Obstacles, their relationships and strategy implementation failure

Abstract

Strategy implementation remains a difficult task with improbable success. This paper provides an explanation on why so many strategy implementation efforts fail. The paper addresses the following questions: What are the obstacles to a successful strategy implementation? Do these obstacles simply accumulate during implementation or do they relate to each other in more damaging ways? and Can an obstacle be the cause leading to, and reinforcing, other obstacles?

Based on an extensive review of the literature and on an in-depth case study analysis, this paper draws three main conclusions. The first is that there is little agreement regarding what the real implementation obstacles are. The second is that obstacles interact and can be strongly interrelated in dynamic and complex manners, which add further difficulties to the process of strategy implementation. The third is that obstacles can lead to and cause other obstacles, eventually forming long causality chains of blockages.

Keywords: obstacles, relationships, strategy implementation, failure, strategic plan, case study.

IMPORTANT: This article has been submitted to an international scientific journal and cannot be submitted simultaneously to any other journals. It is intended only for presentation at the conference.
1. Introduction

Strategy implementation is an important issue and a concern for researchers (Gioia and Chittipeddi, 1991; Mockler, 1995; Barney, 2001; Hickson, Miller and Wilson, 2003; Brenes, Mena and Molina, 2008). One of the major unresolved problems in the field is the great percentage of strategic plans that fail to succeed, with some authors estimating a rate of failure between 50 and 90 percent (Nutt, 1999; Kaplan and Norton, 2001, 2008; Sirkin, Keenan and Jackson, 2005). Although remarkable progress has been made in the strategic management field, this problem persists, indicating that significant challenges remain for researchers and practitioners. In particular, it is imperative to look more closely at the reasons behind failure. This paper attempts to do so by investigating the following questions: (1) What are the main obstacles to a successful strategy implementation? (2) Do these obstacles simply accumulate during implementation or do they relate to each other in more damaging ways? and (3) Can an obstacle be the cause leading to, and reinforcing, other obstacles?

Some of these questions have previously been investigated and the answers provided so far have been important contributions to management knowledge. Unfortunately, however, they have not been able to significantly lower the rate of strategy implementation failure. This is especially the case for the first question. Although researchers have addressed this question for some time, there is still little agreement on what factors most influence transformation initiatives. In particular, as the literature review will show, there is no consensus on what the most important obstacles to strategy implementation are, how many obstacles there are and how they affect the strategy process.

The second and third questions, regarding the possible occurrence of interaction or causality between obstacles, are relatively new and are our main interest in this paper. Only a minority of researchers in the field address these two questions (e.g. Beer and Eisenstat, 2000). Most researchers do not explicitly consider the possibility of relationships between obstacles. This paper discusses and presents examples of these relationships.

The study of these questions is highly relevant as it helps explain why the high rate of strategy implementation failure persists. In order to increase the understanding of the reasons why so many strategy implementation initiatives fail, and to expand the available empirical evidence supporting the answers to the questions raised previously, this paper carries out an extensive review of the literature on strategy implementation and discusses an in-depth case study analysis of a non-profit organization – a Faculty of Economics in Portugal.

In pursuit of these objectives, the remainder of this paper is organized into several sections. It starts by discussing each one of the research questions mentioned previously. This discussion culminates in the presentation of a framework to explain strategy implementation failure. The paper then addresses the research methodology adopted for the study and presents the empirical part that explains the strategy process followed by the Faculty of Economics at one of Portugal’s newer universities. Reasons for failure are described in some detail, and in the chronological order in which they occurred, to uncover the causality relationships. A discussion of the case study ensues and evidence is presented that supports the answers provided to the research questions. The paper concludes by deriving implications for the literature and practice on strategy implementation.

2. Obstacles to strategy implementation

The literature shows that there are many obstacles to a successful strategy implementation. Researchers such as Alexander (1985), Kotter (1995) and Beer and Eisenstat
provide comprehensive sets of implementation difficulties. Alexander, for instance, points to ten main implementation ‘difficulties’; Kotter emphasizes eight ‘reasons’ why transformation efforts fail; and Beer and Eisenstat explain six ‘silent killers’ of strategy implementation.

These are rather extensive sets of obstacles, but they also exhibit marked differences and important gaps in their contents. Because of these gaps, we decided to make a thorough compilation of obstacles to implementation from the studies in the literature. First, we identified major publications investigating strategy implementation obstacles. We used the EBSCO Host Research Database for that purpose as well as several search strings – including ‘implem* and obstacl*’, ‘chang* and probl*’, ‘transform* and difficult*’, ‘execut* and impedim*’, and others – which were applied to titles and keywords of the publications. Then, within the results of the search, we selected only papers from business journals included in the ISI Journal of Citation Reports, which aims to list the most influential research outlets. Table 1 shows a short description of the obstacles that have been found, the authors who have identified them, and the number of times each blockage has been documented in the literature reviewed.

In addressing the first research question, which seeks to identify the obstacles to a successful strategy implementation, this paper provides one of the most comprehensive repertoires of obstacles that can be found in the literature. Sixty-five different obstacles, grouped in fourteen distinct categories were identified as shown in Table 1. Although other obstacles may exist (Kotter, 1995), with some authors suggesting that their number may be limitless (Kotter and Schlesinger, 1979; Alexander, 1985), the obstacles identified in the table are those considered as the most important ones in the literature reviewed.

The analysis of this table allows us to draw two major conclusions. Firstly, it indicates that most of the obstacles to successful strategy implementation are organizational factors that fall under management control. This conclusion is consistent with current literature. In fact, obstacles under management control have previously been considered to be much more important for failure/success than external uncontrollable events (Nutt, 1999).

Secondly, the distribution of the crosses in the cells of the table and the frequency with which each obstacle is documented in the literature show no clear pattern or hierarchy, indicating considerable disagreement among researchers regarding what the most important obstacles are. Therefore, the answer to the above question is not as consensual as one could initially be led to think.

Thus, while a definitive answer to the question of what the most important obstacles to strategy implementation are is not possible, it is essential to understand that any of the blockages in the table can contribute to slowing down the pace of strategy execution, to introducing distortions in the process, to generating excessive costs, and ultimately to impeding a successful implementation. Therefore, knowing them is important, both for researchers and for managers interested in avoiding failure, given that effective management must identify and overcome each and every obstacle (Alexander, 1985; Harris and Ogbonna, 2002). A comprehensive list can also be helpful in identifying and understanding the relationships between obstacles. The fact that such a list was not readily available for use by researchers, might help explain why the relationships between obstacles have been
overlooked so far.

3. Relationships between obstacles

Research on implementation has turned, in recent years, to investigating the effect of internal organizational variables on strategy implementation. In particular, researchers have investigated how an organization’s characteristics affect the process and outcomes of strategy implementation. This important line of research has been followed by several authors, for instance, Hickson et al. (2003), Homburg, Krohmer and Workman (2004), Miller, Wilson and Hickson (2004), Stadler and Hinterhuber (2005), Bauer, Falshaw and Oakland (2005), Sirkkin et al. (2005), Kaplan and Norton (2006), Menguc, Auh and Shih (2007), and Brenes et al. (2008). However, there is a different perspective that might also be adopted and which has largely been neglected. This perspective is concerned with how implementation obstacles relate to each other. When this perspective is taken, it is imperative for the researcher to try to find answers to the following questions. Do implementation obstacles simply accumulate during strategy implementation or do they relate to each other in more damaging ways? If they do relate, can the relationship be characterized as a cause and effect relationship?

A couple of examples might be helpful in illustrating better what ‘accumulation’ and ‘cause and effect’ mean in this context. Hickson et al. (2003) and Miller et al. (2004) provide an example of accumulation. They conclude that both organizational readiness for change—the symmetrical of resistance to change—and managers’ experience with the implementation of similar strategic decisions can determine the probability of implementation success. The probability of success is higher when the organization has experienced leaders and is ready for change. The probability is lower if only one of these characteristics is present. Failure is almost certain when none of these characteristics are present. The accumulation of both impediments, resistance to change and lack of management experience, which are viewed as largely independent in those studies, leads to certain failure.

The case study discussed below provides, in turn, an example for causality between obstacles (Figure 1). In this case study, the occurrence of an obstacle is the cause for the occurrence of a subsequent obstacle. The fist obstacle is the selective attention of management to specific types of information which misses important information on future external events. This obstacle leads to the formation of conservative expectations about the future, another obstacle, which leaves the organization unable to anticipate those future events and unprepared to deal with them. The impact of the unanticipated events, the third obstacle in the chain, contributes to further the implementation difficulties. It is important to emphasize that the three obstacles mentioned in the example can individually impede strategy. However, as suggested by the example, they can also contribute to raise other obstacles, in a causality chain, as specified. An obstacle might function as a cause for other subsequent blockages, reinforcing their impact, as illustrated in Figure 1.

PLEASE, INSERT FIGURE 1 HERE

A review of the literature provides useful insights regarding the aforementioned questions, although little basis for determining their answers. In particular it indicates that there are at least three different ways in which researchers look at the relationships between
obstacles as shown in Table 2.

Most researchers simply ignore this possibility. Tichy and Ulrich (1984), Cameron, Whetten and Kim (1987), Johnson (1988, 1990, 1992), Nadler and Tushman (1989, 1990), Stadler and Hinterhuber (2005), Balogun (2006), Hrebiniai (2006), and Kaplan and Norton (2006, 2008), for instance, do not discuss the possibility of any kind of relationships between implementation blockages. Nevertheless, some of these researchers identify the reasons why a specific obstacle might occur in a given organizational setting. Tichy and Ulrich (1984: 353), for instance, suggest that strategic «change can be resisted because of the cognitive frame of reference held by people in a particular culture» and Balogun (2006) proposes that middle managers’ sensemaking of strategic plans can originate unanticipated counteracting change outcomes (obstacles). In these studies, the authors explain why specific impediments to change might occur in an organization, but they do not address the issue of causality between blockages.

Other researchers consider the possibility of accumulation of obstacles during implementation, but do not acknowledge relationships between them. For example, Alexander (1985), Hambrick and Cannella (1989), Kotter (1995), and Harris and Ogbonna (2002) suggest that an organization can experience several implementation problems. They briefly refer to the number of obstacles that can occur, with Alexander computing an average of obstacles per firm. Therefore, this seems to suggest simple accumulation of independent obstacles, without any relationships between them. Sirkin et al. (2005), Hickson et al. (2003) and Miller et al. (2004) explain in considerably more detail this view that independent implementation difficulties might accumulate. Sirkin et al., for example, go as far as proposing an additive mathematical formula to predict the degree of implementation difficulty.

Lastly, other researchers consider the possibility of interaction, but fail to elaborate further on this concept. Wernham (1984, 1985) and Beer and Eisenstat (2000) for example argue that obstacles interact, with Beer and Eisenstat going as far as proposing a model of the (bidirectional) interactions among six ‘silent killers’ of strategy implementation. However, what they mean by interaction is not exactly clear. Although, these authors convey the idea of feedback loops (Wernham) and vicious circles (Beer and Eisenstat) between obstacles, which are forms of unidirectional circular causality, it is not clear if and how they differentiate ‘interaction’ from ‘causality’. Therefore, there is clearly a dearth of studies explicitly addressing the topics of causality between obstacles and of chains of obstacles. Table 2 presents a comprehensive synthesis of major thoughts on this issue.

From the above discussion, we conclude that although the diversity of views synthesized in Table 2 makes it difficult to offer a consensual answer to the aforementioned research questions, regarding what types of relationships there are, the analysis of the views expressed in the literature, together with the evidence gathered from the case study we discuss below, allows us to claim that obstacles to strategy implementation may simply accumulate, interact with each other, as well as be linked in cause and effect chains. These concepts are explained further in the next sections.

The explicit acknowledgement in this paper that obstacles may form chains, and in this way prevent strategy implementation, is a major departure from most of the existing literature on strategy implementation and change management.
4. Congruence and chains of obstacles

Congruence between organizational systems has been assumed as a *sine qua non* condition for implementation success (Leavitt, Dill and Eyring, 1973; Peters, Waterman and Phillips, 1980; Hussey, 1996). Shaw, Gupta and Delery (2001) test this assumption and conclude that it is not merely a long-held theoretical premise: it is a practical reality! According to them, all systems must be aligned if success is to be achieved in the implementation of a new strategy.

In the same way that alignment is essential for success, a lack of alignment will almost certainly hinder strategy execution. In this regard, there is no dispute here that alignment between organizational systems is fundamental for strategy implementation. However, this paper suggests that as damaging for strategy implementation as a lack of congruence between organizational systems is the existence of another kind of congruence, not much spoken of: a congruence between obstacles.

The opposite of organizational alignment is not necessarily its absence, but the existence of congruence between obstacles. The former indicates that there are some favourable, reinforcing, interactions between systems. The latter implies that there are some unfavourable, detrimental interactions between blockages or cause and effect relationships. These two situations are the extremes of a continuum where no relationship or simple accumulation of independent obstacles occupy an intermediate position. No relationship between obstacles and accumulation are frequent assumptions in the literature, as indicated in Table 2. However, interaction and cause and effect relationships are probably the most destructive.

The idea of cause and effect relationships proposed in this paper emerged from the literature and became clearer when Table 1 was being compiled. As the number of items in the table grew, the causality gaps started to disappear and the idea gained substance. It was then decided to reorder the table in a logical sequence. A loose chronological sequence, closely matching the order of the stages in a strategy process, was considered satisfactory.

The reordered table then further suggested that long chains of intertwined obstacles could occur, with an obstacle providing the substratum or justification for a number of other obstacles. Obstacles can succeed in a chain with a common root, a logical explanation for the successive binding of the obstacles – as was suggested by the above example taken from the case study discussed in this paper – or an opportunistic behavior by resistants to change, who take advantage of unintended change outcomes and of unanticipated external events.

Thus, while it may be difficult to determine the exact nature of the relationships between obstacles, the answers to the second and third questions of this research suggest that obstacles do not only accumulate but also tend to be strongly interrelated in a dynamic and complex manner, adding further difficulties to the process of strategy implementation. In fact, the chains of several interrelated obstacles, which can grow in number during the process, can be one of the main causes of strategy implementation failure. Therefore, chains should be avoided or blocked right from the beginning of the strategy process. Once a chain has started the process can easily get plagued with more and more obstacles and it can become too difficult to eradicate them all.
5. A framework to explain strategy implementation failure

Figure 2, which is an adaptation from Mintzberg and Water’s (1985) original illustration of how strategy is formed, depicts a framework for explaining strategy implementation failure/success.

Organizations may have an intended strategy that was formed on the basis of a careful analysis of the situation (Johnson, Scholes and Whittington, 2008: 419). This intended strategy may become the realized strategy. Frequently, however, this intended strategy, or a part of it, is abandoned by the organization and becomes the unrealized strategy (Mintzberg and Waters, 1985; Mintzberg, 1987). There can be many reasons why all or part of the initial strategic intent is not realized. Obstacles to strategy implementation will likely play a vital role in this process. By obstacles we mean internal and external events that act to modify or impede execution of the initial strategic intention. On the one hand, obstacles may modify the original strategic intention, preventing it from being fully implemented as planned. In this case we have a realized strategy which is not necessarily the intended strategy. On the other hand, obstacles may prevent altogether the implementation of the intended strategy. In this case we have an unrealized strategy. Emergent strategies might also modify or prevent intended strategies from being implemented.

As depicted in Figure 2, these obstacles might prevent implementation in at least three different ways. (1) Obstacles can accumulate, without relating to each other (e.g. Hickson et al., 2003; Miller et al., 2004). Accumulation means the successive addition of obstacles. (2) Obstacles might interact with other obstacles (e.g. Wernham, 1984, 1985; Beer and Eisenstat, 2000). Interaction means reciprocal action, a bidirectional reciprocal relationship, perhaps even a mutually reinforcing relationship with a multiplicative effect between obstacles. (3) Obstacles can cause other obstacles and in this way form causality chains between them. Causality means that there exists a cause and effect relationship between obstacles.

In interpreting the literature reviewed and the evidence gathered from the case study presented below, we conclude that for a simple accumulation of obstacles to occur, obstacles must be independent and unrelated. For an interaction between obstacles to occur, obstacles must simultaneously coexist in time and reinforce themselves. For a causal relationship to occur, obstacles must occur in different moments in time but be related by some type of function or underlying logic.

Considering that the literature seems to explicitly embrace the former two concepts, but not the latter, we are particularly interested in exploring this concept here. To this purpose, in addition to the evidence previously discussed, we illustrate how chains of obstacles can emerge in a real world context, using case study evidence.

6. Methodology

In order to increase the understanding of the reasons why so many strategy implementation initiatives fail, and to expand the available empirical evidence supporting the
answers to the questions discussed previously, this paper discusses the development of a strategic plan and performance measurement and management system in the Faculty of Economics at the University of Algarve, one of Portugal’s newer universities. Although the processes of strategic planning and performance measurement have their roots in the world of business, the last two decades have seen their widespread application within public and non-profit organizations in an attempt to improve the efficiency and effectiveness of these organizations. The higher education sector has not escaped this trend, which some authors have branded the ‘McDonaldisation’ of higher education (Hartley, 1995; Mok, 1999).

It is nowadays widely acknowledged that higher education institutions are faced with the same challenges as business and industry including reduced availability of resources, increased levels of competition, rapid technological advancement and increasing demands from customers for accountability. These challenges have led higher education institutions to dramatically adjust their activities and profiles and look to the business community for direction and planning. With private sector business concepts and practices being increasingly imported into the university sector we have witnessed a shift from collegiality to managerialism in higher education (Deem, 2004; Deem and Brehony, 2005; Yokoyama, 2006) and a rise of the audit culture (By, Diefenbach and Klarn, 2008), or in the words of Neave (1998:7), a rise of the Evaluative State.

Central to the audit culture and managerialism in higher education are ‘economic rationalism’ and ‘private management’, with far more attention being given to strategic management and performance measurement (Pusey, 1991; Grace, 1995). Indeed, the global environmental pressures experienced by the higher education sector in the past twenty years have transformed universities into highly entrepreneurial, customer focused and revenue seeking enterprises (Ackroyd and Ackroyd, 1999), which Marginson and Considine (2000: 9) have called “enterprise universities”, and Bleiklie (1998) “knowledge enterprises”. As Parker (2002) emphasizes, along with the corporatization of universities has come the emerging phenomenon of the corporate university.

Strategic planning and performance measurement have emerged, therefore, as important means for universities to respond to a rapidly changing and uncertain environment (Smith, Drabenstott and Gibson, 1987; Watson, 1995; Barker and Smith, 1997; Rieley, 1997; Taylor and Karr, 1999). Consequently, in spite of the specific nature of higher education institutions, the case study discussed in the next section can be informed by the research findings from other sectors but also inform the literature of strategic management in business. This is, indeed, consistent with findings that the principles of effective strategic management are not limited by the type of organization as much as by the nature of the external environment they face (Miles and Snow, 1978; Miles and Cameron, 1982). Some studies even indicate that despite internal organizational differences similar types of strategies (e.g. Cameron, 1983) or ways of managing implementation (e.g. Hickson et al. 2003) have been found across fundamentally different organizations as a result of them facing similar environmental conditions. It is, therefore, reasonable to assume that the case study we carried out in a higher education institution is a valuable source of evidence to improve our understanding of how strategic plans are made and fail to get implemented not only in the higher education sector but also in other sectors. This assumption also finds support in some evidence that the most significant impeders (Alashloo, Castka and Sharp, 2005) and success factors (Leitzel, Corvey and Hilley, 2004) to strategy implementation in higher education institutions are identical to the ones found in other organizations or organizational contexts. Therefore, and as Mintzberg and Rose (2003) emphasize, while the typical university may seem very different from the typical corporate organization, its behavior may in fact contain sobering messages for the strategic management of businesses. In addition, Universities have been considered useful research sites for strategic process researchers because of characteristics such as multiplicity
of goals, diffused power base, politicized decision making processes, and others (Gioia and Chittipeddi, 1991).

Whilst we can assume that the case study can be informed and inform strategy management in other sectors, it is important to bear in mind that a case study research methodology has its own limitations of reliability and validity, and provides little basis for generalization. However, the opportunity it offers to examine, in-depth, the phenomenon under study and to deliberately cover contextual conditions represents an advantage over other methodologies in accomplishing the objectives of this research. The data supporting our conclusions were collected before, during and after the case study intervention, using a case study protocol as suggested by Yin (1994). The role of the researchers as participant observers covered different forms of engagement including: (1) interviewing key people from the organization; (2) gathering information from sources other than interviews (e.g., questionnaires, observation and documents); (3) facilitating meetings; (4) planning and designing particular interventions; (5) analyzing the information collected; and (6) reporting the results and facilitating their discussion with the organization.

A narrative strategy (Pettigrew, 1990) was adopted to construct a detailed story from the data and to prepare a chronology of events. An interpretive approach dominated the data analysis, wherein we attempted to explain results by developing an understanding of the situation and of the perceptions and reactions of those involved in the case study. It is important to emphasize, however, that at key points of the process some of the most influential participants, including the Dean, were asked to explicitly express their views regarding the process followed as well as the outcomes achieved. This process allowed us to assess the correctness of our interpretations. Whenever divergences emerged, the participants were requested to elaborate further on their views by explaining the reasons for opinions, actions, or feelings in order for us to have a more precise understanding of the situation.

Validity issues were addressed in three main ways. Firstly, by employing multiple sources of evidence to get the most accurate and detailed picture of events as possible and to corroborate findings. Secondly, by having more than one researcher present at some key points of the data collection process. Finally, by following an explanation building logic in analyzing the case study evidence. Reliability was integrated into the research design through the use of a plan containing all the major components suggested by Yin (1994).

7. Case study: the faculty and the process

The Faculty of Economics is one of three faculties at the University of Algarve, in Portugal. It is presently responsible for undergraduate and postgraduate courses in Economics, Business Administration and Sociology with approximately 900 students, 45 teaching and research staff, and 15 technical and administrative staff.

The strategic planning process for the Faculty of Economics began in May 2005, two months after the appointment of a new Dean, and its main objective was to develop a clear strategic plan to guide the work of the faculty over the next three to five years. A performance measurement and management system was also to be developed as part of the planning process in order to help implement, measure and manage change.

To guide the effort of implementing and evaluating a new strategy for the Faculty of Economics, the Dean of the faculty formed a steering group, which included the authors of this paper.

An important feature of the strategic planning process is that it followed the general recommendations of integrated strategy processes in the literature, such as those proposed by Tichy (1983), Hambrick and Cannella (1989), Nadler and Tushman (1989), Ansoff and

The process brought together representatives of the major stakeholder groups of the faculty and, through consultation, discussion and group consensus, established collective priorities for the faculty that were consistent, measurable and aligned with the faculty’s vision and strategic objectives. The procedure adopted was one of synergy, as recommended in Shapiro and Nunez (2001), and consisted of the stages that are summarized in Figure 3.

First, a preliminary strategic planning meeting involving the Dean and Vice-Dean of the faculty, the President of the Scientific Committee, each of the directors of the three undergraduate degrees offered by the faculty, and two more staff members was held to identify and discuss strategic issues and to schedule two further meetings. The first of these meeting involved all members of the Scientific Committee (i.e. those staff members with a Doctoral Degree) and the second involved those present at the preliminary gathering and also the President of the Pedagogic Committee. At the Scientific Committee the Dean addressed all members, explaining the need for a new strategy and for an adequate performance measurement system. The steering group was invited to explain how the process would be organized, who would participate and how. After that, everyone else had the opportunity to state their opinions regarding what was said. Some participants addressed specific aspects such as threats and opportunities, resources available, strategic options, planning and others.

A half-day workshop was then held in order to analyze the internal and external environment and to agree upon the faculty’s vision and overall mission. After the workshop, the steering group carefully analyzed and clustered the issues that had surfaced during the workshop and as a result of this process prepared a draft strategic plan.

Then, the steering group consulted the Dean and Vice-Dean of the faculty on the completeness and appropriateness of this plan. Feedback was received and was used to refine and extend the plan. Having developed a generally accepted vision and mission statements, a set of objectives, and strategies for obtaining them, these were issued to the faculty’s main stakeholders for consultation and comment.

A questionnaire and a cover letter explaining the purpose of the questionnaire were distributed to all staff members and to student representatives. The main objective of the questionnaire was to give the respondents the opportunity to provide additional comments and to rank the issues that had surfaced during all previous meetings in order to understand which ones were considered most important by the faculty’s key stakeholders. Twenty-nine teaching and research staff members (64%), four technical and administrative staff members (27%), and sixteen student representatives (100%) replied to the survey, with average results, for each of the 150 items of the questionnaire, ranging from a minimum of 3.2 (agreement) to the scale’s maximum of 4.0 (complete agreement). Items were ranked in accordance with their average results.

Following this ranking exercise, the results were re-issued to the Dean and Vice-Dean for further discussion. Once analyzed and approved by faculty leadership, a revised version of
the plan was presented at the Scientific Committee by the Dean and the steering group. It was widely discussed by all participants and several suggestions were made. A strategy map (Kaplan and Norton, 2000; see Figure 4) was then developed in order to ensure the coherence of the vision, mission and objectives, and to help communicate the strategy to the different stakeholders of the faculty, and a final version of the strategic plan was produced.

In summary, the outcome from the process was a written document which contained a synthesis of the SWOT analysis, a list of the fundamental stakeholders, the faculty vision, mission, strategy and strategic competencies – to be developed in order to differentiate the faculty –, and a list of objectives to be pursued. These were sanctioned by the Dean and Vice-Dean. The steering group also developed a consistent set of 35 key performance measures to monitor the achievement of the strategic objectives specified in the plan. Targets and dates for each specific key performance measurement were not discussed, but the timeframe for the whole plan was the duration of the Dean and Vice-Dean’s mandates (three years).

Regrettably, the strategy process at the Faculty of Economics resulted in an unexpected outcome. The strategic plan was completed and approved, but not implemented, in spite of the steering group having followed a process tailored to prevent some of the best known implementation obstacles.

8. Reasons for strategy implementation failure in the Faculty of Economics

Since its inception, great care was put into the management of the whole planning and implementation process. However, the outcome was still not satisfactory. The main reasons for the interruption of the process and failure to implement the plan are now presented, in chronological order and not in any order of relative importance.

First, participants selectively collected and retained information regarding some important events. For example, in spite of the use of formal and informal methods, including a national conference held at the faculty, aimed at obtaining all relevant information about an important future event, the so-called ‘Bologna Process’, the strategy process participants did not correctly anticipate the speed of this event nor its full competitive impact. Although participants expressed concerns that «it was difficult to know exactly how, when, and which competitors would adhere in the near future to the Bologna Process» it was also emphasized that «it would be likely that most universities would still take some time before operationalizing the process». As a consequence, reasonable but conservative expectations were initially formed about the speed the faculty’s competitors would adhere to the Bologna Process. In accordance with these expectations, a top-down approach was chosen to develop and implement the faculty’s strategy. This choice was subsequently deemed inadequate in the face of the true speed of the events. Forming conservative expectations about future competitive challenges meant that participants’ mental models were not correctly updated in accordance with future events and consequently created an initial excessive confidence on the success of the plan that was expressed by feelings of «difficult but probable success» shared between the Dean, Vice-Dean and the steering group.

Second, the steering group replaced a systematic behavioral diagnosis with a brief and
informal analysis. A proper diagnosis would have allowed for a more precise assessment of the organization’s readiness for change and, in particular, it would have helped anticipating the motives for the infrequent participation in the planning process of an influential member of the faculty – a strong formal and informal leader, and a former Dean of the faculty. At the time, the limited participation of this influential member was not considered a serious problem because all other influential faculty members participated actively in meetings, replied to the questionnaires, made numerous informal contacts, and submitted many documents with their personal strategic assessments. However, this manager’s infrequent participation has probably affected the completion and implementation of the plan. A timely frank discussion with him, about any impediments for a fuller participation on his part, could have proven helpful in increasing his involvement.

During the strategic planning process there was no indication of any disagreement or of any active resistance coming from him or from anyone else. Clearly, there was no active opposition or any active rival coalition in the faculty. He simply did not (or could not) participate more often. In fact, when asked about his infrequent participation he agreed that it had been limited, but also mentioned that «the proposed plan contemplated most of [his] strategic concerns and it was largely in agreement with what [he] believed to be the adequate strategic options for the future of the Faculty». This is a position that he had already taken in a previous strategic planning meeting. However, this infrequent participation, to which he agreed, separated him from the change proponents and made the group of influential change proponents less numerous. This sent a message of lack of political support to participants and rendered the management team less effective by the absence of a valuable and insightful manager.

Experimentation with alternative solutions (Armstrong, 1982; Johnson and Scholes, 1999; Johnson et al., 2008), pilot projects or the contagion approach (Ansoff and McDonnell, 1990) were not applied because opposing coalitions with alternative views did not surface. These approaches, however, are not effective in all situations (Armstrong, 1982) and would not have been effective in the case of the influential member of the faculty which did not want or could not participate in the process.

Third, the unanticipated rush of Portuguese universities to comply with the new framework for higher education that had been set by the Bologna Process (OECD, 2006). Although the Commission of the European Communities (CEC, 2006) had established 2010 as the deadline for completing the Bologna reforms in all EU Countries, every major Portuguese university offering courses in Management and Economics declared that they were going to adhere in the first year. In fact, the Portuguese Minister for Higher Education, Mariano Gago, announced, in May 2006, that the adherence in the first few months was «gigantic, with 40% of all Portuguese courses submitted for ratification by the Ministry» (Público, 2006).

This rush to Bologna compliance created, therefore, an enormous competitive pressure that was highly unexpected when the faculty started its strategic planning, just a few months before. As a consequence the faculty wanted to be a part of the first wave of Portuguese institutions joining the Bologna Process, which required a tremendous effort to quickly make all the necessary changes: bureaucratic, academic, procedural and others. The Bologna Process implied that all bachelor, master and doctorate degree programmes should be adapted to the new framework. In Portugal, this required the development of new curricula for all degrees. The faculty had three graduation degrees and five master courses, all of which had to be changed to meet with the Bologna Process recommendations. These changes were made necessary too suddenly and thus constituted unanticipated internal problems that distracted and diverted the attention of faculty members.

Fourth, in addition to the existing master degrees that had to be adapted, the faculty saw
an opportunity to develop new master courses and several proposals were made and approved. This represented one of the greatest efforts ever to develop new products. It was a period of intense emergent strategic activity, which occurred in parallel with the strategic planning. Although the content of the strategic plan did not exclude such proposals, the planning process suffered from this intense simultaneous strategic activity. Participants experienced a conflict of priorities which ended up leading to the inversion of the initial top-down approach to an emergent bottom-up approach. One major symptom of this shift was the lack of time and energy to invest in the formal strategic planning activity.

Fifth, the members of the steering group were all directly involved in the development of several of those new course proposals. This involvement came on top of all other current professorial activities in the faculty. Again, lack of time was a major hindrance, which became evident when meetings of the steering group had to be postponed because of other important urgent matters.

Sixth, the Portuguese Government decided to change the whole process for evaluation of the higher education institutions and introduced new legislation on the topic (CNE, 2008:47554). Other major changes had been and are still being introduced. For instance, the universities funding is being dramatically changed from public only to public and private, and from a ‘teaching based funding’ to a ‘research based funding’ (OECD, 2006:80-82,103). Other major changes are expected for the Portuguese higher education network and governance (OECD, 2006; CNE, 2008). Also, the ageing of the population and the changing needs of Portuguese employers suggest that additional strategic adjustments must be made by higher education institutions (OECD, 2006).

Seventh, these nationwide changes are impacting the University of Algarve and the Faculty of Economics. A dramatic change in the university strategy, structure, governance and budgeting has been developed and has yet to be fully completed in the institution (e.g., UALG, 2008). These overwhelming and comprehensive changes have dramatically modified the context for the development of the institution, and the uncertainty that they introduced was an obstacle for the conclusion and implementation of the strategic plan of the faculty. In short, the strategic planning started at the faculty in a period of relative stability, but soon after, a long period of dramatic and deep changes began, introducing uncertainty and increasing complexity, particularly in terms of its future strategy, structure, governance, assessment and budgeting.

Eighth, the time frame for the Dean and Vice-Dean mandate is three years. The strategic planning process commenced in the second month of the mandate and it was on track until the seventh month. After that, the process started to suffer from delays, motivated by the above mentioned phenomena. By the end of the first year there were too many changes taking place, both internally and externally, and the SWOT analysis had lost its focus. Even if the plan had been completed and approved, it would have had insufficient time for implementation. The approach of the second half of the three year mandate was an obstacle to the strategy formation and implementation.

Ninth, the Dean and Vice-Dean had no intention of seeking election for a second mandate. As their mandate approached the middle, they mentioned on a few occasions that they had «no intention of being re-elected» and, consequently, the priority level they attributed to the development and implementation of a strategic plan was interpreted as having decreased. This interpretation found support in the fact that their commitment to the planning process waned.

Tenth, the targets for the Balanced Scorecard were never discussed or approved. The need for a meeting between the steering group and the Dean and Vice-Dean was mentioned on a few occasions but it never took place. Other activities absorbed all the available time and the meeting was simply postponed successively.
A draft version of this description of the obstacles to the strategic planning process was discussed with the Dean and with the informal leader who was an infrequent participant. Minor changes were suggested by both and were introduced into this final version.

9. Analysis of the Reasons for Failure, Implementation Obstacles and Chains

This section analyzes the aforementioned strategy implementation obstacles and the chains of causality that they have formed. For this purpose, it is convenient to start by comparing the obstacles suggested in the literature, and indicated in Table 1, with those identified in the previous section of this paper, which occurred in the case study of the Faculty of Economics. Table 3 is the result of this comparison. In order to elaborate on this table and facilitate the analysis, the ten reasons presented earlier were broken down into twenty-two detailed causes for failure. These were, in turn, re-ordered in accordance with the time at which they first occurred. This exercise was done based on internal and external documents, and on field notes taken by the researchers. The order of the obstacles is important in this research because, one of the basic requirements for establishing a casualty relationship is the temporal ordering of the cause and of the effect (the cause must be shown to unambiguously precede the effect; Bullock, Harlow and Mulaik, 1994; Sila, 2007; Mulaik, 2009: 101). Unfortunately, given the nature of some blockages, it is not easy to position them in a time line. Thus, both researchers ordered the obstacles independently and then reached an agreement on the differences found.

Two main conclusions can be drawn from the analysis of Table 3 and from the analysis carried out in the previous sections. Firstly, the analysis suggests that there are many individual reasons why strategy implementation can fail. In the case study at hand twenty-two obstacles were combined (accumulated, interacted or related in a causality chain), leading to an unsatisfactory result. The obstacles identified in the case study are clearly less than the sixty-five obstacles identified in the literature, but their combination (accumulation, interaction or relationship in a causality chain) sufficed to prevent a successful implementation of the strategy.

Secondly, the analysis indicates that although obstacles may simply accumulate, they may also relate with each other in dynamic and complex manners. Obstacles accumulate when they occur randomly, with no identifiable cause or relationship to other obstacles. Accumulation might happen either at a particular moment or over time. This seems to be the implicit assumption in most research on implementation obstacles, as it was noted earlier in this paper. Obstacles may, however, reinforce themselves in an interactive and/or causal way. In the latter case, the emergence of an obstacle is triggered by another obstacle, which in turn may generate another and another, culminating in a chain or a complex network of obstacles.

The obstacles in the case of the Faculty of Economics did not (and they did not have to) occur in the sequence suggested in Table 1. The difference between these two sequences can be confirmed by comparing the first and third columns of Table 3. This difference suggests that the various obstacles may combine in several different chains of events. Most of these
chains remain poorly understood and one important question for researchers is whether there are common patterns of obstacles that can be identified.

In the case study under analysis three major chains of causality, diagrammed in Figure 5, have led to the failure of the strategy implementation. The sequence of obstacles in each chain can be easily compared with the chronological representation in Table 3. In the case of the faculty, the problems started with the inability of the participants to obtain the information necessary to define the next steps of the strategy process. Therefore, the first two obstacles are common to the three chains, and are represented with larger rectangles, but then they led to different sequences of blockages, all contributing to the abandonment of the approved strategic plan and the balanced scorecard that was being developed.

The first chain of causality (left on Figure 5) is related to the Faculty of Economics’ management. The conservative expectations and the steering group’s excessive optimism led to a poor choice of change management method and to a superficial behavioral diagnosis which prevented the group from anticipating the reasons for non-participation of a charismatic and experienced senior manager. A frank discussion about the reasons for his absence and about his possible disagreement with the strategy never took place. Thus, a plan was developed without him, rendering the senior management team slightly less influential and less effective. This chain clearly illustrates how an obstacle, or more than one obstacle, can be the cause for a series of subsequent obstacles, which occur in different moments in time. This chain also suggests that charismatic leaders can be a problem, but for a reason opposed to that suggested by Stadler and Hinterhuber (2005) since the charismatic leaders may decide not to participate in the strategy process. In this case, the participation of an experienced leader might have made a difference, just as Hickson et al. (2003) emphasize.

The second chain of causality identified (centre of Figure 5) is related to the unanticipated speed of the Bologna Process and the internal activities that it has triggered. This external event led to an unanticipated need to quickly adapt the existing courses. Therefore, attention was diverted to solve this strategic problem. And, if this diversion was not enough, some members then decided to create new courses, which increased the conflict in the priorities of competing strategic activities: strategic planning, adapting current courses, and creating new ones. The main consequence of this effervescent strategic activity and of the conflicting priorities was a lack of time available for planning. Meanwhile, the Dean’s mandate was coming close to its mid-term and since he had no intention of seeking re-election, his commitment to the plan diminished and the performance management system was not even approved. Again, this chain suggests that an obstacle or more can be the cause for a series of subsequent obstacles.

The third chain of causality (right on Figure 5) is related to external events and to university governance, strategy and structure. The unanticipated external events caused turmoil in all the Portuguese universities with governance, structure, assessment and budgeting being under scrutiny. This fact raised great concerns within the faculty, regarding the kind of impact this scrutiny would have on its own strategy and structure. The high level of uncertainty raised contributed to a less committed top management team and further undermined the implementation of the strategic plan of the faculty. This chain is shorter and simpler than the others, but again, it illustrates how chains of obstacles can form.
The analysis of these three chains shows that in any of them the emergence of an obstacle triggered another, which led to another and another, until the interruption of the strategy process. This is an important characteristic of the chains of obstacles. Another important characteristic of the three chains is that they share some of the blockages identified in the case study. In fact, five of the obstacles in Table 3 (obstacles 2, 23, 48, 61 and 65) are shared by at least two of the chains. The three chains start with obstacles 23 and 48, two of them contain obstacles 2 and 65, and all end with obstacle 61.

Although the representation of the relationships between obstacles is, in this case, linear and sequential, it is possible that, in other settings, other types of relationship might occur. Vicious circles, so popular in the literature (e.g., Beer and Eisenstat, 2000; Balogun, 2006), might also occur, although none has been observed in this case study.

Finally, it can be argued that the three chains form a complex network of causal relationships. The representation of the chains in Figure 5 can be seen as a network composed of three parallel chains with some shared blockages. It is possible that, in other settings, obstacles might form similar networks of chains. As it was noted earlier, most of these chains remain poorly understood and one important question for researchers is whether there are common patterns of obstacles that can be identified. For instance, are the patterns formed by any of the chains in Figure 5 frequent? Do they occur in other organizations? Are linear causality chains frequent? What obstacles do they contain? Are vicious circles formed by obstacles a frequent phenomenon? What obstacles do these circles contain? Are there any patterns of vicious circles? Are networks formed by obstacles frequent? What are the obstacles in these networks? Are there any frequent patterns of networks? These are questions which have not been addressed by any of the literature reviewed and which seem significant enough to deserve additional research.

10. Discussion and implications for the research and practice of strategic management

The ideas of accumulation and of interaction between obstacles to implementation are not new. Whilst Hickson et al. (2003), Miller et al. (2004) and Sirkin et al. (2005) discuss the accumulation of obstacles, Wernham (1984, 1985) and Beer and Eisenstat (2000) suggest the interaction among blockages. Other researchers might implicitly assume the possibility of accumulation and/or of interaction, but only these explicitly discuss those topics, as indicated in Table 2.

Regarding the concepts of causality between obstacles and of chains of obstacles, there is clearly a dearth of studies which explicitly address these topics. The only study that comes close to addressing them is the work of Beer and Eisenstat (2000), which describes a model of the interactions among six ‘silent killers’ of strategy implementation and refer to the existence of a vicious circle of obstacles. This study represents a major step forward in the understanding of the relationships between obstacles and how these can prevent successful strategy implementation. However, it considers a limited number of obstacles (six) in a rigid model of predetermined interactions and, more importantly, this research does not discuss the concepts of unidirectional causality and of chains of obstacles. Consequently, the differences between interactions, causality and vicious circles, if any, are not discussed. Empirical evidence of the interactions/vicious circles is also vague and scarce, since the researchers present evidence of each of the obstacles (silent killers) but little (or no) evidence of causality. Furthermore, none of the conditions necessary to demonstrate causality (Bullock et al., 1994; Mulaik, 2009: 101) are considered in their work.
In the present paper, the researchers have aimed to contribute to this discussion by providing temporal evidence from a case study and by clarifying the differences between accumulation, interaction, linear chains of causality and vicious circles. This study is the first to suggest that obstacles can cause other obstacles and that they can form long chains of successive blockages.

The study is also a departure from previous work in that we explicitly bring together the previously identified concepts of accumulation and of interaction between obstacles with the ‘new’ concept of causality to explain strategy implementation failure. Many researchers have proposed prescriptive approaches for managing change (Balogun, 2006), but few have studied the reasons why the high rates of strategy implementation failure persist. The framework suggested here adds a new explanation for the high rates of failure. Nevertheless, it is important to emphasize that the work carried out by other authors was taken as a point of departure to explain that many different kinds of relationships between obstacles may emerge and that these relationships are less predictable and rigid than it might be suggested by previous studies (e.g. Beer and Eisenstat, 2000; Beer, Voelpel, Leibold and Tekie, 2005). In fact, the findings reported in Table 3 and in Figure 5 suggest that chains of obstacles might include different combinations of blockages, which can be difficult to capture or predict by one single rigid model.

A fundamental question remains, however, unanswered: How do chains of obstacles develop? A plausible explanation is that chains develop through a combination of undesired events, organizational members’ initial intentions and emergent opportunistic behaviors. Employees’ and middle managers’ behaviors are guided by persistent mental models, strongly protected by cultural artefacts (Johnson, 1988, 1990, 1992), which slowly evolve through an iterative process composed of a succession of social interactions, each with the purpose of making sense of unfolding top managerial actions and events that people cannot immediately understand (Argyris, 1977; Gioia and Chittipeddi, 1991; Balogun, 2006). These shared, persistent, slowly evolving mental models, composed of deeply held values and assumptions, constitute an underlying evolving explanation (logic) for active or passive resisting behaviors, including sabotage (Morrison and Milliken, 2000).

The recognition that people may resist change in many different ways and can do so actively to aggressively undermine implementation initiatives (Kotter and Schlesinger, 1979), and the recognition that an iterative process of social interactions underlies the evolution of people’s guiding mental models (Balogun, 2006) may, in fact, help explain how chains develop and how they lead to failure. In particular, because these recognitions suggest that some kind of preconceived sequence of actions, possibly combined with opportunistic behavior that takes advantage of emerging internal and external events (Mintzberg and Waters, 1985; Mintzberg, 1987), some of which are by themselves obstacles to change, gives rise to other obstacles in order to prevent successful strategy implementation.

This initially preconceived and then emergent logic, results from an intention combined with opportunistic behavior – particularly evident when there is an opposing internal coalition or a labor union which tends to resist in an organized fashion – seems to constitute a reasonable explanation for many failed change efforts, although it has not been recognized as such by researchers. However, chains may also develop without any deliberate intention to resist change, as it was the case of chain three in the Faculty of Economics under study in this paper. This question of how chains of obstacles develop is, however, a question which demands further research.

Furthermore, it is also important to emphasize that in recent years, there has been very fruitful research exploring interactions among activity choices in complex systems (e.g. Siggelkow, 2002). The results of this research can inform people and organizations that seek to better understand the nature and consequences of interactions (and of causality) among
obstacles to strategy implementation. In particular, the results can help understand whether there are any frequently occurring chains of obstacles (common patterns or configurations), and whether there can be some specific remedies for those common patterns of obstacles.

These findings have several implications. The very high number of obstacles that exist makes it difficult for managers to keep all of them in mind. This finding suggests that any method which allows managers to anticipate the type of obstacles more likely to be faced by their organizations (Porter and Smith, 2005), and to anticipate the patterns of interaction or causality among them, would have major implications in this area. The classification of obstacles in a small number of generic types, as proposed by several researchers (e.g., Kotter, 1995; Beer and Eisenstat, 2000) seem to be insufficient to help managers identifying the specific types of obstacles from which their organizations are more likely to suffer. Although Sirkin et al. (2005) suggest the opposite; that managers should focus their attention on a short number of generic factors (obstacles) in order to avoid dealing with too many priorities simultaneously and to avoid spreading resources, they agreed that participants must engage in debate in order to identify the underlying specific causes of problems and to tailor specific and innovative solutions.

Alongside the need to develop methods which allow managers to anticipate obstacles, it is also fundamental to develop processes which allow them to deal with these obstacles once they emerge. In particular, it is fundamental to develop solutions to deal with chains of obstacles. The best way to ensure success is to prevent any of these chains of obstacles to getting started. Once they have, it can become considerably more difficult to break them and to prevent the process from reaching failure. Since one obstacle can lead to and reinforce other obstacles, over time they grow in number and increase the complexity of the problems with which managers must deal. Managers will have to deal with and eradicate each and all of the obstacles in the chain. Thus, every day that goes by increases the difficulty of leading a process that has already gone astray. Chains of obstacles and the difficulty of eradicating them are perhaps the reasons why it is so difficult to implement a new strategy and why the failure rates have been estimated to be so high. The earlier an obstacle is detected the better. The earlier a chain is detected, the easier it will be to correct the deviant effect.

In spite of the limitations of this research, which are discussed in the next section, the three chains identified in this work may constitute a valuable set of patterns of obstacles, both for research and practicing managers. These ‘examples’ can serve to develop theoretical frameworks aimed at understanding how chains of obstacles can be conceptualized, how they emerge, and how they can be recognized and stopped.

11. Main Research Limitations and future research

Causality between strategy implementation obstacles is one of the main themes in this research. However, establishing the existence of causality is a difficult task. Perhaps with the exception of experimental research – an infrequent methodology in management research – there is no research methodology capable of proving beyond any doubt that one stimulus (or a change in one independent variable) is the cause of a specific effect (or of a change in a dependent variable). No research methodology - not even statistical methodologies based on regression models or on structural equation modeling - is sufficient to ensure causality (Baz, 2008; Gibson, Buckler and Chakrapani, 2010). Our methodology, addresses one of the most important conditions for establishing causality, which is the temporal ordering of the cause and of the effect (i.e., the cause must precede the effect, or a change in the independent variable must precede the change in the dependent variable). In this study, the temporal ordering of the strategy implementation obstacles was specifically considered. The case study
methodology that was adopted, longitudinal in nature, offered some advantages over other methods in gathering temporal evidence on the phenomena under study.

Unfortunately, other conditions are concurrently required to ensure causality (the existence of correlation between two variables and the ruling out of extraneous variables) that could not be addressed in the case study. The case study methodology is not adequate for assessing correlations between variables, usually more easily assessed in surveys and in cross sectional studies.

Thus, one major limitation of the study, and a suggestion for future research, derives from the current study’s methodology and from its inability to prove beyond any doubt that causality between obstacles exists. The case study methodology employed in this study can only verify one of the three minimum conditions necessary for proving causality (temporal ordering between cause and effect), a condition that cross-sectional studies usually do not verify. Future research based on cross sectional and survey methods might assess the correlation between obstacles and begin to address these limitations.

12. Conclusions

The development and implementation of a strategic plan is not a straightforward task, with some authors estimating a rate of failure of between 50 and 90 percent. In order to understand these findings and the reasons why these rates still persist, we carried out an extensive literature review and discussed an in-depth case study of the development of a strategic plan in the Faculty of Economics of one of Portugal’s newer universities.

Although a case study research methodology provides little basis for generalization, the main objective was to contribute to research advancement by providing possible explanations for the high rate of implementation failure, and ideas for further research in the field.

In order to extract useful conclusions and implications from the case study, twenty-two specific obstacles were identified and compared to the extensive list of sixty-five obstacles, previously compiled from the literature review. Based on the evidence gathered from this comparison, from the in-depth case study analysis and from the exhaustive review of the literature, three major conclusions were then drawn.

The first conclusion is that there can be many individual reasons why strategy implementation may fail. In theory, the number of obstacles may in fact be limitless and largely dependent on the organization that is implementing the strategy.

The second conclusion is that the obstacles affecting a strategy process may simply accumulate over time, without any interaction or causality between them, as it is frequently assumed. However, the evidence gathered from the case study, strongly suggests that the occurrence of an obstacle will probably generate another related impediment, which in turn may generate another and another, leading to a ‘coherent’ chain of obstacles, acting together and reinforcing each other. This is an important finding as the occurrence of sequences of obstacles, linked together in reinforcing chains of causality, is a possibility that has not been investigated in the literature, and as a consequence remains poorly understood.

The third conclusion is that a coherent intertwinement of obstacles brings increased complexity to the process of strategy formulation and implementation. This enhanced complexity makes it more difficult for managers to deal with the obstacles and the chains they form, and puts a strong emphasis on the need for management to assume a preventative attitude, rather than a reactive solution to the problem. Although the idea of accumulation and interaction between obstacles to implementation is not completely new, the proposition that obstacles might form causality chains is new and is a fundamental issue demanding additional research as it may contribute to further explain the persistence of high rates of failure in
strategy implementation. Research is needed, for instance, to investigate the relationship mechanisms between obstacles which can reduce the probability of success. In particular, research is needed to understand how chains of obstacles develop, whether such chains can be classified into some general typologies, and finally, whether some general solutions can be developed to prevent common types of chains.

These findings provide a contribution to the strategic management field by helping explain the high rate of unsuccessful strategy implementation and expanding our knowledge on how to make the development and implementation of business strategies more efficient and effective. Furthermore, they provide significant opportunities for further research.

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References


Wernham, R. (1985). ‘Obstacles to strategy implementation in a nationalized industry’,


Figure 1. A cause and effect chain of obstacles
Figure 2. How obstacles interrelate and affect the strategy formation and implementation process
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stimuli: Bologna Process, new Faculty Dean, lack of scientific research in the faculty, increased importance of research for fund raising.</td>
</tr>
<tr>
<td>2</td>
<td>Preliminary meeting, initial analysis of the situation and decision about the next steps for the planning process. Change management method: managed resistance. Management style: democratic: consultation, discussion, towards consensus. Scientific Committee meeting. Incipient version of the Strategic plan.</td>
</tr>
<tr>
<td>3</td>
<td>Half-day workshop. First version of the strategic plan. Consultation with the Dean and Vice-Dean on appropriateness of the plan. Consultation with all members (questionnaire). An experienced former dean continued to participate infrequently.</td>
</tr>
<tr>
<td>4</td>
<td>Discussion of the questionnaire’s results. Second version of the strategic plan. The plan does not include resource allocation, time frames, and performance measures. Consultation with Dean and Vice-Dean. Approval of the plan. Scientific Committee meeting. Selection of performance measures. Last version of the plan includes vision, mission, strategy and performance measures, but no targets.</td>
</tr>
</tbody>
</table>

**Figure 3. The strategy formulation and implementation process as carried out in the faculty**
VISION
To be a Faculty recognised nationally and internationally for its excellence, competence and social responsibility in the creation and dissemination of knowledge.

MISSION
Promote excellence in graduate education.
Interact with the community, in order to improve people’s quality of life.
Undertake and disseminate research of international quality.

Stakeholder Perspective
To achieve our vision, what key outcomes must we deliver to our stakeholders?

Provide high quality education
Ensure an effective student placement
Attract and retain ‘good’ students
Align products, programmes and services with customers needs

Internal Process Perspective
To achieve the desired outcomes to our stakeholders, what internal processes must we excel at?

Ensure courses and Faculty are highly regarded
Impact upon the community
Develop, promote and publicise the Faculty’s profile
Further develop relationships with the Media
Organise international conferences
Promote student and staff mobility
Develop effective alliances with business and non-profit organisations
Develop effective partnerships with foreign higher education institutions

Learning and Growth Perspective
To achieve our vision, how will we sustain our ability to change and improve?

Maintain most current software and hardware and promote their use
Increase range of the library’s collections and promote their use
Promote staff development
Develop effective quality management systems
Innovate curriculum

Financial Perspective
To achieve the desired outcomes for our stakeholders, what do we need to achieve financially?

Increase revenue and diversity revenue sources
Ensure resources are efficiently used
Increase number and quality of publications and communications
Increase the percentage of staff involved in research activities

Figure 4. The faculty’s strategy map
Figure 5. Three series of obstacles linked in causality chains of events

Note: Figure 5 has been vertically compacted for convenience. Vertical lines in the shape of tall inverted Zs represent chronological precedence according to Table 3: obstacle 10 precedes obstacle 65a, and obstacle 13 precedes obstacle 65b. Causality is represented by arrows.
<table>
<thead>
<tr>
<th>Type / Category</th>
<th>Obstacles to a Successful Strategy Implementation</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership</strong></td>
<td>1. Unclear vision or bad strategy, strategy defined in terms of old paradigm</td>
<td>x x x x x x x x x x x x x x x 13</td>
</tr>
<tr>
<td></td>
<td>2. Lack of top management commitment</td>
<td>x x x x x x x x x 10</td>
</tr>
<tr>
<td></td>
<td>3. Lack of training on implementation methods (steps, styles, context, variables and linkages)</td>
<td>x x 3</td>
</tr>
<tr>
<td></td>
<td>4. Lack understanding of the potential of culture and cultural artefacts for managing change</td>
<td>x x x 3</td>
</tr>
<tr>
<td></td>
<td>5. Lack of a context sensitivity approach to change management</td>
<td>x x x 5</td>
</tr>
<tr>
<td></td>
<td>6. Poor choice of method for introducing change, e.g. choosing edicts or to plan without receptivity</td>
<td>x x x x x x x 8</td>
</tr>
<tr>
<td></td>
<td>7. Inadequate leadership, narrow leadership roles</td>
<td>x x x x x x x x x 9</td>
</tr>
<tr>
<td></td>
<td>8. No development of leadership down-the-line (e.g., recruitment, education, experiences, succession)</td>
<td>x x x x x 6</td>
</tr>
<tr>
<td></td>
<td>9. Lack of adequate experience in the proponent of the change</td>
<td>x x 2</td>
</tr>
<tr>
<td></td>
<td>10. Management ineffective as a team</td>
<td>x x 4</td>
</tr>
<tr>
<td></td>
<td>11. Top managers leave the organization</td>
<td>x x 4</td>
</tr>
<tr>
<td></td>
<td>12. No management of symbols and other cultural artefacts to facilitate change</td>
<td>x x x x x x x x 8</td>
</tr>
<tr>
<td></td>
<td>13. Short time available for the change, excessive speed of the changes</td>
<td>x x x x x x 5</td>
</tr>
<tr>
<td></td>
<td>14. Personnel attention distracted from implementation, daily-to-day activities take all the time, delays</td>
<td>x x x x x x x x x x x 9</td>
</tr>
<tr>
<td></td>
<td>15. Internal problems that were not anticipated, behaviour compliance, hijacked process, sabotage, strategic drift</td>
<td>x x x x x x x x x 8</td>
</tr>
<tr>
<td><strong>Time available</strong></td>
<td>16. Communication style not tailored to receivers</td>
<td>x x 2</td>
</tr>
<tr>
<td></td>
<td>17. Lack of tact, management support and regard for people affected, no involvement with people</td>
<td>x x x x x x x x x x x x 12</td>
</tr>
<tr>
<td></td>
<td>18. No encouragement for providing negative feedback</td>
<td>x x x x x 5</td>
</tr>
<tr>
<td></td>
<td>19. Inadequate information systems, withholding of information, insufficient information available</td>
<td>x x x x x x x x x x x x 13</td>
</tr>
<tr>
<td></td>
<td>20. No encouragement of people for challenging and questioning mental models/paradigm/schemata</td>
<td>x x x x x 5</td>
</tr>
<tr>
<td></td>
<td>21. Failure to see need for change, misunderstanding mechanics of the change process or benefits</td>
<td>x x x x x x x 10</td>
</tr>
<tr>
<td></td>
<td>22. No sense of urgency, no perception of a crisis</td>
<td>x x x 3</td>
</tr>
<tr>
<td></td>
<td>23. Selective attention and retention of pieces of information, no anticipation of potential problems</td>
<td>x x x x x x x x 7</td>
</tr>
<tr>
<td></td>
<td>24. Sensemaking of plans and events not as desired by management</td>
<td>x x x x x x x x 10</td>
</tr>
<tr>
<td></td>
<td>25. Different evaluations of the situation</td>
<td>x x x x x x x x 9</td>
</tr>
<tr>
<td></td>
<td>26. Misinformation, use of information or rumours to create resistance</td>
<td>x x 2</td>
</tr>
<tr>
<td></td>
<td>27. Denial of credibility and competence of change initiator, low trust / confidence in change agent</td>
<td>x x x x x x x x x x 10</td>
</tr>
<tr>
<td></td>
<td>28. No sincere dialogue about obstacles or conflicting aspects, no sharing of interpretation of plans and events, no two-way communication, no internal opinion surveys</td>
<td>x x x x x x x x x 9</td>
</tr>
<tr>
<td></td>
<td>29. People's perception of lack of control, of not being valued, or of being lied to</td>
<td>x x x x x 5</td>
</tr>
<tr>
<td></td>
<td>30. Insufficient detail about implementation tasks</td>
<td>x x x x 4</td>
</tr>
<tr>
<td><strong>Reluctance to change - fear of loss</strong></td>
<td>31. Habit, low tolerance for change, reluctance to let go, to experiment</td>
<td>x x x x x x 6</td>
</tr>
<tr>
<td></td>
<td>32. Threat to existing social relationships</td>
<td>x x 2</td>
</tr>
<tr>
<td></td>
<td>33. Fear that change will upset current balance of power between groups and departments</td>
<td>x x x 3</td>
</tr>
<tr>
<td></td>
<td>34. Fear of loss of status, power, freedom, economic benefits and security</td>
<td>x x x x x x 6</td>
</tr>
<tr>
<td></td>
<td>35. Fear of unknown, of uncertainty and ambiguity, of negative feedback, of failure, of being incompetent</td>
<td>x x x x x x x x x x 8</td>
</tr>
<tr>
<td></td>
<td>36. Originator of current status quo may feel indicted</td>
<td>x x x x x x x x x 5</td>
</tr>
<tr>
<td>Behavioural diagnosis</td>
<td>37. Lack of assessment of culture, values, symbols, gossip, and mental models of the organization</td>
<td>x</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>38. Lack of a behavioural diagnosis, no assessment of readiness for change or incorrect assessment</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>39. Viewing people as resisters, not change creators</td>
<td>x</td>
</tr>
<tr>
<td>People's skills - training</td>
<td>40. Inadequate employee training on new tasks, inadequate timing of training</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>41. Current skills are insufficient or inadequate</td>
<td>x</td>
</tr>
<tr>
<td>Participation - involvement</td>
<td>42. Manipulation, or managers merely want a ratification</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>43. No identification with the change, plan developed without participation, top down approach, no middle management commitment, no empowerment</td>
<td>x</td>
</tr>
<tr>
<td>Culture and climate</td>
<td>44. Outside consultants proposed the change</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>45. Unclear responsibilities and accountability</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>46. Group norms, role prescriptions, routines, symbols, peer pressure, rites of intimidation and degradation</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>47. Poor relationships, low trust, and interdepartmental rivalry or conflict, leading to an unwillingness to cooperate and to subordinate to the organizational greater good</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>48. Tradition bound, paradigm persistence and/or homogeneity, stories of unsuccessful changes</td>
<td>x</td>
</tr>
<tr>
<td>Structure</td>
<td>49. Structural inadequacy, rigidity or bureaucracy</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>50. Lack of a strong power coalition pro-change, small size of power coalition</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>51. Structural changes that were not required, or in excess</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>52. No institutionalization of the change in structure and culture, declaring victory too soon</td>
<td>x</td>
</tr>
<tr>
<td>Change extension, projects, short term wins</td>
<td>53. Extension of the change, number of departments and people affected</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>54. Lack of previous trials/experimentation with the solution, lack of a pilot project</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>55. Lack of planning for short-term wins, change not broken down into short steps or projects</td>
<td>x</td>
</tr>
<tr>
<td>Coordination</td>
<td>56. Personal objectives conflict with organizational objectives</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>57. Conflicting organizational priorities</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>58. Ineffective coordination</td>
<td>x</td>
</tr>
<tr>
<td>Resources</td>
<td>59. Limited available resources, committed resources in past decisions, withdrawal of resources</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>60. Sunk costs preventing reinvestment in a better future alternative</td>
<td>x</td>
</tr>
<tr>
<td>Performance management</td>
<td>61. Control/reward systems reinforce paradigm and status quo, lack of adequate feedback/learning</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>62. No link established between strategic and daily objectives, no strategic control</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>63. No equity/justice in sacrifices asked and rewards given</td>
<td>x</td>
</tr>
<tr>
<td>External events</td>
<td>64. Parent company structure, tradition, paradigm, change in its own strategy or withdrawal of support</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>65. Other unanticipated external events (macro factors, stakeholders, …)</td>
<td>x</td>
</tr>
<tr>
<td>1. No relationship between obstacles is explicitly discussed (reasons for a specific obstacle might be identified, but no relationship between obstacles is explicitly addressed, identified or explained)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Accumulation of obstacles without any interaction or causality</td>
<td>x³</td>
<td>x</td>
</tr>
<tr>
<td>3. Interaction (a bidirectional reciprocal relationship, perhaps with a multiplicative effect, but no unidirectional causality nor vicious circles), unidirectional causality and/or vicious circles (definition of the concepts is not provided and remain mixed and unclear, evidence of relationships insufficient)</td>
<td>x⁵</td>
<td>x</td>
</tr>
</tbody>
</table>

Notes: ¹ The authors discard the possibility of empirically studying any kind of cause-effect relationships. ² The author does not explicitly address causal relationships between obstacles, but explains how a trigger event and middle managers’ sensemaking can originate an obstacle. ³ The authors make an implicit assumption of accumulation of several independent obstacles without interaction or causality between them. ⁴ The authors do not explicitly address any causal relationships between obstacles, but they explain why some obstacles might make an appearance in an organization. ⁵ The author suggests a feedback loop of events that can cause an obstacle. Feedback loops between obstacles might also be implied.
Table 3. Comparison of obstacles in the literature with those of the Faculty of Economics

<table>
<thead>
<tr>
<th>NO. IN THE PREVIOUS SECTION</th>
<th>SHORT DESCRIPTION OF THE OBSTACLE</th>
<th>NO. IN TABLE 1</th>
<th>NO. IN FIGURE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selective attention and retention of information (signals of massive adhesion to Bologna not captured)</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>1</td>
<td>Selective attention and retention of information (missed signals of future changes in HEI evaluation, funding and governance)</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>1</td>
<td>Paradigm persistence (conservative expectations were formed about the speed of change)</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>1</td>
<td>Paradigm persistence (conservative expectations) and excessive initial optimism</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>1</td>
<td>Poor choice of combination of methods for introducing change (top-down strategic planning)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Replacement of a formal behavioural diagnosis with an informal and superficial analysis</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Lack of a frank discussion about impediments</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>Planning started without ample participation of an influential senior manager</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>2</td>
<td>Political position of change proponents weakened by lack of involvement and visible political support from an influential formal and informal leader</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>2, 5</td>
<td>Management less effective as a team</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Unanticipated external events (surprising adhesion of competitors to the Bologna framework which greatly increased the low competitive pressure of the past)</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>Internal problems not anticipated (caused by the portuguese rush to Bologna)</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>3, 5, 10</td>
<td>Attention distracted/diverted to other activities (e.g. urgent adaptation to the Bologna framework)</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Too many strategic initiatives at the same time (current plus new emerging products)</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>4</td>
<td>Conflicting organizational priorities (solving current problems, strategic planning, emerging new products)</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>4, 5, 8</td>
<td>Short time available for the change</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>Unanticipated external events (Government changes HEI evaluation, funding and governance)</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>7</td>
<td>Changes in the university’s (not the faculty’s) strategy, values, structure, governance and budgeting (which were not consistent with the faculty’s new strategy)</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>7</td>
<td>Impact on the faculty's structure and strategy of the strategic, structural and governance changes at the university level</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>8</td>
<td>Mandate of the Dean and Vice-Dean approaching its terminus (similar to top management leaving the organization)</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>Lack of commitment to the plan (no intention of seeking election for a second mandate)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Development of the performance management system not concluded (quantitative targets not defined)</td>
<td>61</td>
<td>61</td>
</tr>
</tbody>
</table>