PATTERNS OF STRATEGIC CHANGE

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Introduction

The current business environment demands a high level of managerial response, making strategic change more necessary than ever before (Ben-Menahem *et al.,* 2012). It has been stated that change is the only valid constant, because in this context inaction is the riskiest strategy (Farjoun, 2007). In this context of heightened dynamism, change comes from the multiple sources linked to actors that have a wide variety of decision-making capabilities and influences (governments, pressure groups/ecologists, competitors, etc.), all of whom expect a response from the firm (Langley et al., 2013; Mackay and Chia, 2013; Sosa, 2006). All of these influences have to be interpreted and accepted by the firm's decision-making bodies, whose capability for action will depend on the firm's theoretical perspective, strategic choice or the ecology of the population. However, organizational life is not characterized by deterministic natural selection or strategic choice, but by a process of creative evolution, in which strategic choice interacts with environmental forces to produce positive and/or negative consequences that have completely unexpected influences on the firm's results (McKay and Chia, 2013). Success or failure does not only depend on strategic choices or the choice of environment, but also, and perhaps to a greater extent, on the possible outcomes or circumstances of the process itself, which are determined by the actions of the stakeholders. From a cognitive standpoint, strategic change can be defined as a dynamic process that occurs within the firm in response to the managers' interpretation of external or internal events (Boyne and Meier, 2009). The external environmental forces that demand change and the internal forces that seek stability are mediated by the perception of the strategic apex.

The punctuated equilibrium model considers that companies evolve over long periods of incremental change and short periods of reorientation or discontinuous change that affect all organizational activity. Although change affects many stakeholders, discontinuous changes have been fundamentally linked to changes in the top management team (Dahlmann and Brammer, 2011; Sánchez, Sánchez and Escribá, 2010).

This model defines the term 'strategic reorientation' as large-scale change throughout the company, including simultaneous and discontinuous adjustments to the firm's strategy, structure, power distribution, and control systems (Romanelli and Tushman, 1994; Tushman and Romanelli, 1985). However, the majority of studies have focused on only one component of change (Gordon *et al.*, *2*000; Lant *et al.*, 1992), which prevents the complexity of interactions between the different organizational or environmental variables from being captured (Rajagopalan and Spreitzer, 1997). Changes in strategic components are themselves stages in the process within an input-process-output model, but the sequence of these changes has never been conclusively established (Amis *et al.*, 2004), and clarifying this temporal sequence would give us a better understanding of *how* and *why* organizations change (Armenakis and Bedeian, 1999). It is necessary to analyze change in its entirety (*what* are the changes that take place) and the process that takes place over time (Palmer and Dunford, 2008; Pettigrew *et al.*, 2001). This is an interesting research question that has so far been overlooked in organizational scholarship (Van de Ven and Poole, 2005). Finding the right sequence(s) is a key temporal condition for the success of change (Amis *et al.*, *2*004) and is more important than other parameters such as pace or linearity (Liguori, 2012).

A central theme of strategic change concerns the active participants within the firm. Implementing change requires the mobilization of resources controlled by various managers at different levels of the firm's hierarchy (Pfeffer and Salancik, 1978). In order to roll out change it is also necessary to involve all of the firm's stakeholders, with their conflicting

interests (Greve and Mitsuhashi, 2007). In our paper we focus on the role of the strategic apex, which includes the board, the chief executive officer (CEO), and the top management team (TMT) because, although are the stakeholders who have greater formal power, there is still considerable ambiguity regarding the actual role played by top managers in the strategy process (Jarzabkowski, 2008). The prior literature has focused on the analysis of one type of governance mechanism, while excluding others (Castro *et al., 2*009). Following up the suggestion of Brunninge *et al.* (2007), the focus of this work is to identify the role played by the different governing bodies and the management in a firm's strategic change.

Based on the above, this study has two main objectives: (i) to identify *who* the actors are in the strategic apex that are involved in strategic change; and (ii) to analyze the sequence of strategic change, in order to identify change patterns.

Our study identifies a variety of change patterns and the different factors that trigger the processes of both radical and incremental strategic change. This paper contributes to the literature on strategic change by making the first in-depth study of the relationship between the different elements that define change, and the temporal sequence of those relationships. The study also makes a valuable contribution to the study of processes, providing a greater understanding of the causal relationships that occur between variables. With its thorough study of the role of the TMT, this paper also contributes to the TMT literature by analyzing different managerial changes and their implications for strategic change.

The remainder of this paper is divided into four sections. In the following section we present a review of the literature on strategic change. Within the distinct components of strategic change, we highlight the changes to the firm's distribution of power, in order to identify the actors involved within the strategic apex. We go on to describe the methodology used in the study and set out our findings, followed by a discussion section. The paper

concludes with a summary of its implications and suggestions for future avenues of research in this subject area.

Theoretical framework

The Concept of Strategic Change

Firms face the paradox of simultaneously needing change –to maintain their competitive position– and stability –to try to control uncertainty–, because both aspects are essential for the firm's effectiveness (Farjoun, 2010; Klarner and Raisch, 2013).

The punctuated equilibrium model of organizational change (Tushman and Romanelli, 1985) indicates that organizations evolve through alternating periods of convergence and reorientation. Convergence refers to incremental or gradual changes and corresponds to a period of stability for the firm, so small changes in strategies, structures and power distribution do not produce fundamental transformations (Romanelli and Tushman, 1994). This phase of stability encourages the development of routines (Feldman and Pentland, 2003), which reinforce the firm's existing strategy and increase inertia (Klarner and Raisch), 2013.

Reorientation refers to large-scale, rapid and discontinuous changes within the firm across all domains of organizational activity: strategy, structure, power distribution and control systems, leading to so-called radical change (Virany *et al., 2*992) or strategic reorientation (Romanelli and Tushman, 1994; Tushman and Romanelli, 1985). The speed and abruptness of these changes is necessary to overcome organizational inertia (Klarner and Raisch, 2013). The majority of studies have focused on only one component of change, such as strategy (Barker *et al.,* 2001; Ben-Menahem *et al.,* 2012; Boeker, 1997a; 1997b; Greve and Mitsuhashi, 2007; Klarner and Raisch, 2013; Miller, 1993; Zhang and Rajagopalan, 2010), structure (Ben-Menahem *et al., 2*012; Klarner and Raisch, 2013), power distribution (Miller, 1993; Weisbach, 1988), or control systems (Garg *et al., 2*003; Simons, 1994). Furthermore, much of

the literature on radical change has been based on the assumption that every element of an organization is changed simultaneously (Amis *et al.,* 2004) and it is therefore acknowledged that very little is known about the sequence of the modifications that take place during a change process (Pettigrew, 1992; Pettigrew *et al., 2*001; Van de Ven, 1992; Van de Ven and Poole, 2005), regardless of whether the change is incremental or radical. However, a key question relates to the order in which different elements are changed and the effect, if any, that this sequence has on the outcome of the change process (Amis *et al.,* 2004). The answer to this question will explain *how* and *why* organizations change (Armenakis and Bedeian, 1999). The need to investigate the sequence of these changes has already been identified (Amis *et al.,* 2004; Huy, 2001; Liguori, 2012; Rindova *et al., 2*010) and this investigation can be approached in a number of ways. In this study we focus on the sequence of changes in the components of strategic change –strategy, structure, power distribution and control systems– and attempt to find patterns of change within organizations. Of the components involved, power distribution plays a central role, as it affects the agents of change and identifies *who* is involved.

Who Manages Strategic Change?

As we have indicated above, change requires the collaboration of many of the firm's stakeholders (Battilana, Leca and Boxenbaum, 2009) to involve them in the adoption of new practices (Battilana and Casciaro, 2012). However, the senior management is comprised of stakeholders with the greatest formal power in the firm and therefore could well be the group with the most influence for initiating strategic change (Clark and Soulsby, 2007). From a cognitive point of view the directors perceive the environment subjectively and through their interpretation of the contextual circumstances they identify concrete options for initiating change (Herrmann and Nadkarni, 2014). The paradox of change is that firms need stability and change at the same time to survive in their environment. Sometimes the internal forces

that are oriented towards stability are dominant and the directors are blind to the need for change. Faced with environmental changes, information can be ambiguous and hard to interpret, so the board may instigate managerial changes to gain access to scarce resources or information (Zhara and Filatotchev, 2004). A change in management personnel brings with it a change in the interpretation of information and this has the potential to affect company strategy (DiMaggio and Powell, 1983; Williamson and Cable, 2003). Power is distributed between the CEO, the TMT, the board of directors and the shareholders. While the majority of the literature has focused on analyzing the CEO's involvement in the firm's strategy, some studies have also examined the role of the TMT (Barker *et al.,* 2001; Gordon *et al.,* 2000; Lohrke *et al.,* 2004; Volverda *et al., 2*001).

Some papers argue that senior managerial succession is the primary agent for a change in company strategy (Boyne and Meier, 2009; Gordon *et al.*, 2000; Lant *et al.*, 1992), while other studies suggest the possibility of reciprocal causality between these two elements (Barker *et al.,* 2001). Some authors even believe that these changes are simultaneous (Virany *et al.,* 1992). Managerial turnover often leads to new experiences and ideas being brought into the company (Ballinger and Marcel, 2010) and may overcome the lack of acceptance and understanding of the other elements that constitute strategic change (Barker *et al.,* 2001; Boyne and Meier, 2009; Melnyk *et al.,* 2010; Tushman and Rosenkopf, 1996).

Other authors have posited that changes in strategy, structure and control may occur before managerial change (Wiersema and Bantel, 1993; Zhang, 2006). According to this view, the key determinant of a change in senior management is the need to adapt to the environment. In this respect, Jarzabkowski (2003) concludes that caution must be exercised when assuming that change is a function of the new senior management. Her findings suggest that the election of new senior management *emerges* from a relationship with the internal dynamics of change.

In their definition of strategic change several studies have linked managerial succession to changes in one or more of the variables listed above: strategy (Barker *et al.*, 2001; Boeker, 1997a; Miller, 1993; Pitcher *et al.*, 2000; Simons, 1994); structure (Barker *et al.*, 2001; Gordon *et al.*, 2000; Hayward and Shimizu, 2006; Lant *et al.*, 2992); and control systems (Miller, 1993; Simons, 1994). CEO succession has also been linked to other changes in the distribution of power, such as changes in the TMT (Miller, 1993; Shen and Cannella, 2002) or in the body of the shareholders (Denis *et al.*, 1997; Weisbach, 1988).

With respect to the board of directors, some authors have demonstrated the importance of its involvement in the firm's strategy. The board is a valuable resource (Macus, 2008) that should be exploited when the firm needs to take important decisions, such as a change in strategy (Rindova, 1999). The collaborative model suggests that the focus of the board's role should be on advising management and enhancing strategy discussion (Kroll *et al.*, 2007). Very few works have actually considered the relationship between board changes and strategic change. The prior literature has focused on the analysis of a single type of governance mechanism, while excluding others (Castro *et al.*, 2009). Following the suggestion of Brunninge *et al.* (2007), this study looks at the involvement of the different governing bodies at the time that strategic change is being developed.

This paper will analyze all the components of strategic change in an attempt to identify the different sequences of change and to establish *who* they involve.

Methodology

Organization studies often use two definitions of change: (i) an observed difference over time in an organizational entity in selected dimensions; and (ii) a narrative describing a sequence of events on how development and change unfold (Van de Ven and Poole, 2005). The second definition is often associated with a process theory explanation of the temporal

order and sequence, in which change events occur, based on a story or historical narrative (Pettigrew, 1990; 1997; Poole *et al.*, 2000; Van de Ven, 1992). Only this latter approach can describe how firms develop and change over time (Pettigrew *et al.*, 2001). From this point of view, and within an input-process-output model, events represent changes in the variables, which in turn constitute stages in the process. Thus, as a process unfolds, its sequence of events, inherent causes and consequences can be observed, opening the proverbial 'black box' between the antecedents and the results of change (Van de Ven and Huber, 1990). This analysis calls for longitudinal research in which files, documents, and reports are used to illustrate the company's objectives, as well as the visible results of the changes implemented.

This type of study is therefore highly suited to research into phenomena that cannot easily be measured from a quantitative point of view (Yin, 1993).

The initial sample consisted of all the firms listed on the Madrid Stock Exchange (Spain). We selected these firms because there is greater accessibility to information regarding the composition of their governing bodies. Moreover, listed firms are much more visible than other firms and therefore any relevant strategy-related event would be reported in the press. Likewise, the availability of information in annual reports, important events, etc., helped us to corroborate and verify the data taken from the press (Churchill, 1999).

The period of our study is from 1993 to 2000. We selected this period for two fundamental reasons. Firstly, the business world experienced an important change during this time, driven by globalization and the technological revolution, which prompted many large Spanish firms to introduce strategic changes (Sánchez, Sánchez and Escribá, 2006). Secondly, unlike in the previous decade, the number of mergers over this period was not excessive, which would otherwise have introduced a bias into our investigation when we included strategic changes due to mergers. We therefore consider that this period is appropriate for the aims of our study.

A *strategic change* may imply adjustments in company strategy, structure, power distribution, and control systems. The literature provides a detailed description of the changes in strategy (Lant *et al.,* 1992), structure (Lant *et al., 2*992; Pitcher *et al., 2*000), power distribution and control systems (Barker *et al., 2*001; Garg *et al., 2*003; Lant *et al.,* 1992; Miller, 1993; Simons, 1994). The significance of the change in these elements indicates different levels of change, ranging from incremental to radical (Romanelli and Tushman, 1994; Tushman and Romanelli, 1985). However, a radical change or strategic reorientation always implies changes across all the domains of an organization. In order to detect these changes, the study followed the example of other works (Miller, 1993; Rindova *et al., 2*010; Romanelli and Tushman, 1994), reviewing information published in the press on each of the companies over eight years. This information was taken from the Baratz database, which provides a summary of reports published in the principal Spanish financial journals. All the firms in the study were quoted on the stock exchange, so any significant changes would be reported in the press. We also looked at any relevant facts held by the Madrid Stock Exchange relating to the period of our study, in order to corroborate the data and compare them with the information provided by the Baratz database. This comparison showed that these facts relate above all to the distribution of power, with almost no reference to strategy. Only information relating to company growth, rather than company structure, was reported. We also reviewed the CEO letters published in the firms' annual reports –which summarise many of the changes adopted by the firm– and CEO interviews with the press. This variety of sources allowed us to specify and verify the information. However, our study has focussed principally on archival data, the annual report, important events registered with the CNMV (the National Stock Market Commission; the regulatory body of the Spanish Stock Market) and the news. As Klarner and Raisch (2013) point out, archival data provide "consistent information for

longitudinal studies, but data from questionnaires and interviews can be contaminated by respondents' biased recall" (page 165).

To detect changes in the distribution of power, we referred to firms' published annual information about the composition of their corporate governance bodies. Making a year-by-year comparison of the list of managers and directors published in the companies' annual report we detected four types of governance mechanism changes: succession, when there was a new CEO; turnover, when changes were made to other personnel within the TMT; reorganization, when posts within the team were created or abolished; and board turnover, when changes were made to the board of directors. The fifth power distribution change relates to significant changes in the shareholders. We used news items to identify this type of change in the company's capital structure (Weisbach, 1988).

All of the firms quoted on the Madrid Stock Exchange had experienced board turnover and shareholder changes during the study period. It is possible that publicly listed firms might experience more frequent changes in their shareholders and boards than other firm samples. The sample selection was therefore based on the different types of managerial changes. Using qualitative data methods, we selected companies that we believed would give the most explanatory results. These included companies with the least typical data (Eisenhardt and Graebner, 2007; Yin, 1993), such as CEO succession without TMT turnover and TMT turnover without CEO succession. This data was relatively infrequent and did not fit with the relations that we were looking for (Gibbert and Ruigrok, 2010) and so would ensure internal validity. Our objective was to provide a wide range of examples of succession and TMT turnover, and to assist our understanding of the relationships being studied we included the two extremes of high-turnover companies and firms with no change in their top management (Eisenhardt and Graebner, 2007). Of the various firms that fulfilled the criteria for change, we chose those that had been cited most often in the press or whose annual reports were more

detailed. Our final sample consisted of 10 Spanish companies, based on their qualitative information over the eight-year period of the study. Table 1 shows the companies selected and their fundamental characteristics. Given that only a small number of observations are required for accurate results in comparative studies (Yan and Gray, 1994), we considered that 10 was a suitable number of companies for our research. Four examples were placed in CEO succession and TMT, to reflect the maximum range of managerial change.

Contextual data such as sector and firm performance were also collected from information published in annual reports. Sales growth was selected as the specific measure for performance because this indicator is widely used to measure a firm's success (Boeker and Goodstein, 1993) and can be used as an early warning system for the validity of current strategy (Gordon *et al.*, 2000). Managers' or other stakeholders' dissatisfaction with the firm's performance can act as a catalyst for change and can help to overcome organizational inertia (Boeker, 1997b; Sánchez *et al.*, 2010). To evaluate the effectiveness of the firm's response to sectoral conditions we used Sales Growth adjusted by sector.

In all, 3,909 news items were sorted independently by three coders, who were given information on the types of change or events that were to be considered. Any year in which a substantial change in any of these dimensions was observed (see Appendix A) was recorded in the appropriate category for that particular date. The coders then wrote independent event histories in chronological order, detailing the content of the news. They then exchanged documents and the three coders' classifications were compared. A high level of congruence was attained (97%), which can be explained by the use of a summary sheet designed from the literature definitions of each type of change. Furthermore, different sub-periods of change for each company could be identified over the extensive period of our study. By breaking the study into sub-periods we were able to increase the number of observations, enriching the analysis and facilitating our conclusions. The sub-periods were chosen because a certain

continuity in the events within each period and the specific discontinuities at the extremes of the time frame (Langley, 1999; Langley, Smallman, Tsoukas and Van de Ven, 2013).

Insert Table 1 about here

Results and Discussion

We carried out a hierarchical cluster analysis, which is the most appropriate method for small samples. The objective of this method is to detect any typologies by considering multivariant data (Jain, Murty, and Flynn, 1999). To achieve this we codified the changes summarized in Tables 2 and 3 as binary variables, where 1 represents the existence of change and 0 represents the absence of change. We created the clusters using the Ward method, which minimizes intragroup variance, and maximizes group homogeneity. We used the squared Euclidean distance as our measure, which is suitable for use with the Ward method. The results obtained demonstrate the existence of four typologies of change, which correspond to the patterns of change identified in Table 4 (distance <5): A, B, C and D. The patterns that were most clearly identified by the cluster, because they were more compact and homogenous, were those that correspond to patterns C and D (distance <2). For a greater distance (<10) we grouped the data in the cluster, which, according to the punctuated equilibrium, matched the firms that implemented incremental change (patterns A and B) and firms that made radical changes (patterns C and D). In the initial phase, Tables 2 and 3 recorded the date of the change. Subsequently, once the sub-periods of change had been identified, we coded the various changes as binary variables, using 1 if a change had taken place and 0 if no change had occurred. Finally, once the patterns had been identified through the analysis cluster, we were able to assign a pattern to each period, using the letters A, B, C or D. Because of the restrictions on the length of this paper, we have only included the final

tables (Tables 2 and 3), in which the value 1 has been replaced by the letter that identifies the pattern adopted by the firm during the period of the study.

Insert Tables 2-3 about here

As we have noted, some authors have suggested that the term 'strategic change' implies that modifications take place simultaneously (Amis *et al., 2*004). By using the dates of the news items, we are able to determine the order of precedence of the components of strategic change that took place within the firms. This in turn allows us to establish, for each company and for the entire length of the study, the sequence of the events that took place in each company. By analyzing these sequences we can clearly identify a set of four sequences or change patterns that were repeated at different times within the firms in the sample (Table 4). These sequences are identified in Tables 2 and 3.

Insert Table 4 about here

These sequences can take place over one, two, or even three years. This indicates that although firms may undergo the same sequence of change, they are not always implemented at the same speed. By identifying these sequences, we can respond to *what* changes and *how* it changes (the order of the sequence of the changes). To determine the *why* of these sequences, we analyzed the company's performance history because this is significantly related to strategic change (Ben-Menahem *et al.*, 2012) and allows us to evaluate the firm's response to the specific environmental conditions. Our aim is to establish whether these change sequences were linked to performance patterns.

There are some periods where no change occurs, but these are rare; the norm being a certain degree of change, at least within the firm's strategy or structure. We have therefore

called the first sequence *continuous incremental change*, described by some authors as uninterrupted sequences of competitive actions (Rindova *et al.*, 2010).

Continuous change (sequence A) refers to changes either in the firm's strategy or structure, with no other changes in its power distribution or control systems. There is a clear temporal order of strategy and structure. As Amburgey and Dacin (1994) point out, strategy seems to be "a much important determinant of structure than structure is of strategy" (p.1446). The firm makes incremental changes to either strategy or structure, in response to non-radical changes in the environment, and adapts itself to the periods of convergence set out in the punctuated equilibrium model (Miller and Friesen, 1980; Tushman and Romanelli, 1985; Romanelli and Tushman, 1994).

Sequence B (Table 4), *adaptive change*, also corresponds to so-called incremental change (Romanelli and Tushman, 1994). It tends to occur at a time of instability or performance fluctuation, but within acceptable values, or even when the firm is performing at a high level, in relation to the sectoral average. This pattern or sequence tends to begin with changes among the firm's shareholders, followed by TMT turnover and then board turnover. Changes to the distribution of power are followed by changes in strategy and, occasionally, the firm's structure (Castro *et al., 2*009; Rindova, 1999; Westphal and Fredrickson, 2001). This change sequence usually seems to have positive effects for the firm, particularly if the changes take place over a relatively broad timescale, which might indicate that gradual change is appropriate.

Sequences C and D consist of strategic reorientation, affecting all of the firm's components: power distribution, strategy, structure, and control systems. The main difference between sequences three and four lies in the actors involved, principally whether there is a change of CEO. This highlights the importance of identifying *who* is involved in the changes.

We distinguish four types of strategic reorientation, according to *who* is involved in the change and the firm's previous performance (*why*), or the need for change (Figure 1).

Insert Figure 1 about here

The majority of firms that follow sequence C (Table 4) are achieving good performance. In firms that start from a favourable position, an improvement can be observed in their sales growth following the implementation of the changes. Conversely, if the firm starts from a position of poor performance, the changes do not have a positive effect. We have called this sequence "proactive" strategic reorientation because it produces positive results when it is not imposed as a result of poor performance or a situation that adversely affects the company. A quantitative analysis might consider some of the changes to be simultaneous, because many of them take place within the same year. However, by using the date of the news item as the control, we observe that a reorganization of the management team tends to precede changes to the strategy and structure. Moreover, in every case, changes to the control systems inevitably follow TMT reorganization, within a six-month period. It therefore appears that managerial changes precede the other components of reorientation, and we would even go so far as to state that for a firm to carry out a proactive change there must be collaboration between the board and management team. Although some studies indicate that a change of CEO is the starting point for strategic reorientation, it is reasonable to believe that an incumbent CEO could produce exactly the same strategic change (Dahlmann and Brammer, 2011), at least, in a stable environment (Henderson *et al.,* 2006). On the other hand, when this change sequence is adopted by firms experiencing poor performance, "proactive change" may be "insufficient" (see Figure 1). At first, sales may increase because of the expectations created by the change. But this improvement is not sustained in the following

year and may even decline (see, for example, the case of Zaragozano in Table 2, which needed three successive changes to achieve growth).

Finally**,** firms that need to improve their performance may have to involve more actors in the change process, including CEO succession (sequence D in table 4). A prior CEO's enduring commitment to a strategic path might be the result of cognitive inertia, such as long tenure (Henderson *et al.,* 2006). Risk-taking is less likely in the face of poor performance because the CEO tends to adopt defensive strategic choices when the firm's survival is perceived to be at risk (Shimizu, 2007). The appointment of a new CEO makes strategic change more likely (Hayward and Shimizu, 2006) and demonstrates the proper functioning of internal and external control mechanisms and the firm's openness to a new beginning (Hayward and Shimizu, 2006). We observed two different circumstances affecting the firm's subsequent performance. Firms that start from an unfavourable position, whose performance is below the sector average, succeed in improving their growth sales through strategic reorientation. We have therefore called this pattern "necessary change". On the other hand, firms that implement this change sequence starting from an acceptable performance level, with results that are similar to or above the sector average, will see a decline in their performance, possibly because this type of change is "excessive" (Figure 1) for their particular situation. The dynamic properties of the sequences of firms' competitive actions provide observers with the appropriate cues for forming impressions about a firm's strategy, and allow them to compare firms competing in the same environment (Rindova *et al., 2*010). Employees might think that the firm is performing badly, which could create a situation of uncertainty and mistrust between the actors (Datta *et al., 2*010). This might then cause them to undervalue the routines and ways of working that had been profitable up to that point. Disruption to profitable strategies could originate with the new CEO, who brings his or her own ideas and who might not agree with the firm's habitual strategies (Hayward and Shimizu,

2006). Alternatively, this disruption could be the result of spite or fear among trustworthy managers, who might choose to leave their job (Boeker and Goodstein, 1993; Wiersema and Bantel, 1993). The firm then loses the valuable know-how that has enabled it to achieve its good results. Anova test was performed in order to check if there are significant differences in sales growth after these changes take place. The companies which have implemented a necessary or proactive change have higher sales growth means (necessary=52,13 ; proactive=40,28) than those obtained (necessary= -0,566 ; proactive=27,24) before these strategic changes ($p<0,01$). By the other hand, the firms which have implement excessive or insufficient change have lower sales growth means (excessive=0,74 ; insufficient=-2,94) than those obtained (excessive=10,08; insufficient=0,89) before these strategic changes (excessive $p<0,05$; insufficient $p<0,1$).

The order of events in this sequence always includes board turnover, prior to or simultaneously with CEO succession. In every case, CEO succession precedes changes to TMT turnover – if it occurs– and TMT reorganization. As with *proactive change*, changes in the control systems follow changes to the management team. These findings reflect the complexity of modern companies, whereby any individual, even a CEO, is unable to impose significant change without an accompanying change in the TMT. If a firm is to be strategically reoriented, it appears that the participation of the whole management team is required (Volverda *et al., 2*001). In fact, none of the firms in this study would be able to initiate strategic change through CEO succession alone.

Table 4 shows that management reorganization occurs in the two sequences of strategic reorientation and it should be noted that the firms that made radical strategic changes had all reorganized their management teams. Conversely, firms that did not reorganize the TMT did not experience radical strategic change or reorientation. Some firms even experienced TMT turnover but only made adaptive change. These findings reveal that

reorganization of the management team is necessary to stimulate strategic reorientation because it always precedes the other components of strategic change. Managerial reorganization does not necessarily mean changing the members of the TMT, rather it refers to a reshuffle of responsibilities, involving (perhaps) the same people. It may be that the demographic composition of the TMT is less important for change (Dalton *et al., 2*998) than assigning each manager to the position that best suits their potential (Gordon *et al.,* 2000;Greve and Mitshashi, 2007; Hayward and Shimizu, 2006).

Conclusion

We believe that this research improves our understanding of the sequence of events that occur when a firm undergoes strategic change and also makes a new contribution to the existing literature. Establishing a temporal order is essential for linking action and processes and it is more suitable than other parameters such as pace or linearity (Liguori, 2012).

As we have indicated, change can originate from any environmental factor or arise from an internal and intentional action (Langley *et al.,* 2013). However, organizational dynamics are not characterized by deterministic natural selection or by strategic choices, but rather by a process in which the external environmental forces that are the drivers for change interact with the firm's internal attempts to achieve results that are also subject to chance, coincidence and luck (McKay and Chia, 2013). Moreover, in the process of adapting to the environment, the agents of change have to overcome the inertia of the other workers and mid-level managers if they want to bring about the change (Battilana and Casciaro, 2012). One of the limitations of this study is that there is too much focus on the TMT and CEO, preventing us from gaining an overall understanding of the phenomenon. Future studies therefore could include the effects of middle managers on the patterns of change that have been identified. However, this study has contributed to the academic understanding in this field by explicitly addressing the *who, what, why,* and *how* of implementing a strategic change process, an

aspect that has been largely neglected in organizational research (Van de Ven and Poole, 2005), and the findings of this study have a number of significant implications in this field.

First, our results indicate that, since periods of complete strategic inactivity are rare, the normal state for a firm is one of change, even though these periods of change clearly vary in their intensity and duration.

Second, the study identifies distinct patterns of radical and incremental change, which explain the different methods that firms use when they are seeking how best to adapt to their environmental conditions or testing the conditions for change. This study broadens the traditional view of punctuated equilibrium, and identifies two sequences of incremental change (continuous and adaptive), and a further two sequences of strategic reorientation or radical change (proactive and necessary change). Identifying the sequence of changes helps to clarify our understanding of *how* and *why* organizations change. The same sequences can lead to excessive or insufficient change, depending on the firm's prior performance. Understanding the change process can accelerate its implementation and create a source of competitive advantage for the firm in the current turbulent environment, in which change and adaptation to the environment is fundamental to its survival (Rindova *et al., 2*010).

Third, this study has found that change in a company's TMT, through reorganization, can be sufficient to overcome organizational inertia and initiate strategic change, within the environmental limitations. Practitioners need to know that strategic reorientation can be achieved without having to appoint or dismiss members of the TMT. This analysis underlines the importance of seeking the best fit between the managers' knowledge and experience and the nature of their role in the firm.

We have demonstrated that strategic change involves both board and managerial changes. In this study, changes in the TMT appear to be related to changes in the board of

directors, which is in line with the findings of previous studies (Westphal and Fredrickson, 2001). This suggests that the composition of the board of directors is a decisive factor in strategic decision-making. Future research could therefore examine the joint influence of the board and TMT on strategy formulation (Castro *et al., 2*009; Kim *et al., 2*009).

As Langley (1999) indicates, the synthetic strategy of qualitative analysis uses a narrower level of detail for tracing the process for each case. However, it has the advantage of producing relatively simple theoretical formulations and allows a certain generalization of the data. Future studies would be able to select one particular type of change process, and to describe in greater detail the companies that have adopted this process and identify the results. Finally, the study has other limitations, such as sample selection, although we have tried to include a variety of situations. We should point out that cluster analysis is an exploratory method, and it would therefore be necessary to verify the results against other, independent samples. More in-depth case studies and quantitative empirical analyses need to be carried out, with a view to verifying the relationships and patterns of change observed in this study.

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Table 1: Firms principal characteristics

Managerial change	Company	Sector	Fundamental characteristics
Succession-TMT turnover	Telepizza	Hotels, restaurants, and cafés	Very fast expansion and growth 20-fold increase in the number of outlets during the study period
	Fasa Renault	Equipment production and assembly	Unfavorable economic situation in the sector Ambitious investment plan Forced succession (year one) and succession due to retirement (year eight)
	REE	Electricity supplier	Public enterprise New legal environment to liberalize the sector
	Bodegas y Bebidas	Drinks and tobacco	Unfavorable economic situation in the sector nationwide International growth (acquisitions, alliances, joint ventures) Quality Assurance policy (specified place of origin for wines)
Succession-no TMT turnover	Sos Arana	Foodstuffs	Considerable growth through mergers and acquisitions.
	OMSA	Foodstuffs	Top management main shareholders Senior managers with severance protection clauses from OSCAR MAYER FOOD
No succession-TMT turnover	Zardoya Otis	Equipment production and assembly	Commitment to quality. Placed as head of the Otis group. Highest degree of TMT turnover: executive vice president
	Banco Zaragozano	Banking	Large geographic expansion
No change	Pescanova	Foodstuffs	Products innovated through acquisitions The growth does not result in reorientation, the former policy seems to continue in force
	Zeltia	Other consumer goods	Focus strategy: Pharmamar as head of the group

Table 2: Sequence of events in the firms (part I)

	Cases		Share	Board	CEO	TMT Change		Strategy	Structure	Control	Gsales* (%)
						Turnover	Reorganiz.				
Telepizza	1	Year 1	C	C							Very high
		Year 2					C	C	C		Very high
		Year 3								C	Very high
	2	Year 4				B			B		Very high
	3	Year 5	C	B		B		B	B		Very high
		Year 6					C	C	C	C	Very high
	4	Year 7	D	D	D	D	D	D			Moderate
		Year 8	D	D			D		D	D	Moderate
Fasa Renault	5	Year 1	D								Decreasing
		Year 2		D	D		D	D	D	D	Very high
	6	Year 3						A	A		Decreasing
		Year 4							A		Very high
	7	Year 5									High
	8	Year 6		B		B		B	B		Very high
		Year 7							B		High
	9	Year 8		D	D	D	D	D	D	D	Zero
REE	10	Year 1									Moderate
	11	Year 2	C				C	C	C	C	Very high
	12	Year 3				B		B			Very high
		Year 4		B					B		Very Low
	13	Year 5	D		D	D					Decreasing
		Year 6				D	D	D	D	D	Moderate
	14	Year 7	B					B			Moderate
		Year 8		B		B			B		Moderate
Zaragozano	15	Year 1	B					B			High
		Year 2	B	B							Very low
	16	Year 3	C						C		High
		Year 4		C		C	C	C	C	C	Moderate
	17	Year 5	C	C				C			Very low
		Year 6		C		C	C		C	C	Low
	18	Year 7	C	C	C		C	C	C		Decreasing
		Year 8		C			C		C	C	Moderate
SOS	19	Year 1									Decreasing
		Year 2									Low
	20	Year 3		D							Very high
		Year 4		D	D		D	D	D	D	High
	21	Year 5						A			High
		Year 6						A	A		High
	22	Year 7		C				C			Zero
		Year 8					C	C	C	C	Very high
OMSA	23	Year 1	B								Zero
		Year 2	B					B			Moderate
		Year 3	B	B							Moderate
	24	Year 4	B	B				B			High
	25	Year 5						A			Moderate
		Year 6							A		Zero
	26	Year 7									Zero
	27	Year 8	B	B				B			Moderate

* Very low (GSales<-15); Low (-15<GSales<-8); Decreasing (-8<GSales<-1); Zero (-1<GSales<1); Moderate (1<=GSales<=8); High (8<GSales<=15); Very high (GSales>15

Table 3: Sequence of events in the firm (part II)

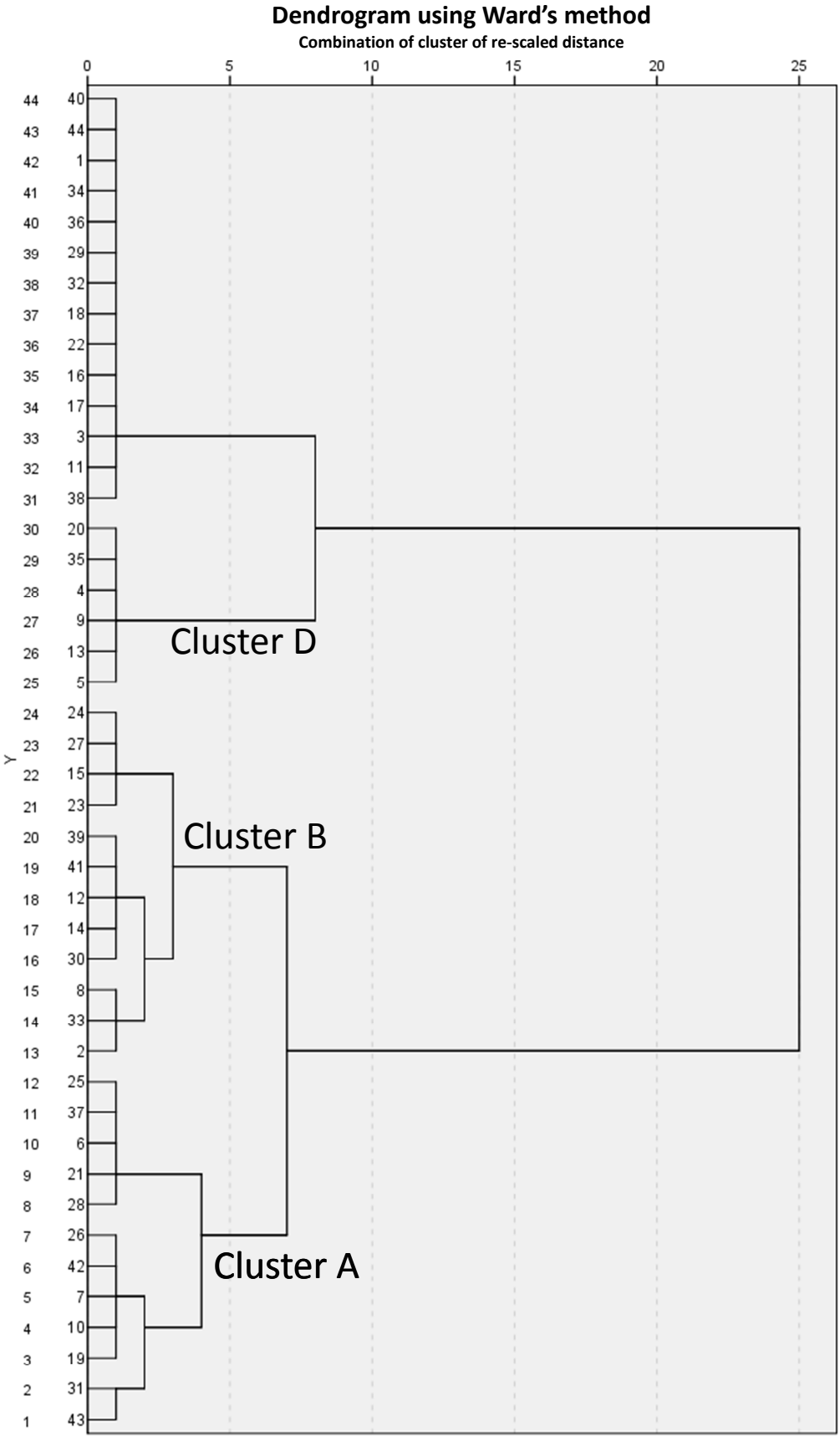
Cases		Share	Board	CEO	TMT Change		Strategy	Structure	Control	Gsales* (%)
					Turnover	Reorganiz.				
Zardoya Otis	28 Year 1						A			High
	29 Year 2		C		C	C	C	C	C	Moderate
	30 Year 3		B				B	B		High
	Year 4						B	B		Moderate
	31 Year 5							A		Moderate
	Year 6							A		High
	32 Year 7		C			C		C		Moderate
	Year 8		C		C		C		C	High
Bodegas y Bebidas	33 Year 1	B					B			High
	34 Year 2	C	B				B	B		Moderate
	Year 3		C			C	C	C		Very high
	Year 4						C	C	C	Moderate
	35 Year 5		D	D		D	D	D		Moderate
	Year 6	D	D			D	D	D	D	Zero
	36 Year 7	C	C		C	C	C		C	Decreasing
	Year 8	C				C	C	C		Decreasing
Pescanova	37 Year 1						A	A		Moderate
	38 Year 2	C								Moderate
	Year 3					C	C		C	Moderate
	39 Year 4		B							High
	Year 5	B	B				B	B		Moderate
	Year 6	B								High
	40 Year 7	C								Moderate
	Year 8		C			C	C		C	Very high
Zeltia	41 Year 1	B					B	B		Low
	Year 2	B	B					B		Moderate
	Year 3	B	B							High
	42 Year 4									Moderate
	43 Year 5		B							High
	Year 6	C	B				B			High
	44 Year 7	C				C	C			Very high
	Year 8	C					C	C	C	Very high

* Very low (GSales<-15); Low (-15<GSales<-8); Decreasing (-8<GSales<-1); Zero (-1<GSales<1); Moderate (1<=GSales<=8); High (8<GSales<=15); Very high (GSales>15

Table 4: Sequences patterns of strategic change*

Pattern A: (Strategy)-(structure)
Pattern B: (Share)-(turnover)-board-strategy- (structure)
Pattern C: Share-board- (turnover)-reorganization-strategy-structure -control
Pattern D: (Share)-board-CEO-reorganization-(turnover)-strategy-structure-control

* The change within the brackets does not always appear in the pattern


Dendrogram using Ward's method
Combination of cluster of re-scaled distance
0
5
10
15
20
25
Y
44 40
43 44
42 1
41 34
40 36
39 29
38 32
37 18
36 22
35 16
34 17
33 3
32 11
31 38
30 20
29 35
28 4
27 9
26 13
25 5
24 24
23 27
22 15
21 23
20 39
19 41
18 12
17 14
16 30
15 8
14 33
13 2
12 25
11 37
10 6
9 21
8 28
7 26
6 42
5 7
4 10
3 19
2 31
1 43
Cluster D
Cluster B
Cluster A

APPENDIX A: MEASURING ORGANIZATIONAL CHANGE

CHANGES IN STRATEGY

LOW PRICE Modifications Compared to competitors	PRODUCT QUALITY Improvement Modification	CUSTOMER ASSISTANCE QUALITY	LEAD TIMES	DEGREE OF REACTION TO CUSTOMER REQUIREMENTS	INNOVATIONS Product Services Process	PRODUCT EXCLUSIVITY	GROWTH Mergers Strategic Alliances		SALES TURNOVER	MARKET SHARE	ADVERTISING	DISTRIBUTION	BREADTH OF PRODUCT RANGE
							Short-term	Structural					

CHANGES IN STRUCTURE

ORGANIZATION CHART Relationships of authority Communication channels Responsibilities	GROUPING CRITERIA by Function, Markets, Matrix	BUSINESS UNIT SIZE	REORGANIZATION OF BUSINESS UNITS	STRUCTURALLY AUTONOMOUS PLANTS AND OTHER DIVISIONS Opening or closing

CHANGES IN POWER DISTRIBUTION

SHARE CAPITAL STRUCTURE

CHANGES IN CONTROL SYSTEMS

ADMINISTRATIVE PROCEDURES Incentives system included	BUDGETS	INFORMATION SYSTEMS	STOCK CONTROL	PLANNING SYSTEMS	DIFFERENCE $\geq$ 1% IN SGA COSTS / SALES