Microfoundations of (Inter)action Between Top and Middle Managers in Strategic Implementation

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Abstract
Objective: We used the microfoundations lens to contribute to studies on the interaction between top and middle managers, as well as to studies on the cognitive effects of strategy implementation.

Methodology: Empirical evidence result from a survey conducted with 104 middle managers of a large size telecommunications company operating in Brazil. Originality: Making use of traditional and contemporary literature and in opposition to simplified assumptions about managers’ interfaces, we revealed the relevance of managerial interactions and their idiosyncratic and inimitable nature. Results: Our analyses revealed that a combination of micro adaptation practices by middle managers and their perceptions regarding top manager’s participative leadership positively influenced the way implementation is cognitively realised. Such effects are even more pronounced when the two groups of managers experience a good relationship.

Theoretical Contributions: The survey, in pointing to microfoundational aspects that contribute to strategy implementation, opens up possibilities for future studies based on this theoretical perspective. It also contributes to the practice, by elucidating aspects, both behavioural and cognitive, susceptible to management and to improvements in the implementation processes.

Keywords: Microfoundations. Strategy implementation. Top managers. Middle managers.

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Introduction

Two groups of managers stand out in seminal literatures on organisational and strategic studies due to their ability to impact the implementation of planned changes. The first group comprises top managers of large organisations, who are usually positioned at the same level or at one hierarchical level below the CEO and whose main responsibilities involve making strategic decisions and formulating long-term plans (Amason, 1996; Naranjo-Gil & Hartmann, 2006; Dooley, Fryxell, & Judge, 2000). The second group includes middle managers, who are usually positioned at two or three hierarchical levels below the CEO, simultaneously enjoy access to top management and knowledge about the company operations (Wooldridge & Floyd 1990; Wooldridge, Schmid, & Floyd, 2008; Lê & Jarzabkowski 2015; Sillince & Mueller 2007).

Although it exists an accumulated knowledge on the roles played by top and middle managers, with the significant influence both groups exert on implementation, these traditional literatures has developed along two separate paths, inhibiting understanding of how these managers interact and jointly affect the realisation of strategies (Raes et al., 2011).

More recently, research interest in exploring perspectives that enable interfaces between top and middle management grew (Ateş, Tarakci, Porck, van Knippenberg, & Groenen, 2018; Heyden, Fourné, Koene, Werkman, & Ansari, 2017; Knox, 2020; Vuori & Huy 2016), especially in considering the procedural limits of traditional structures that may harm inter-organisational relations, affecting competitive results (Teece, 2007). In this respect, the theoretical foundations of this work indicate that specificities involving microfoundations of the two managerial levels and their interpretative precedents for an appropriate strategy implementation have not yet been investigated.

The microfoundations lens starts from a basic principle, namely that the comprehension of macro phenomena - which, in strategy, may be exemplified by a company’s performance or competitive advantages - must consider aspects that take account of the individuals. For scholars in this approach, stating that a company has certain capabilities is a way to simplify an intricate set of combinations that involve actions, competences, knowledge and individual abilities (Abell, Feli, & Foss, 2008). As proposed by Felin and Foss (2005, p.441): “there is no organisation without individuals (...);” yet this elementary truth seems to have been lost in the increasing focus on structure, routines, capabilities, culture, institutions and various other collective conceptualizations in much of recent strategic organization research”.

In this regard, scholars who hold this perspective understand that any inference about phenomena that take place at the macro / organizational level, presuppose an investigation of
a complex set of actions and interactions among individuals (Abell et al., 2008). To these actions and interactions, other aspects that may influence the decision-making process and behaviours / actions adopted must be added. By way of illustration, we may mention abilities (Nelson & Winter, 1982), predispositions, expectations (Felin & Foss, 2009), plans, purposes, hypotheses (Foss & Felin, 2011), emotions, cognition, knowledge, beliefs, values and interests (Salvato & Rerup, 2011), among others.

In an attempt to contribute to such perspective, this survey intends to answer the following question: what are the microfoundational effects of actions, perceptions and interactions between top and middle managers on strategy implementation? The microfoundations of interactions between managers and their interpretative precedents are herein understood as the bases that contribute to the promotion of the implementation of organisational changes. This orient the investigation in three factors: middle manager’s perception of top manager’s participative leadership; actions of facilitating adaptability enacted by middle managers; and relationship quality between these two management groups. Thus, the main contribution of this work is to demonstrate how middle managers implement strategies, cognitively, based on its actions and interpretations regarding the dynamics in which they are involved with top managers.

We justify our study on the existence of tensions surrounding the idiosyncratic, tacit, and therefore inimitable nature of relations around top and middle managers. Accordingly, we argue that the implementation of strategy rests on the interactions between managers that are tacitly shared, with predispositions that confirm the cognitive dependence on leadership, communication and relationships. These interpretations and predispositions among managers are transmitted among partners and shared not by means of formal rules, and constitute the main proposition that supports this investigation. Interactional capabilities lead to emerging and collective results and, therefore, provide microfoundational essence (Floyd and Wooldridge, 1992; Felin, Foss, & Ployart, 2015), in terms of resources that enable a company to respond, in a unique way, to the challenges of effectiveness in implementing a strategy. Such interpretations and predispositions provide an organisational way of acting that enables members to reconfigure relational capabilities among managers for an adequate capitalisation of the intended strategy (Teece, 2007).

It is known that strategy implementation involves the extent to which communication, interpretation, adoption and realisation of strategic decisions within an organisation are aligned with its context (Raes, Heijltjes, Glunk, & Roe, 2011). In this regard, as highlighted by Thomas and Ambrosini (2015), strategy implementation will be understood as its cognitive realisation,
by means of middle managers’ assessments on the achievement of deliberate plans and the emergence of autonomous initiatives.

Our empirical evidence derive from a survey conducted with 104 middle managers of a large size telecommunications company operating in Brazil. Results mostly suggest that middle managers’ perceptions of their interactions with top managers, as well as middle managers’ actions, influence how strategy implementation is cognitively realised. Such findings also contribute to the growing literature of microfoundations (Felin, Foss, & Ployart, 2015), offering empirical evidence on the cognitive means on which relations between managers are based. As suggested by Eggers and Kaplan (2013), cognitive aspects are essential for understanding strategic choices and, consequently, organisational performance. This study also contributes to the examination of interfaces between top and middle managers, and has implications for organisations and managers willing to understand the outcomes of their actions, interpretations and interactions on the way they substantiate the implementation of strategies.

This article develops below into three major parts. The first explains the theoretical foundations and the conceptual model and includes the research hypotheses. Next, the methodology and details of data collection and analysis are presented. Finally, results and implications for research and practice are discussed, as well as limitations and suggestions for further studies.

Managerial microfoundations in strategic implementation

Seminal research in strategy focused on formulation as a central activity (Andrews, 1971; Fredrickson & Mitchell, 1984). This research supposed that top managers were committed to implementation based on the assumption that organisations should inevitably take a given path when preparing their strategic plans, a path that necessarily involves top-down deliberation (Langley, 1988). Over time, however, several studies began to challenge the traditional dichotomy between formulation and implementation, now increasingly seen as strongly interlaced activities (Mintzberg, 1978; Pettigrew, 1992; Chakravarthi and Doz, 1992; Wolf and Floyd, 2017; Burgelman et al. 2018). In other words, they are not two opposites in a continuous and linear process (Whittington, 2007; Jarzabkowski, Balogun, & Seidl, 2007), because implementation may generate important changes even to strategy’s contents (Vaara & Whittington, 2012).

From the point of view of middle manager’s involvement, since Bower (1970) and Burgelman (1983) the literature has become prolific in attesting the importance of this...
managerial level in implementation, which exceeds the mere execution of a strategic view established by top managers (Balogun & Johnson, 2004; Dutton et al. 1997; Floyd & Wooldridge, 1992; Floyd & Wooldridge, 1997; Rouleau, 2005; Vaz & Bulgacov, 2018). Over time, middle managers have been increasingly regarded as individuals having capacity and power to act (Feldman & Pentland, 2003). They become attributes of the organisation as a whole (Nelson e Winter, 1992) and, through the choices they make, their characteristics, abilities and cognition, they provide bases for the comprehension of collective organisational phenomena (Felin, Foss, Heimeriks & Madsen, 2012). When acting, these individuals take into consideration the situation and their experience (Feldman, 2000) and, based on this perception, “they help in the sensing, seizing, and transformation of opportunities” (Felin, Foss and Ployhart, 2015, p. 584). To ignore the influence of middle managers is to accept the hypothesis that they are homogeneous and unimportant, when it comes to understand organisational phenomena (Felin & Foss, 2005).

Social interactions between organisational players are a constitutive part of the understanding of any organisational activity (Barney & Felin, 2013; Abell et al., 2008). The structure of the complexities around the capabilities involved in implementing activities in an organisation is specifically addressed by Teece (2007), when prominence is given to managers’ microfoundations such as abilities, leadership, knowledge and interpretations, in their activities of monitoring the environment, making use of opportunities and reconfiguring organisational resources. That way, it is possible that making use of opportunities and reconfiguring resources are activities linked to a strategy implementation, as long as there is a “certain level of involvement” between managers to avoid the “anti-innovation bias”, overcoming resistances against what is regarded as novel and increasing creativity among participants (Teece, 2007, p. 1327). For the author, this can be done through efforts to reduce isolation in combination with hierarchic decision-making processes and interaction’s effects acknowledgement among managerial process’ participants. Taking this same line of argument, Gilbert (2005) states that social contact with higher hierarchic levels managers may favour adherence to routines.

In addition to Teece’s viewpoint, we may consider collective organisational constructs, including implementation, as intrinsically dependent on managerial cognition, represented by interpretations and individuals attitudes (Felin et al., 2015; Eggers & Kaplan, 2013; Salvato & Rerup, 2011) who guide it based on previous experiences, political acceptance and perceptions of the various decisions made. In other words, implementation represents an indication of the extent managers agree with what is being done within the organisation, of the extent managers believe strategy implementation is gaining sufficient attention, as well as, for instance, of the
emphasis on the microfoundational conditions that influence the rationale of their involvement (Miller et al., 2004; Gavetti, 2005).

Based on a cognitive perspective, the “realisation of implementation” indicates efforts to bring about organisational change (Bartunek 1984, Conger & Kanungo 1988, Thomas & Velthouse 1990) manifested as middle manager’s evaluation about the deliberate and emergent aspects of the strategy design (Thomas & Ambrosini 2015). Perceptions and interpretations affect implementation because middle manager’s mental schemes shape their subsequent understandings and actions regarding the strategy.

However, tensions emerge in middle managers’ perceptions of because they are not mere passive receptors of environmental stimuli (Mantere, 2008). On the contrary, other organisational players, who are critical for the delimitation of their attention, influence their actions and premises, especially members of the upper echelons (Hambrick and Mason, 1984). That is, top managers begin to act increasingly as players, who, by using their social influence, power and control, shape and regulate middle manager’s choices (Canales, 2013). These players influence the regulation of the company’s attention based on their abilities, beliefs and particular values (March & Olsen, 1976). They also format a set of concrete communications and procedures that affect the availability and visibility of issues and responses from decision-makers (Ocasio, 1997). That way, middle managers may re-enact the organisational environment by assigning meaning to informational events (Weick, 1995), for instance, in considering long-term competitive opportunities and threats. However, their efforts and their attention will be conditioned by communication channels and procedures shaped by top managers, such as investments’ considerations.

By acknowledging the contributions of these groups of managers to the strategy implementation, this study proposes a conceptual model based on interactional microfoundations between them. The model contemplates middle management actions and perceptions of top manager’s participative leadership, as well as the quality of the relationship between these two groups. These three components, namely action, interpretation and interaction, are the basic influences over the way strategic implementation is cognitively realised by middle managers. The theoretical model is presented and explained below.
Conceptual model

*Perceptions of participation in the strategy and cognitive realisation of implementation*

We initially suggest that middle managers’ perceptions and interpretations of their participation in the strategy are expressed by occasional participative leadership efforts by the top managers. Such perceptions will guide middle manager’s evaluations and attitudes regarding a cognitive realisation of strategy’ implementation. That way, middle management while thinking and acting, middle management process information and assign meaning to what is happening in the organisation (George & Jones 2001). In addition to a cognitive assessment of social and work-related issues (for instance, Golden et al., 2000; Huang et al., 2008; Zhou & Schriesheim 2010), such ways of thinking and acting adopted by the middle management influence the way they interpret organisational change programmes. Therefore, perceptions of participation in the strategy will shape middle manager’s estimates the overall success of deliberate and emergent aspects of implementation deliberate and emergent aspects.

Middle managers perceive the exercise of top manager’s participative leadership when the latter attempt to frequently interact with middle management to obtain information, which will be valued and used as basis for the strategy formulation (Raes et al., 2011). This behaviour is recognised by middle management not only through top manager’s efforts to include subordinates in the strategy (Edmondson, Roberto, & Watkins, 2003), but also through the overall decision-making process (Lam, Huang, & Chan, 2015; Miao, Newman, Schwarz, & Xu, 2003; Somech, 2006).

Such perception of the exercise of participative leadership by top managers has already been associated with several positive consequences for individuals, teams and organisations. For instance, at individual level, perception of participative leadership results in better employee performance (Lam et al., 2015). At team level, it contributes to efficacy (Edmondson et al., 2003), reflection (Somech, 2006) and creativity (Li, Liu, & Luo, 2018). Finally, it favours overall organisational commitment (Miao et al., 2013) and alignment of behaviours to strategy (Van Riel et al., 2009).

The analysis of these behaviours and interactions among agents is fundamentally important to the establishment of strategy microfoundations inherent both in the formulation an in the implementation. Middle management participation in the strategic decision-making process, promoted by top managers, may enable formulation to take place based on a collaborative and structured investigation. Baer, Dirks and Nickerson (2013) apply the microfoundations lens to suggest that this type of investigation consists in separating framing
of strategic issues from establishment of objectives. Therefore, top manager’s efforts to include middle management in the decision-making process favour the overcoming of cognitive biases and political interests that impair the quality of decisions and, consequently, people’s commitment to the implementation.

It must be also taken into consideration that middle manager’s perceptions of top manager’s leadership and inclusion practices enable the combination of cognitive and motivational dimensions, something so far relatively neglected by the strategy microfoundations approach (Foss & Lindenberg, 2013). Information and knowledge are not properties of organisations (Nelson & Winter, 1982), but rather of the individuals that are parts of them (Felin & Hesterly, 2007). Therefore, managers’ cognition and interpretative processes with which they are engaged are fundamentally important to the study of microfoundations of strategy (Eggers & Kaplan, 2013).

Based on these arguments, we propose the following hypothesis (H1): the perception of participation in the strategy, manifested in top manager’s participative leadership, relates positively to the cognitive realisation of implementation by part of the individuals in middle management.

The moderating effect of the quality of relationship between managers

It is important to emphasise that an organisations’ focus of attention emerges from social interactions in which decision-makers take part (Ocasio, 1997). Notwithstanding the potential positive impact of perceptions of participative leadership on the cognitive implementation of strategies, the predisposition of individuals in the middle management to share information depends on trust, openness and nearness they enjoy to members of the top managers (Ashford, Rothbard, Piderit, & Dutton, 1998). In other words, the quality of the relationship between the parties interferes in the dynamics involving top manager’s participative leadership and implementation’s outcomes.

Would then the quality of the relationship between top and middle managers be a relevant aspect to observe? The model proposed by Raes et al (2011) suggests that what happens during periods of contact between groups of managers determines the happenings that take place when there is no contact. That is to say, when the quality of interactions between top and middle managers is low or insufficient, the parties will begin to diverge, to pursue different lines of action, or even act against each other, resulting in poor alignment between formulation and implementation of strategies (Raes et al., 2011, p. 103).
Middle managers are aware of the importance of being attentive to the social context, and efforts to bring to light aspects potentially important to the implementation are limited to the relationship networks in which they participate (Dutton et al., 1997). For this reason, the strategic involvement of middle management is subject to their social relations within the organisation, especially with top managers (Ahearne et al., 2014; Pappas & Wooldridge, 2007; Shi, Markoczy, & Dess, 2009). It could be inferred that trust, inherent in good relationships, favours the information sharing (Nahapiet & Ghoshal, 1998) and reflects an organisational context that is propitious to the discussion of entrepreneurial opportunities (De Clercq, Dimov, & Thongpapanl, 2010; Kim & Mauborgne, 1998).

The quality of the relationship between groups of managers is linked to the level of openness, accessibility and trust of the interface between top and middle managers (Ashford et al., 1998).

Personal connections and relationships form a basis for examination of the microfoundations of strategy (Barney & Felin, 2013). For instance, the investigation of relational components enables understanding of the role of conflicts among managers from different hierarchic levels that emerge from their collective attempts to balance pressures in favour of continuity and changes to organisations (Martin, Keller, & Fortwengel, 2019). Such relations among managers, based on constructive dialogue, act then as an aggregating principle to explain how individual actions ensure conformity to capabilities at company’s level (Felin & Hesterly, 2007; Salvato & Vassolo, 2018).

In view of the foregoing, we propose the following hypothesis (H2): the higher the quality of the relationship between top and middle managers, the stronger the positive relationship between top manager’s participative leadership and quality of strategy implementation.

**Actions of facilitating adaptability and implementation realisation**

With regard to actions of facilitating adaptability, we observe that they were originally systematised by Floyd & Wooldridge (1992). These authors assigned to individuals in middle management the role of promoting flexible organisational arrangements in favour of the strategy, of creatively experimenting and of developing new job activities that reach beyond formal expectations (Floyd & Wooldridge, 1992). Therefore, when facilitating adaptation, middle managers promote learning and stimulate the development of other members of the organisation, improving their capacities to respond to changes (Nonaka, 1994).
Hence, individuals in middle management represent essential agents for an “adaptive” turnaround with regard to the implementation of strategies. As suggested by Weiser, Jarzabkowski and Laamen (2020), middle management actively participates and promotes adaptation in strategic implementations by creating meanings, narratives and coordination mechanisms (Weiser et al., 2020).

An application of middle manager’s actions to the implementation of strategies, from the viewpoint of microfoundations, was prepared by Lenka, Parida, Sjödin and Wincent (2017). The authors demonstrate that, in a context of strategies aimed at promoting expansion of service offerings to the market, individuals in middle management exert influence in favour of the implementation, breaking resistances, acting to persuade people to help the strategic cause, to informally conduct activities, to maximise access to resources and to promote collaboration (Lenka et al., 2017).

The lens of microfoundations applied to the cognitive realisation of strategic implementation proves itself, therefore, to be particularly appropriate to examine actions of the middle management aimed at facilitating adaptation. As we go increasingly deeper into the micro level of analysis, microfoundations permit us to explain the heterogeneity and the different degrees of manifestation of these middle managers’ strategically divergent behaviours (Schmid, Floyd, & Wooldridge, 2010). In this respect, Cruz, Corrêa, Diniz and Vaz (2020) demonstrate that middle manager’s actions to facilitating adaptability encompass different micro practices associated with the development of a firm’s dynamic capabilities.

These evidences, in turn, enable us to formulate the following hypothesis (H3): middle manager’s activities to facilitating adaptability are positively related to the quality of strategy implementation.

The set of formulated hypotheses is synthesised in our theoretical model, as illustrated by Figure 1.
**Methodological aspects**

This survey may be characterised by five major methodological aspects. Firstly, its conception is post-positivist, in that it adopts numerical observational measurements to study the behaviour of individuals (Creswell, 2010). Secondly, its method is hypothetical-deductive, in that a particular question is reduced to a set of variables that include hypotheses to be either rejected or confirmed. Thirdly, its purpose is descriptive, since it pursues deeper understanding of a relatively known subject. Fourthly, its investigative strategy is quantitative and is based on survey. Fifthly, it is a cross-sectional study, and does not infer from possible intertemporal interferences. Therefore, the choice of method was dictated by the attempt to wholly describe a complex organisation in terms of the interaction between managers at different hierarchic levels.

The survey was carried out with middle management individuals who work at a large-size Brazilian telecommunications company. The company was selected because it exhibits specific characteristics that proved to be important to the objectives of the survey. Apart from the fact that the telecommunications sector, because of its dynamism, is traditionally researched in studies on strategy (Mirabeau & Maguire 2014; Vuori & Huy, 2016), the truth is that, in larger organisations, information and interest asymmetries make the contact between top and middle managers more difficult (Hambrick, Finkelstein, & Mooney, 2005; Tengblad, 2002),
causing interactions between the two groups to become more critical and, consequently, results more difficult to obtain (Raes et al., 2011). The surveyed company will be herein named “Crescente Telecom”, to preserve its identity and the confidentiality of collected data.

We opted for following methodological aspects also adopted by previous studies on the contribution of managers to strategy implementation processes. On the one hand, we are examining competitive strategies of a business unit, in line with the literature analysis approach that explores middle manager’s activities of facilitating adaptability (Ahearne et al., 2014; Tarakci et al., 2018). On the other hand, the analysis focuses on managers’ perceptions (Thomas & Ambrosini, 2015).

Two major characteristics have been used as references to identify the population of middle managers of Crescente Telecom to be surveyed: position in the organisation’s formal structure, specifically two to three hierarchic levels below the CEO (Wooldridge & Floyd, 1990), and network of relationships and information, including access to top managers and extensive knowledge of the operations (Wooldridge et al., 2008). In total, 169 individuals in middle management fulfilled the selection criteria.

All these Crescente Telecom’s managers received e-mail messages from the authors inviting them to participate in the study. The final sample included answers from 104 individuals, or 62% of the target population. Most respondents declared themselves to belong to the masculine gender (83%) and to hold at least one graduation diploma (81.3%). Respondents are, approximately, 40 years old, work in the telecommunications sector for 14 years (standard deviation 8.38), work for the same company for 11 years (standard deviation 8.06) and occupy their current position for 3 years (standard deviation 3.4). It is worth mentioning that three invitations to participate in the survey have been sent to respondents: the original invitation, a reminder 10 days after, and a last reminder 20 days after that. It was then necessary to check the occurrence of a potential “no-response bias” associated with the coexistence of middle management individuals who responded to the survey at different moments. “Fisher” (Agresti, 2018) and Kruskal-Wallis (Hollander & Wolfe, 1999) tests results did not revealed any such biases, since respondents’ answers did not exhibited significant differences.

Although we have used scales already tested and validated by previous studies to measure our surveyed variables, we conducted pilot interviews with three individuals of Crescente Telecom’s top managers to make sure that the items would be relevant to their particular contexts. The questionnaire was administered on-line using the surveymonkey platform, after being pretested with five managers to render questions more relevant and to
adapt the language and make it more adherent to the organisation’s usual way of speaking. We have been attentive to potential translation biases; the original items of English scales were translated into Portuguese and a different person translated this version again into English, thus preserving the meaning of the original scales. To facilitate the identification of the persons about who the questions were made, we included pictures of the nine members of the company’s top managers in the questionnaire. The individuals in the middle management then answered the questions making use of the five-point Likert scale (1 = strongly disagree and 5 = strongly agree).

**Variables and data reliability**

**Dependent Variable**

Our dependent variable is the **cognitive realisation of implementation** and was measured considering six items used in previous studies. These items reflect both the overall perception of people relative to the success of the strategy and the adequacy of resources allocated to implementation efforts, linked to deliberate plans and emergent initiatives (Menon, Bharadwaj, Adidam, & Edison, 1999; Miller *et al.*, 2004; Thomas & Ambrosini 2015).

**Independent Variable**

The scale originally proposed by Floyd and Wooldridge (1992) served as basis for the evaluation of **middle manager’s actions of facilitating adaptability**, whose expression was considered as divergent strategic behaviour (Ahearne *et al.*, 2014; Tarakci *et al.*, 2018; Pappas & Wooldridge, 2007), as well as strategic role (Floyd & Wooldridge, 1994; Mantere, 2008; Wooldridge *et al.*, 2008).

Since it is a middle manager’s action beyond an interpretative and cognitive component, we evaluated such micro practices taking into consideration both self-assessments by respondents and assessments their peers made of them in respect to the quotidian manifestation of attitudes to facilitating adaptability. This same procedure was adopted by Pappas and Wooldridge (2007) and has the objective of reducing potential effects associated with the common method’s bias, in addition to increasing overall data reliability. This enabled the assessment of a total of 67 middle management individuals by at least one colleague. We then took the average of collected answers to that evaluation among peers and compared them with self-assessments performed by the middle managers using, to that purpose, Kolmogorov Smirnov and Wilcoxon tests (Hollander & Wolfe, 1999). Finally, the results of such tests enabled us to apply, in an integrated way, the five items of the scale to the middle manager’s
actions to facilitating adaptability: Kolmogorov–Smirnov (0.61); Mann-Whitney (0.12); Interclass Correlation Coefficient (0.40); Inter-evaluators Reliability (0.57); Statistical Significance for Agreement between Evaluators (0.76).

Although participative leadership refers to a top manager’s behaviour, in this study, this variable was evaluated based on the perception of middle manager’s individuals. We believe this procedure is convenient because participative leadership takes place when top managers promotes the inclusion of their subordinates in decision-making processes and uses information provided by middle management as basis for the formulation of strategies (Edmondson et al., 2003; Lam et al., 2015; Somech, 2006). Therefore, we followed Raes and van Vlijmen (2017) explanation, according to which the involvement of middle management is inherent in the top manager’s participative leadership construct.

**Moderator variable**

Cordiality, nearness, friendship and openness reflect characteristics of a good relationship between managers at different hierarchic levels (Ashford et al., 1998). Accordingly, people in Crescente Telecom’s middle management evaluated the quality of their relationship with members of the top managers based on these criteria.

**Control variables**

Finally, we tried to control a set of variables pointed out in previous studies as being important in that they affect power perception within organisations, contextual knowledge and understanding of the strategy by managers. These variables are age (Pappas & Wooldridge, 2007), position (Thomas & Ambrosini, 2015), and seniority relative to sector (Dutton et al., 2001), to organisation (Ahearne et al., 2014; Tarakci et al., 2018) and to position (Floyd & Wooldridge, 1992).

**Validity and reliability tests**

We acknowledge that our methodology could be enhanced, and incidence of variables common to the method lower, if the study included data of different natures or answers by managers coming from different hierarchic levels. However, we emphasise that our survey is comparable to recent studies that also faced the challenge of collecting answers from people that are difficult to access (Estevão Silva, de Castro Krakauer, & Coda, 2020; de Oliveira Rodriguez, Amelia Tomei, & de Campos Serra, 2020). Nonetheless, we applied Harman’s
single factor test, which is the most adopted procedure to evaluate potential common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). For that purpose, we initially conducted an exploratory factor analysis, which resulted in 44% of the variance being explained by the first factor. Next, we produced a confirmatory factor analysis, which resulted in $2.29 \chi^2 / DF$ (p value 0.000), indicating low probability of incidence of common method variances in our survey.

It is worth highlighting that we tested convergent and discriminant validities of the variables adopted for the survey. As suggested by Fornell and Larcker (1981), we took into consideration the convergent validity for all variables whose values of average variance extracted (AVE) were above 0.5. Additionally, results exhibited by Table 1 suggest discriminant validity has occurred, since all these values exceeded the shared variances (SV) among constructs. We also assert the existence of discriminant validity associated with the fact that the factor loadings of the items were bigger than their cross factor loadings (Barclay, Higgins, & Thompson, 1995). In order to check construct dimensionality (Dim.), we adopted the parallel analysis (Hoyle & Duval, 2004). Results of Kaiser-Meyer-Olkin (KMO) tests revealed appropriate factor loadings for all variables, that is, higher than 0.50. Likewise, to infer reliability, we used Cronbach’s Alpha (CA) and composite reliability – CR (Chin, 1998) tests and found all values higher than 0.7 (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). In brief, Table 2 presents all indicators, their descriptions and factor loadings.

Table 1 - Convergent and discriminant validities and variable reliability

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>AVE</th>
<th>CA</th>
<th>CR</th>
<th>KMO</th>
<th>Dim.</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participative Leadership</td>
<td>3</td>
<td>0.78</td>
<td>0.85</td>
<td>0.85</td>
<td>0.71</td>
<td>1</td>
<td>0.48</td>
</tr>
<tr>
<td>Quality of Relationship</td>
<td>6</td>
<td>0.65</td>
<td>0.86</td>
<td>0.87</td>
<td>0.82</td>
<td>1</td>
<td>0.48</td>
</tr>
<tr>
<td>Quality of Implementation</td>
<td>6</td>
<td>0.67</td>
<td>0.93</td>
<td>0.91</td>
<td>0.87</td>
<td>1</td>
<td>0.40</td>
</tr>
<tr>
<td>Facilitation of Adaptation</td>
<td>5</td>
<td>0.69</td>
<td>0.88</td>
<td>0.87</td>
<td>0.80</td>
<td>1</td>
<td>0.30</td>
</tr>
</tbody>
</table>

AVE = Average variance extracted, CA = Cronbach’s Alpha; CR = Composite reliability; KMO = Kaiser-Meyer-Olkin; Dim. = Dimensionality; SV = Shared Variances

Source: Prepared by the authors.
### Table 2 - Results of the analyses of major components

<table>
<thead>
<tr>
<th>Indicators and references</th>
<th>Description</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle manager’s Perceptions of Top manager’s Participative Leadership (Raes et al., 2011; Raes &amp; van Vlijmen, 2017)</td>
<td>Directors put a high value on information they receive from me and my peers</td>
<td>0.911</td>
</tr>
<tr>
<td></td>
<td>Directors seek frequent interaction with me and my peers to obtain information</td>
<td>0.850</td>
</tr>
<tr>
<td></td>
<td>Directors use the information they receive from me and my peers as a basis for strategy formulation</td>
<td>0.889</td>
</tr>
<tr>
<td>Quality of Relationship between Top and middle managers (Ashford et al., 1998)</td>
<td>My relationship with directors is cordial</td>
<td>0.882</td>
</tr>
<tr>
<td></td>
<td>My relationship with directors is friendly</td>
<td>0.909</td>
</tr>
<tr>
<td></td>
<td>My relationship with directors is distant</td>
<td>0.485</td>
</tr>
<tr>
<td></td>
<td>My relationship with directors is open</td>
<td>0.889</td>
</tr>
<tr>
<td></td>
<td>My relationship with directors is trusting</td>
<td>0.800</td>
</tr>
<tr>
<td></td>
<td>My relationship with directors is close</td>
<td>0.798</td>
</tr>
<tr>
<td>Middle manager’s actions of Facilitating adaptability (Ahearne et al., 2014; Tarakci et al., 2018; Pappas &amp; Wooldridge, 2007)</td>
<td>I (or this person) encourage informal discussion and information sharing</td>
<td>0.744</td>
</tr>
<tr>
<td></td>
<td>I (or this person) relax regulations to get new projects started</td>
<td>0.846</td>
</tr>
<tr>
<td></td>
<td>I (or this person) buy time for experimental programs</td>
<td>0.860</td>
</tr>
<tr>
<td></td>
<td>I (or this person) locate and provide resources for trial projects</td>
<td>0.891</td>
</tr>
<tr>
<td></td>
<td>I (or this person) provide a safe haven for experimental programs</td>
<td>0.818</td>
</tr>
<tr>
<td>Middle manager’s Cognitive Realisation of Implementation (Menon et al., 1999; Miller et al., 2004; Thomas &amp; Ambrosini, 2015)</td>
<td>Our strategies are examples of effective strategy implementation</td>
<td>0.791</td>
</tr>
<tr>
<td></td>
<td>Strategy implementation efforts are generally considered a success in this firm</td>
<td>0.825</td>
</tr>
<tr>
<td></td>
<td>I personally think that the implementations of strategies have been successful in this firm</td>
<td>0.810</td>
</tr>
<tr>
<td></td>
<td>The implementation of strategies is considered a success in my area</td>
<td>0.839</td>
</tr>
<tr>
<td></td>
<td>The right kind of resources are allocated to strategy implementation efforts</td>
<td>0.847</td>
</tr>
<tr>
<td></td>
<td>Adequate resources are allocated to strategy implementation efforts</td>
<td>0.828</td>
</tr>
</tbody>
</table>

**Source:** Prepared by the authors.
Results

Table 3 synthetises averages, standard deviations and correlations among variables. We analysed variance inflation factors (VIF) in order to check for potential multicollinearity problems, especially because a correlation slightly above 0.50 exists between the independent variables “Middle manager’s Perceptions of Top manager’s Participative Leadership” and “Middle manager’s Actions to Facilitating adaptablity”. Results of this analysis did not exhibit any variance inflation factor higher than 10. Therefore, we may say that multicollinearity is not present.

Table 3 - Averages, standard deviations (SD) and correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Average</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participative Leadership</td>
<td>3.97</td>
<td>0.8</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of Relationship</td>
<td>4.05</td>
<td>0.76</td>
<td>0.70***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Realisation of Implementation</td>
<td>4.19</td>
<td>0.6</td>
<td>0.63***</td>
<td>0.52***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Facilitating Adaptability</td>
<td>3.81</td>
<td>0.64</td>
<td>0.55***</td>
<td>0.42***</td>
<td>0.52***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Age</td>
<td>40.15</td>
<td>7.65</td>
<td>0.20**</td>
<td>0.30***</td>
<td>0.19**</td>
<td>0.11</td>
<td>0.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Seniority in Organisation</td>
<td>10.85</td>
<td>8.06</td>
<td>0.30***</td>
<td>0.17*</td>
<td>0.08</td>
<td>0.20**</td>
<td>0.13</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Seniority in Sector</td>
<td>13.86</td>
<td>8.38</td>
<td>0.20**</td>
<td>0.19*</td>
<td>0.03</td>
<td>0.18*</td>
<td>0.39***</td>
<td>0.38***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>8. Seniority in Current Position</td>
<td>3.42</td>
<td>3.43</td>
<td>-0.03</td>
<td>0.01</td>
<td>-0.05</td>
<td>0.00</td>
<td>0.22**</td>
<td>0.29***</td>
<td>0.21**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* Significant at 10% level; ** Significant at 5% level; *** Significant at 1% level

Source: Prepared by the authors.

We checked the survey hypotheses using the multiple linear regression test and opted for the hierarchic approach, adopting procedures and recommendations by Hair et al. (1998). Table 4 presents, consequently, the results of each checked model, with their corresponding beta coefficient, determination coefficient and F-test value estimates, as well as potential changes in adjusted determination coefficients.
Table 4 - Results of indicators and major components analysis

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.019 **</td>
<td>0.014 *</td>
<td>0.011</td>
<td>0.012 **</td>
</tr>
<tr>
<td>Time in Company</td>
<td>0.008</td>
<td>-0.005</td>
<td>-0.005</td>
<td>-0.005</td>
</tr>
<tr>
<td>Time in Sector</td>
<td>-0.010</td>
<td>-0.008</td>
<td>-0.007</td>
<td>-0.006</td>
</tr>
<tr>
<td>Position = Facilitator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position = Coordinator / Supervisor</td>
<td>0.015</td>
<td>-0.240 **</td>
<td>-0.260 **</td>
<td>-0.271 **</td>
</tr>
<tr>
<td>Position = Manager / Director</td>
<td>0.229</td>
<td>-0.163</td>
<td>-0.247 *</td>
<td>-0.384 **</td>
</tr>
<tr>
<td>Time in Position</td>
<td>-0.004</td>
<td>0.006</td>
<td>0.004</td>
<td>-0.004</td>
</tr>
<tr>
<td>Participative Leadership (PL)</td>
<td>0.481 ***</td>
<td>0.106</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>PL x Quality of Relationship</td>
<td>0.063 **</td>
<td>0.058 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitating Adaptability</td>
<td></td>
<td></td>
<td></td>
<td>0.343 ***</td>
</tr>
</tbody>
</table>

R²        | 4.1%  | 33.1% | 36.3%  | 43.6%   |
R² Adjusted | 9.7%  | 37.7% | 41.3%  | 48.6%   |
F          | 1.72  | 8.21*** | 8.28*** | 9.78*** |
VIF        | 1.56  | 1.56  | 8.24   | 8.26    |

* Significant at 10% level; ** Significant at 5% level; *** Significant at 1% level.
Source: Prepared by the authors.

Although Model 1 demonstrates that there is no significant relationship associated with control variables, we observe that age appeared as the only personal characteristic of middle management individuals that affects their cognitive realisations of strategy implementation.

Next, we tested the first hypothesis of Model 2 by including the variable “Middle manager’s Perceptions of Top manager’s Participative Leadership”. The result was that this additional variable contributes to a 28% increase in the variance explained by the previous model (F= 8.21, p ≤ 0.01), thus confirming Hypothesis 1 (α = 0.48, p ≤ 0.01).

The second hypothesis of this study proposes that the effects on the cognitive realisation of implementation resulting from middle manager’s perceptions of top manager’s participative leadership will be as much stronger as the relationships between both groups of managers are better. This hypothesis was tested in Model 3 and confirmed, since moderation of the variable “quality of relationship” generated a 3.2% increase in the variance explained by Model 2, and positively impacted the dynamics between “perceptions of participative leadership” and “cognitive realisation of implementation” (α = 0.06, p ≤ 0.05).

Finally, in Model 4 we verified that Hypothesis 3 has been confirmed too, since the variable “Actions to Facilitating adaptability” is positively related with the cognitive realisation...
of strategy implementation ($\alpha = 0.34, p \leq 0.01$), its inclusion having contributed to a 7.3% increase in the variance explained by the previous model.

Discussion and final considerations

We used the microfoundations lens (O’Brien, Scott, Andersson, Ambos e Fu, 2017) to expand understanding and contribute to a viewpoint increasingly adopted by studies on the interface between top and middle managers regarding the implementation of strategies (Heyden et al., 2017; Knox 2020; Miller et al., 2004; Raes et al., 2011; Thomas & Ambrosini, 2015). Based on traditional and contemporary literature we argue that microfoundations, in terms of perceptions, interactions and actions involving the mentioned managers, influence the way strategic implementation is cognitively realised. In special, top manager’s participative leadership, actions by middle management to facilitating adaptability and quality of relationship between the parties, emerge as relevant factors that explain the cognitive essence of deliberate and emergent strategies. Revealing the central position of middle manager’s activities in terms of their realisation of strategic implementation is a way to demonstrate the value of adopting the microfoundations lens to understand organisational phenomena.

In theoretical terms, this article, in different aspects, contributes to a better understanding of strategies implementation. Initially, by making possible a dialogue between different theoretical points of view, thus bringing reflections, based on the microfoundations perspective, into the literature aimed at understanding implementation and middle management participation. In this respect, the article adds to those that point to the relevance of cognitive and behavioural aspects (Gavetti, 2005; Eggers & Kaplan, 2013; Lindenberg & Foss, 2011), as well as to those seeking to understand the creation and maintenance of higher performances (Teece, 2007; 2012; Eisenhardt, Furr, & Bingham, 2010) to explain strategic phenomena. In brief, the study brought empirical evidence related to cognition and behaviour to the process of strategy implementation.

To simply identify that the strategy implementation is influenced by interactions between managers, although relevant, is not sufficiently elucidative to fully comprehend managerial practices, because knowing it does not inform us about what must be done. However, understanding that the perception of middle managers about top manager’s behaviour regarding participative leadership and about the quality of the relationship between them provides indications as to what micro activities may be worked at, and how.
Specifically, the results of our analysis indicate that top manager’s micro activities – in the exercise of participative leadership – may promote micro management’s perception of inclusion and, consequently, generate better results in strategies implementation, due to better understanding and higher commitment and coordination among the various parties involved (Dooley et al., 2000; Hodgkinson et al., 2006; Vila & Canales, 2008).

Results also demonstrate that the contributions to the cognitive realisation of strategy implementation arising from middle manager’s perceptions of top manager’s participative leadership are greater when the relationship between the parties is good. This finding reinforces conclusions reached by previous surveys such as, for instance, that of Canales (2013), which suggested that the quality of relationships promotes interactions that are important to help both groups assign meaning to new and important strategic structures. Similarly, Westley (1990) argues that good relationship with top managers enables middle management to hold a certain control over strategic conversations, making these managers more motivated and capable of sustaining high levels of effort in favour of the implementation. Thus, our study reinforces the relevance of the relationship between top and middle management as a significantly influential factor in the quality of strategic processes within organisations (Canales, 2013; Castañer & Yu, 2017; Floyd & Lane, 2000; Glaser, Fourné, & Elfring, 2015; Vuori & Huy, 2016).

As for researches on the effects of middle activities to facilitate strategic adaptation, they are mostly focused on the consequences for the organisation’s performance (Ahearne et al., 2014; Floyd & Wooldridge, 1997). Previous studies tried to unveil the practices adopted by middle management as resistance (Guth & MacMillan, 1986), balancing emotions (Huy, 2011, 2014), conflict management (Lê & Jarzabkowski, 2015) and meanings’ construction (Balogun & Johnson, 2004). The results of the investigation herein presented contribute to advance this body of knowledge, in that they link middle manager’s activities to facilitate strategic adaptation to an improved cognitive realisation of implementation. Therefore, the idea that these managers must prioritise this behaviour is reinforced (Ahearne et al., 2014).

However, a more specific investigation is needed to explain the connection between the age of middle managers and their cognitive realisation of implementation. In spite of age being a more commonly adopted characteristic by demographic surveys that address attitudes towards work, results are not conclusive, mainly with respect to the relationship between age and organisational commitment (Cohen & Lowenberg, 1990; Wright & Bonett, 2002) or to satisfaction with the job (Boumans, De Jong, & Janssen, 2011; Clark, Oswald & Warr, 1996), and do not allows us to reach a conclusion about the implementation’s positive evaluation.
In addition, the current scenario, in which this survey was conducted, emphasises its practical relevance. Economic downturns and digitisations stimulate companies towards more horizontal structures, a fact that is reflected in the reduction of job positions and functions usually linked to middle management. A similar move occurred in the 1980s (Cascio, 1993; Smith, 1997; Staehle & Schirmer, 1992; Wheatley, 1992), but companies did not reach the expected results, in part due to the destruction of internal relationship networks that connected people (Floyd & Wooldridge, 1997, p. 481, translated by authors). This reinforces the challenge of reconciling, on one side, the search for productivity, on the other, the effective empowerment of middle managers, both fundamental for creativity, innovation and achievement of objectives within organisations.

The results of this study have the potential for contributing to the practice of top manager’s and middle manager’s, indicating their involvement with expectations of an adequate strategy implementation. We understand that these results may be stimulated by an organisational context that supports integration. But, to understand how a participative context translates into concrete initiatives, it is necessary to apply the microfoundations lens herein proposed and to take into consideration leadership activities and relationships with regard to interactions between managers. Middle managers are responsible for mobilising relationships that affect actions that impact the quality of the strategic process. Our understanding of how to deliver the benefits of interactions to the implementation of initiatives permanently demanded by the strategic process increases, when we reveal the impact of these micro activities. We warn that the two groups of managers need to be flexible and understand the activities of participative leadership and facilitation of adaptation as complementary practices that favour efficiency in implementation. In addition, the debate on the importance of relationship quality to results indicates that specific social patterns may be stimulated to engage top and middle managers in the implementation of strategies. As previously mentioned, organisations where groups of managers are closer to each other, that prepare the strategic planning in an integrated way and that prioritise the inclusion of middle management in the decision-making process, attain better quality in implementation processes. Thus, in organisational contexts where top and middle managers are apart, promoting closeness and relationship quality may increase benefits brought about by an open and shared strategic decision-making.

The contributions herein listed need, however, to be evaluated in the light of certain methodological limitations. For instance, we used a crosscut survey design, which prevents us from safely inferring about causality and expected directions of variables. Anyway, we
observed empirical results derived from this survey that withstood all analyses in terms of robustness parameters.

It is understood that the final sample in this survey is relatively small; a fact that makes more difficult the identification of true and significant effects that might be clearer were statistical power higher. However, the data collected are representative of middle management in the population surveyed. We also know that the data collection in one single organisation that operates in a specific segment has advantages associated with the focus of investigation (Ahearne et al., 2014; Tarakci et al., 2018), but it is important to acknowledge that this also poses greater difficulties in generalising results to other organisations, sectors and countries.

We additionally acknowledge limits to the data collection directly from middle management individuals using questionnaires. It would have been convenient to enquire people from other hierarchic levels, superiors and subordinates to middle managers. However, we emphasise efforts expended in minimising potential biases arising from this fact, including attempts to cross validate answers with colleagues regarding actions to facilitating adaptability. In addition, application of the Harman test did not uncover any indication of the existence of common method variances. Finally, we call attention to all the suggestions for future research put forward by this investigation.

References


