	
Type of use of ABC	The more general is the use	Innes & Mitchel (1995,	
information for decision-	of the ABC the more	2000)	
making	successful is the ABC	Swenson (1995)	
	implementation	Foster & Swenson (1997)	
		Krumwiede (1998)	
		Anderson and Young	
		(1999)	
Relevance of the actions	The more relevant are the	Innes & Mitchel (1995,	
taken with the ABC	actions taken the more	2000)	
information	successful is the ABC Foster & Swenson (1997)		
	implementation	Malmi (1997)	
		Anderson and Young	
		(1999)	

Economic and financial	The better are the company Shields (1995)		
improvements after the	benefits in terms of income	Foster & Swenson (1997)	
ABC implementation	increases or cost reductions,	Krumwiede (1998)	
	the more successful is the	Kennedy & Affleck-Graves	
	ABC implementation	(2001)	
		Ittner, Lanen & Larcker	
		(2002)	
Performance perception	The better the performance	nance Shields (1995)	
after the ABC	perception, the more	Swenson (1995)	
implementation	successful is the ABC	Foster & Swenson (1997)	
	implementation	Krumwiede (1998)	
		Mc Gowan & Klammer	
		(1997)	
		Ittner, Lanen & Larcker	
		(2002)	

Adapted from Fitó, A. (2006, p.108) **Table 1** Measures for ABC success

As we can appreciate, the role that cost accounting has, and therefore the specific role of the ABC systems, goes beyond managerial cost accounting and it includes influencing and facilitating the decision making processes in an organization. In this sense, most of the articles analyzed establish a link between the ABC system and the possible value generation. In general, the causality is driven by the best cost information and the best cost calculation, all of this into a strategic context. After analyzing the case studies presented in these articles, we reach the conclusion that the benefits that the literature has attributed to the new costing process (e.g. best information, cost reduction, etc) could perfectly be a consequence of the process of thinking about the cost problem itself. Thus, it could happen that an improvement in calculation and information may not be the consequence of only the ABC implementation but also, a consequence of the decision process itself, conducive to an improvement in terms of rigor, the cost accounting process, in which ABC is embedded as a possible model, but not the only one.

The objective of ABC was initially to pair product costs with strategy, which is a great goal, but the solution they offer is to change in general de allocation of overhead based on labor cost for other drivers that could be better linked to the activity of the company.

But this can be applied and is strategically sound for every company? Considering the multiple cost accounting systems that coexist today, the answer seems to be no. Brickley, Smith and Zimmerman provide an interesting example: "take the case of Hitachi [...], even though this plant is highly automated, and managers know that direct labor does not reflect the cause-and-effect relation between overhead and the overhead cost drivers, Hitachi continues to allocate overhead based on direct labor to reinforce the management commitment to further automation" (Brickley et al. 1997, p.36). So, generally speaking, the idea of not allocating indirect costs mechanically using direct labor as the criterion is an interesting contribution following Kaplan, mainly if we apply long term criteria. But this is not new, and furthermore, this does not mean having to do automatically the opposite, namely never using the direct labor, or only using the drivers that link to activity. In the Hitachi case, activity and strategy do not point at the same direction, and while following activity direct labor should not be applied but, following strategy it should.

The basic tenets of ABC are (1) to generate as many costs pools as possible, and (2) not to use direct labor as the allocation basis as it seems that in most cases it is not the cost driver for an increasing amount of overhead costs. However, as we have seen, this is problematic because of two reasons. First, implementing cost centers is expensive, and sometimes it complicates too much the system without a clear benefit of doing so; i.e. there are alternatives less costly and that measure costs with less precision, but enough for the company and the decision at hand. Second, at a more conceptual level, the question is whether multiplying cost centers permits to talk about another cost paradigm, or it is just a more sophisticated full cost system, without eliminating its weaknesses. So the question is: do the ABC system exceed these weaknesses? Does its basis solve problems as joint production, rational imputation in case of working under capacity, distinction between fixed or variable cost, etc.?

When ABC is presented in cost accounting books, most of the examples are referred to product costing and cross subsidization (see for instance, Horngren et al. 2015). The ABC contribution consists in splitting cost centers into a multiple activity cost centers, and therefore introducing multiple and different cost drivers according to how costs behave, according to which drivers. But is this a new cost paradigm, or is it just a 'better' full costing solution? In the last edition (15th) of Horngreen et al. cost accounting textbook (2015), the chapter dedicated to ABC introduces three main guidelines for redefining a costing system: tracing direct costs, pooling indirect costs, and establishing the bases for

cost-allocation. Through an example, he compares conventional costing with the ABC system, with an implicit idea that the rest of full costing systems can be seen as the case of the simplest one. An important conclusion is that the benefits of ABC systems are justified based on a better or more accurate allocation process, and the authors point out that managers must weigh the benefit of ABC against the implementation costs.

Measuring full costs is useful mainly for two purposes: 1) To help in the pricing decision, and 2) To measure ex-post performance, so to look into the portfolio to decide over products depending on the ex-post performance. For the first purpose, it is important to have a full cost, but the specific procedures to calculate it can differ, because in some industries the prices are also settled based on reasons other than the; costs are the minimum possible price in the long run, and are only an indication that the firm is not efficient enough whenever the price is lower than the full cost.

But looking carefully at the second purpose, one can ask the inevitable question: if there is a product such that show a loss with respect to full cost looking into ex-post performance, what should be done? Should it be dropped? Not in the short run and working below capacity, because the contribution margin is automatically lost. So, why is full cost needed? The answer is simply that the full cost is important as a diagnose device, because it shoes that if all the products were like the one that shows a loss, the firm would be actually losing money. But it is not that evident what to do with that specific product. It seems reasonable to look more closely to the costs involved to that product, to discover whether it is an efficiency problem. However, if after doing this, it continues to show losses, then it is better to find a substitute, and in the meanwhile, keep the product, as it contributes (even if less than desired) to face the overhead costs with its contribution margin.

A different problem is that ABC systems are not helpful at all in the presence of joint costs. This consists in situations where the production process generates joint products and/or by-products. In these processes, possibly, there is a product that can be considered as "the" main product, but you inevitably obtain some others that cannot be avoided or suppressed. These processes present the problem of how to allocate the "joint" costs incurred when producing a batch of all of them: any allocation of those joint costs (therefore excluding the specific costs of each product) is completely arbitrary. For instance, in the semi-conductor industry you cannot avoid generating semi-conductors of different characteristics in the same production batch. Then, if the joint costs are allocated, say, on a per unit basis, then the low quality ones are very likely to generate

losses based on their full cost, that are absolutely meaningless. There are in practice many situations where this happens, and ABC systems do not help at all in such situations.

The last evolution of the ABC system, "Time-driven activity based costing", is a Kaplan reaction to the general failures in many implementation processes. In his presentation he admits that "The traditional ABC model has been difficult for many organizations to implement because of the high costs incurred to interview and survey people for the initial ABC model, the use of subjective and costly-to-validate time allocations, and the difficulty of maintaining and updating the model" (Kaplan and Anderson 2004). As a solution, he proposes a new version: Time-driven ABC that requires estimates of only two parameters: (1) the unit cost of supplying capacity and (2) the time required to perform a transaction or an activity. To demonstrate again its benefits, the paper introduces, as in previous versions of ABC systems, simple numerical examples to articulate the fundamentals of time driven ABC. These examples are, of course, from companies that have successfully implemented the approach and have had significant income improvements. In the examples, he demonstrates that previous bases of ABC were too broad, and not accurate considering that if duration drivers - which estimate the time required to perform the task- are used all the cost measurement problem is solved. At the end, it seems that the arguments to promote the adoption of ABC systems are the same that its author uses to decline its use advocating now for a simpler version where after all we have changed labour hour as a cost driver by activity hour.

However, understanding the cost problems does not preclude managers to enter into fashionable solutions. For that reason, we are going to examine the fashion process next to help managers to understand it and to make them possibly avoid some of the consequences it could create. A conscious manager is the one that first has the knowledge, and then acts according to it. We think that having the knowledge of this process is a first step that would be of great help for ABC potential adopters, and for other possible solutions that may appear in the future.

4. Fad, fashion and rational approach

A fad has been defined in several ways. According to Rosanas a fad is a solution that is created following a rational logic that presumes to solve *definitely* some problems in management, and that creates a short term enthusiasm that, pretty sure will be substituted by another fad more early than late (Rosanas 1999). In some moments "some of these methods may be the solution of all the pains, the beginning of a new age and a focus that

will surely open unexpected doors towards companies' prosperity" (Rosanas 1999, p.19). This phenomenon has also been illustrated by Brickley, Smith and Zimmerman, in a paper in which they investigate the intellectual diffusion of some of these techniques that could eventually become fads, by analyzing the number of articles that contain that specific label or technique (Brickley et al. 1997). They reported also ABC even if the graph they have drawn, at the time of the article, was showing only the beginning of a decline after the maximum peak, reported for year 1995 (Brickley et al. 1997, p.25).

Fads can also be detected because they are usually presented as a real revolution, instead of simply showing them as proposals that partially build on some existing knowledge and, at the same time, argue to throw partially or totally other contributions that have not really contributed from the proponents' point of view (Hilmer and Donaldson 1996). In general "the ideas behind such calls for radical change are often labeled "modern management" or a "new paradigm" and are generally considered a vast improvement over traditional notions" (Hilmer and Donaldson 1996, p.27).

In the area of management control, Malmi, studies four perspectives that could explain the diffusion reason for the ABC systems (Malmi 1999). These are classified in Table 1, adapting the original source of Malmi. There are two logics in the adoption of some system: imitating someone or receiving and outsider influence. In the first case, when it can be potentially imitation, organizations may decide purely by imitation or for other reasons. In the case of outsider influences, these can affect organizations that may be better implementing an ABC (because it can solve some problems they have), or they are influenced by outsiders to adopting ABC. Combining the four options, there are four possible mechanisms: fad, fashion, efficient choice or forced choice.

		Perspective of imitation processes	
		Imitation processes do not impel diffusion	Imitation processes impel diffusion
Perspective of outside influence	Organizations susceptible to adopt the ABC system	Efficient-choice	Fad
	Other organizations that propagate the system	Forced-selection	Fashion

 Table 2 Mechanisms of diffusion of the ABC System

Following Malmi, efficient choice is defined as occurring in response to changes in business conditions. This meaning that the company would choose a system that is most likely to help them to reduce uncertainty, meet the objectives, amongst others. It is a choice based on some objective criteria of efficiency that the company has, and the influence of others is reduced (of course not to zero, as sometimes looking at other is a part of a rational choice) (Malmi 1999). A forced selection is somehow rational, but perhaps not efficient, as it seems that there is someone (with particular and not transparent reasons), that has the power to force the decision, even if it is not clear that the best option is to adopt a ABC system. This can be due to the type of the organizations that are forced by the laws to adopt a model that is not the result of an internal rational choice, so considering alternatives to balance (Malmi 1999).

The distinction between fashion and fad is that a fashion is weaker than a fad. In a fashion, there is a lot of external influence and plus an imitation process. It happens that in some industries some organizations simply imitate the systems that the leading companies implement, without questioning its adequacy for them in terms of efficiency. A fad is a result of implementation when the organization imitates the models adopted by other companies within the industry that have adopted the system to manage costs, and the organization is also susceptible of adopting the system for the same reason (Malmi 1999). The process of choosing ABC can differ depending on the moment the company decides to implement it. The ones that adopt the system in early stages in general follow expert recommendations, and it is plausible to think of adopting it as a result of efficient choice. But later on, as the system is already implement, when some company faces the same decision, there are additional reasons to adopt the system that differ from purely efficiency, and processes of imitation play a substantial role.

Then, there is a process of legitimacy, and as ABC system starts to become consolidated and other agents, like universities, start to intervene that can serve as reference points to help to deciding to implement it. This serves as a reason to understand a possibly quick diffusion in the end of the eighties. When Malmi studied the reasons behind to decide over implementing ABC looked into a wide range of Finnish companies from different sectors, and organized the reasons into the four types we have explained: efficiency, forced selection, fashion and fad, counting the frequency of each (Malmi 1999, see Table 2 on page 658). We find this Table interesting, but it seems a little bit confusing as the reasons classified under the label of "efficient choice" can be perfectly be considered otherwise, for at least two reasons. First, there are reasons that are not really efficient: for

instance, that competitors use ABC: Then, so what? Should we decide adopting the system just because others do it? Second, it can perfectly happen that there is a reason to do something because as Malmi has suggested, "the organization process requires another accounting system". But it could be that ABC is not solving the real problem that makes the company think they need to change. We have tried here to organize before "efficiency reasons" in terms of "solving cost problems", because this is closer to the problem, and could therefore assist better managers to see whether the solution is a fad or a real problem solving one.

We think it is important to understand first, the problems that a company faces in terms of costs linked to the strategy and the activity, but also the diffusion of fads in the past to caution managers of these fads to help them to decide under rational criteria (bounded rationality of course) which means matching reasons and solutions and decide over the appropriateness of them. We turn next to examine this.

5. How to decide if the new solution is appropriate or not

The problem with fads is that ideas that present are attractive, and managers that are in some real trouble, in some cases pretty desperate after seeing the problem persist over time, starve for the new solution to be applied in their companies. So, there is an issue of language that impacts and makes these ideas more appealing and ready to be bought, but other more substantial issues of necessity of solving real complex problems. If managers ask a simple question to themselves, like the following one: "can one idea, or even five ideas explain the past success of firms as diverse as General Electric and McDonald's?" (Hilmer and Donaldson 1996, p.31), they can easily arrive to the conclusion, as the authors suggest, that success is a result of all possible improvements these companies have made in many aspects of their business, "that together have led to its unusual success" (Hilmer and Donaldson 1996, p.31). But there is a paradox here because, we would like to avoid fads, but management science, the way it is organized is a fertile field to make fads increase. And this is due to many reasons, but the following two are pretty important; first, because "problems in management are intractable, yet the pressure (for managers) to be seen to be "doing something" is intense" (Hilmer and Donaldson 1996, p.32), and, second, this must also be incremented with a sensation of frustration because in many cases after several trials problems persist. But there is another social pressure here, as "a manager using the latest technique supported by an eminent expert [...] can hardly be criticized, while one who ignores the latest trend risks being judged oldfashioned and unprofessional" (Hilmer and Donaldson 1996, p.32). Both aspects, as we have mentioned, makes the audience of managers ready for "gurus" and the like.

There are some ways to avoid this, in terms of ABC that is using actively the problemsolving approach, so first, understanding the problem at hand, remaining professional and making your managerial team participate. Then look actively for solutions, and then, decide over the solution that may be changing the system as a whole or simply adapting the one we have. As Hilmer and Donaldson mention, they summarize this as "staying on the professional track". Based on their definitions we can summarize being professional as: 1) Strive for motives that go beyond the pure instrumental, 2) understand the need to master the different types of knowledge that is involved in a craft profession like management, 3) use sound reasoning, and therefore use practical wisdom, 4) use language in precise terms, and avoid general and non-meaningful words and 5) incorporate ethics in your decision processes (Hilmer and Donaldson 1996). We have adapted the five aspects, because for us, ethics (that is their five aspect) is involved in all the rest, meaning that the manager should: 1) Possess full knowledge, 2) Needs to use it according to the decision at hand, 3) Have adequate motives that feed the will and strength to use the knowledge for the specific situation, and decides accordingly, with in the end translating to an action, 4) Learns about experience and updates all knowledge involved, and 5) Tries to have ends that are significant for all participants, included him or her. With this in mind, we can face potential fads with more options of not accepting false trails.

6. Conclusion and managerial implications

One of the main problems of management is that there is not yet a corpus of theories and knowledge that can assist professionals to take adequate choices for solving the problems they actually have. Business schools, some management professors and consultants have tried to sell "the solution", and when managers have a problem, hearing that someone is offering "the solution" is appealing and may turn the personal biases of managers towards thinking that statement that says "the solution exists" is true. But complex problems cannot have simple and single solutions. Management science needs to evolve in a way to help promoting rational choice amongst managers, with great doses of realism. It is necessary to understand that choosing some solutions today, and ABC system is just one of them, would surely imply that this solution may be in need of update tomorrow; and it is precisely this what makes managers to have a job, otherwise, in case of having "the

solution", the next step would be firing the manager and putting instead the solution along with a very powerful machine to make it work without her.

We must fight for a "professional management, an approach that builds systematically and continuously on past achievements in the best traditions" (Hilmer and Donaldson 1996), so to critically approach each solution and think twice before implementing it, and also making your people participate in any important decision process to decide over which solution to take as a response of a problem that the company faces. And making people participate is also important when a final choice is made. It is impossible to implement a solution (even if it is appropriate) without the real involvement of all people affected in the organization.

But the reason to make people participate it is not just because they would be more willing to cope with the problems that could appear (and will surely appear), once the solution starts to be implemented. This is not a good reason to avoid the solution to become a fad. Because if people looks at managers and realize that the boss likes the fad, even if they do not agree with the boss, they would eventually choose for, even in cases people are really convinced that it is a fad. In fact, we can find companies in which a fad is adopted and where top managers claim that the system has finally worked; and they say so, because they do not see problems of fad adoption, as people in that organizations helped to overcome many of the consequences of adopting a fad, once each consequence appears. This can easily happen, because in an organization with great leadership, the adequate motivation of participants, and great identification between people and organizational objectives, it is highly probable that any technique would eventually evolve towards functioning correctly, because this people would take charge of the problems and help to overcome the defects of the system (Rosanas 1999). Then, this would happen with fads and good solutions. Then, it is important to make people participate, because they can critically help top managers to avoid fads, acting as a first filter, then you are boosting the organization fully into efficiency in problem solving rather than following the short term fashions that would surely appear. To help top managers avoiding stressing the organization with an inadequate purpose simply because it follows environmental pressures, and forgets to listen the team.

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