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Extension of the strategic renewal journey framework: The changing role of middle management

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ABSTRACT

This paper presents the findings of a longitudinal study of a large corporation's journey towards becoming an ambidextrous organisation in the face of emerging technology. By investigating the interplay between the top and middle management, the results show that business intelligence systems allowed the firm to pursue a controlled renewal journey that was data-driven, automated, and supported fast organisational learning. This substituted for active frontline and middle managers. The change in organisational direction was driven by a small and powerful strategic top management group, even though this was a multi-unit firm with more than 100,000 employees. The main advantage of this type of journey is that the organisation can fully realize the advantage of highly centralised formal planning and control while becoming resilient and ambidextrous. A well-functioning decision support system, organisational policies and communication strategy can substitute for collective sense-making and shared strategic schemas. The results also suggest that management control systems can have a profound impact on developing organisational ambidexterity. The article also provides further details on the nature and implications of the rhetorical tactics used by the top management team to focus on organisational attention and action.

1. Introduction

Despite its growing popularity as an area of study, many researchers agree that we still know little about how firms ensure their current and future viability. Organisations must renew themselves to close the gap between their existing competencies and the evolving basis of competitive advantage in their industry [1]. Scholarly attention has been focusing on the role of individuals in balancing exploitation and exploration for a long time and argued that the unit of analysis should be individuals because organisational ambidexterity reflects their collective actions (i.e. [2,3]. O'Reilly and Tushman [4] argued that future research should investigate how organisational members may assist or hinder such managerial decisions.

Previous studies concluded that large, multi-unit firms rely on the involvement of multiple levels of management in a co-evolutionary manner (i.e. [5] in which frontline managers can influence the organisational renewal process. Volberda et al. [6] and later Volberda [7]; suggested that for successful renewal in hypercompetitive environments calls for active middle management.

Second, for any strategy, no matter how well formulated, the middle managers are critical in implementing it. They are the ones who must interpret the strategy in the context of daily operations, identify the actions required to implement the strategy and communicate and clarify to their subordinates [8].

The research on how top management team interact with the middle management (MMs), how they influence strategy implementation, is still in its infancy [9]. Consequently, the interplay between the top and middle management in the creation and preservation of organisational ambidexterity needs further investigation. Third, despite its acknowledged importance, many high-technology ventures are failing in their strategic renewal [10,11]. Organisations fail to notice events and trends, external and internal signals, that have potential organizational consequences because they do not resonate with the priorities of the top management team [12].

To the best of our knowledge, research on firm-level ambidexterity, and how it is achieved over time in hypercompetitive environments, is still in its early stage. It is therefore important to understand the large-scale strategic renewal process (or journey) of a multinational company in a hypercompetitive environment, what are the interplays between TMT and MM along such process. The case presented here is

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unique, in the sense that the renewal journey was enforced neither by maturing technology and markets nor by declining revenues. It emerged from the ambition of a visionary top management team. We believe that studying this firm can help us to understand how the social process evolved, who participated in setting the direction, and what roles they fulfilled.

This study was a longitudinal case study, examining the transformation efforts of a multi-unit firm over 9 consecutive years. The firm competes in the high-technology sector, the backbone of the new digital economy. Competition here is fast-paced and the speed of movement is essential to capitalise on opportunities [13]).

This study makes several contributions to the literature. First, the case demonstrates that structural separation is a rewarding way to renew the organisational strategy in a hypercompetitive environment. Second, in contrast with previous research, the study shows that middle managers can remain passive actors in the formulation of the renewal strategy. This is enabled by the presence of a strong top-down drive. Third, the renewal was a "controlled journey", because of its highly centralised nature. The management control systems were the key enablers of organisational flexibility as well as control over the execution and allowed for timely interventions when needed. Therefore, management control systems are found to have a profound impact on the development of organisational ambidexterity, especially for mobilizing and incentivising middle managers and the entire organisation to 'unlearn' old routines.

The first section of the article reviews the literature to explore the link between strategic renewal and organisational ambidexterity. We then expand the theory by discussing the role of middle management and the impact of organisational attention in the strategic renewal journey, in particular, to gain greater influence over the process and reduce resistance to change efforts. This is followed by a description of the methodology and research setting. The next section covers the findings, and finally, we discuss the underlying theoretical and managerial implications.

2. Literature review

2.1. The renewal journey and organisational ambidexterity

Researchers often refer to the process, content, and outcome of activities undertaken by firms to renew, augment, and adapt their core competencies as "strategic renewal" [6]. This phrase covers the refreshment or replacement of organisational attributes and involves the reconfiguration of the organisation's resource patterns, changing its strategy, competitive approach or product–market domain [14,86].

Strategic renewal, therefore, has two important attributes. First, it always involves change. Second, it is a process, a journey that unfolds, in which the organisation aims to obtain and use new knowledge and innovative behaviour to bring about changes in its core competencies [15]. Strategic renewal studies typically apply evolutionary perspectives to identify and investigate the distinct phases through which the change progresses, as well as the role of change agents and their actions.

Studies usually focus on a single case, and attempt to understand how a particular outcome emerged drawing on evidence and sources of explanation at the micro-level (e.g., activities, cognitions, visions, and mistakes of organizational leaders and organizational members). Analytically, researchers strategy will often decompose timelines into blocks or phases. These blocks are likely to be separated at points of discontinuity in macro-level features to capture successive micro-macro influence cycles [16].

Former research has shown evidence that surprisingly few established companies manage to renew their core competencies over the longer term [10,12,87]. Benner and Tushman [17] noted that this is because exploration and exploitation require substantially different organisational support. This makes their simultaneous pursuit extremely challenging. According to Beer and Nohria [18]; the underlying reason is that most organisations have a bias towards exploitation. They tend to find comfort in routines, compared with the high risks and costs often associated with exploration [19,20]. Some results indicate that decreasing formalisation may be associated with increased exploration. For example, Mom et al. [21] found that when middle managers have higher decision-making authority over how and which tasks should be solved, they are more willing to engage in explorative activities.

Sidhu et al. [22] conceptualised exploration and exploitation as knowledge-search behaviour. Li et al. [23] argued that firms exploit by searching for knowledge within the organisation itself and explore by searching for new knowledge from outside the organisation. Both types of the search may occur in two directions: supply-side and demand-side. Supply-side searches are all those looking for knowledge about technology and production aspects, and demand-side searches look for knowledge about market structures and segments, product use and substitution patterns, and customer preferences and needs [23].

2.2. The role of middle-management in the renewal journey

Surprisingly little is known about the top and middle management interactions in developing ambidexterity or how these two echelons achieve alignment between their activities [9,24].

The top management team (TMT) is usually made up by the CEO and senior executives who hold positions at or above the level of vice president. TMT members have a key role in the strategic orientation of the firm [25]. The term middle management describes managers located below top managers but above operations in the hierarchy [26,27]. No matter how well a strategy is formulated, middle managers are critical in implementing it [28,29]. While change can be directed from the top, it still requires that employees understand the change and its intent, as well as its implications. The middle managers must interpret the strategy in the context of daily operations, identify the actions required to implement the strategy and communicate and clarify to their subordinates [29]. They provide a conduit for employees accepting and implementing the change, they did not design and may only partially understand themselves [30,31].

In his seminal paper, Nonaka [32] argued that because of their unique position, middle managers can influence the strategy process by mediating vertically between the top and the bottom of the organisation. First, complex and geographically dispersed organisations cannot be managed by a few individuals or even small groups (e.g. the top management team alone). Such firms require distributed and interactive leadership throughout the organisation, and middle managers, therefore, serve as important interfaces between otherwise disconnected actors and domains [30,33]. Second, middle managers tend to have opportunistic motives in implementing an organisational strategy.

Wickenberg [34] pointed out that they may to some extent have a motive to distort reports by exaggerating successes or covering up failures by concealing important information or framing issues in a particular way to direct top management attention to particular areas [27]. Also, the strategy sponsored by top management may be unpopular amongst middle managers, and they could have an interest in interfering with its implementation. To do so, they may seek to form a coalition with other organisational members (coalitions) to stand in opposition to the strategy. They may even deliberately take ineffective action or create 'roadblocks' to implementation, or move to outright sabotage of the strategy to prove that it was not a good decision in the first place. Passive intervention can also occur, such as giving low priority to implementation, resulting in unnecessary delays and general 'foot-dragging'. These can all seriously compromise the quality of implementation, if not postpone it beyond the effective time. Some employee resistance to organisational actions is not motivated by mere selfishness [35], nevertheless, the structural position of middle managers is argued to give them the power to effectively alter the firm's strategic course [36–38]. In summary, scholars agree that in case of major strategic change (e.g. renewal) especially in a hypercompetitive environment, there is likely to have a shift in power relations between the top and middle management over the organisation's course of actions [6,34].

Ocasio and Joseph [39] arrived at a similar conclusion and suggested that the strategic renewal journey was a relatively fluid, guided evolutionary process where interactions of organisational members, both top-down and bottom-up, are generating the changes in the strategic direction of the firm.

2.3. The role of management control systems in directing the leader's attention

In contrast, other studies have pointed out that there are formalised routines and procedures that can be used by top managers to maintain or alter patterns in organisational activity [40,41]. Formerly, management control systems (MCS) have been characterized as an impediment or, at most cases, counterproductive with innovation (i.e. [42,43], however, recent studies in management accounting literature highlight that dynamic changes in today's environment, makes MCS play an essential role in innovation by providing forecast data, budget goals, or monitoring market responses carefully [44] and support important managerial decisions in different business situations [45]. Khandwalla [46] found that the greater the competition, the greater the need for controls, and the greater the benefits of using a sophisticated management control. His results suggest that this is particularly true when there is intense product competition. Still, the relationship between organizational ambidexterity and control systems (e.g. rewards and compensation controls) has received only limited scholarly attention [47].

Consequently, the heavy reliance on collaboration across boundaries and lateral coordination exhibited in knowledge work called for rethinking management control systems to become flexible for framing the unpredictable innovations, but also to stay stable for framing cognitive models and actions [88].

Simons [48] argued that high performing firms attach a great deal of importance to the use of management control systems, and the process is highly interactive and requires the ongoing attention of managers at all levels of the organisation. Data are frequently and regularly interpreted and discussed in face-to-face meetings with superiors, subordinates, and peers, where underlying data and assumptions are continually challenged and debated.

Sami and Alaudin [44] argued that MCSs enables organisations to manage the implicit tension between limited attention and unlimited opportunities, and can stimulate the leader's exploration activities while simultaneously ensuring the exploitation of pre-set goals. The combinations of different control systems may generate synergy. Similarly, Strauβ and Zecher [49] argue that strategic issues such as balancing exploratory and exploitative activities may also be pursued with the help of management control systems.

McCarthy and Gordon [50] demonstrated that different types of management control systems can work together to balance exploitation and exploration in individual R&D organisations. They also explained that feedback control systems, which rely on after-the-event information (e.g., errors, failures and other unsatisfactory organisational outcomes) to correct problems, are essential for exploitation. They promote the continuous refinement of organisational practices and capabilities. In contrast, 'feed-forward' control systems collect before-the-event information to anticipate future trends and events, and their effects before any changes occur (e.g., in demand). This information helps organisations to engage in the "exploration and double-loop learning needed for individuals and organisations to radically rethink and alter their existing capabilities" [50]:244).

2.4. The role of organisational attention in the renewal journey

The literature suggests that effective adaptation requires managers to scan their internal and external environment. D'Aveni and MacMillan [51] measured the allocation of top managers' attention in surviving and failing firms. They found that surviving firms' top managers paid equal attention to the internal and external environment and more attention to the output environment than the input environment. In contrast, managers of failing firms tended to deny or ignore output factors and paid more attention to the input and internal environments. They were, therefore, unable to lead their firms to adapt.

Staw et al. [52] noted that it is not always dysfunctional to focus on inputs and internal operations, because efficiency-related actions are sometimes enough to keep the firm on track. However, in the face of changes in customer needs and demand, or disruptive, emerging technologies, firms must respond with long-term solutions, such as changing strategies or environments [53,54]. Research has also shown that incumbent firms in relatively established industries are often vulnerable to the disruptive threats posed by an emerging industry [55]. Successful firms pay more attention to the output environment because the most important critical success factors are output-related: customer needs and the product life-cycle [51].

Top managers' readings of the environment hold the key to organisational strategic actions and adaptation models [56]. Many actors may be involved in scanning or data processing, but the information is assumed to converge and be interpreted for action at the top managerial level [57].

According to Dutton and Ashford [27]; no issue is inherently strategic. Issues become strategic when top managers believe that they have an impact on organisational performance.

The attention-based view (ABV) of the firm focuses on how organisational attention shapes organisational adaptation [58]. The actions of decision-makers depend on the firm's structural distribution of attention [59]. A strategy is understood as a pattern of organisational attention paid to a particular set of issues (e.g., problems, opportunities, and threats) and answers (e.g., resource allocation pattern, processes, and routines).

Scholars in attention-based research have argued that power holders constitute and institutionalise the firm's strategic agenda and can exercise influence over it through rhetorical tactics [15,60,61]. Top managers can reconstruct the firm's attention structures by actively communicating strategic agendas [62]. The content of communications allows organisational members to co-orient themselves with changes in strategic issues, initiatives, and activities throughout the organisation (Eg Ref. [63].

Moreover, for strategic change, it is critical to change the organisational vocabulary [64]. To challenge conventional organisational thinking, new words and concepts must be nurtured and promoted [65]. For example, faced with a changing institutional setting, Intel created a new vocabulary emphasising the company as an "industry enabler" [62]:161). Strategic change requires discussion, questioning, negotiations, stories, gossip, and rumours as more information is shared and understood and multiple perspectives of strategic change emerge [66]. The rhetorical tactics of top managers will direct organisation members' attention to selected aspects of the environment to the exclusion of others [39]. The middle managers, however, due to their specific role within the organisation.

The attention of middle managers can be driven through different mechanisms. These include the use of management control systems and the development of knowledge structures [40]. Knowledge structures are the mental templates that facilitate information processing and focus attention on selected aspects of the environment [67]. Both mechanisms signal what behaviour is desired and acceptable in organisations. Researchers have argued that these can be used to shape the ways organisational members think and act, and also mobilise them towards certain actions, and increase their sense of urgency about change (i.e. [68]. This can therefore minimise their resistance to change. For example, communicating the threatening nature of unpredictable, non-routine events generates a sense of urgency for change, because it delivers the clear message that "business as usual" is no longer possible [40,65].

Frequent and powerful communication of a threat that must be turned into an opportunity can therefore mobilise the organisation on a large scale (Eg Ref. [69]).

Middle managers' structural position means they are better placed to interact with and influence their peers and employees at the operational level. This makes their support critical for change.

Researchers using the threat-rigidity thesis, however, have suggested that in a threatening situation, top managers are likely to reduce participation and increase centralised decision-making. In anticipation of this, middle managers are likely to adjust their behaviour. For example, Staw et al. [52] noted that when a threat has been attributed to an external source and it is thought likely that the group can successfully meet the threat, then there is likely to be increased cohesiveness, leadership support, and pressure for uniformity. The group will seek consensus and in so doing, will generally support the policies or position of the existing leadership. Consensus, however, is often achieved by restricting information and therefore reducing debate. Organisational attention is often measured by communications through official formats, such as letters to shareholders, and minutes of boards of directors, and through observations of meetings or informal events [61,70]. An analysis of different forms of communications, including written and oral, can provide a retrospective map of rhetorical tactics and the strategic agenda of the firm [62,71]. Studying organisational attention therefore helps us to understand how the strategic agenda was articulated and shared throughout the organisation, and how middle managers responded.

The present research aims to understand the role of middle-managers in a radical, strategic change initiated by the top management team. In order to gain a better understanding of the interactions between the top and middle management, the use of different communication practices, vocabularies, and rhetorical tactics as a way to direct and reconstruct organisational attention as well as to mobilise for the implementation of the firm's strategy is also analysed.

3. Methodology

We studied the strategic renewal journey of a Fortune 500 company. We chose to use a longitudinal case-based analysis of this particular company because this allowed us to address how and why particular activities are linked to strategic outcomes [72].

3.1. The study company

The study organisation is a US-based multi-unit firm in the information (IT) technology sector and is one of the leading firms in the global business software market. The company has a global presence, with more than 130,000 employees and 400,000 business customers in 175 countries. It has several subsidiaries in three main regions: the Americas, EMEA (Europe, Middle East and Africa) and APAC (Asia Pacific). The three main regions are divided into sub-regions. In 2016, the EMEA region had two main sub-regions: Western Europe and ECEMEA (East and Central Europe, Middle East and Africa).

By 2010, the company was a highly profitable major player in the global business software market. At that time, a new phenomenon, cloud computing, emerged and presented a potential threat to the company's future. The company's top management decided on a major strategy shift, moving the focus from the traditional business to cloud computing.

The authors already had a relationship with the company in the past, before the current research. The trigger for the research was the interest of the company's management of the examined geography (ECEMEA region). Longitudinal research has started in 2007. The collected longitudinal data includes multiple comparable incidents over time, hence it offers stronger and more cumulative evidence that is required for effective contribution to the theory.

3.2. A brief overview of the environment

Large enterprises traditionally used a 'buy and build your own' approach to IT systems. They purchased and installed all the hardware needed to run the applications to support their business. The hardware was usually installed on the premises of the company in one or more server rooms, so this model is known as 'on-premises'. The company's IT department was responsible for maintaining the hardware and software stack and applying new patches and upgrades. Many companies partially or fully outsourced these tasks to external contractors.

The development of high-speed networks and software solutions at the beginning of the 21st century allowed companies to start using IT differently. They no longer needed on-premises hardware to run their software. Instead, they could contract with external providers and access IT services remotely through the internet via 'cloud computing' [73,74]. Cloud computing, therefore, reduced the need to invest in physical infrastructure to store data or run business applications on-premises. From the customer's point of view, the advantage of cloud over on-premises solutions is that these are subscription-based. Since large up-front investments were no longer needed the financially-sensitive small and medium-sized enterprises (SMEs) could also afford cloud solutions. At that time, nevertheless, it was still a latent market need.

Khanagha et al. [75] argued that cloud computing was a potential source of disruption in the telecommunications sector as early as 2009, with new offerings likely to make existing alternatives obsolete. In 2009, however, "figuring out whether it was wise to plan for harvesting the new Cloud opportunities or to consider burying the business model that the organisation had used for more than 150 years took about 5 years of experimentation in different directions" [75]:323). This was because of the high levels of ambiguity and the threat of cannibalisation of existing businesses.

In the study organisation, therefore, when the strategic renewal journey towards cloud was initiated by the TMT, the core business was stable and lucrative, and there was no sign of maturity or decline in product life-cycle or demand. A new industry, the cloud, was, however beginning to emerge. The technology was in an early phase of development; hence the 'cloud' was not only unproven but also highly risky.

3.3. Data collection and analysis

Cuervo-Cazurra et al. [76] argued that research on complex organisations fails to address the issue of subsidiaries located in particular countries or regions. These tend to compete and operate regionally, rather than globally. For example, business units in the EU primarily trade with other European businesses, while North American business units tend to trade in North America. Müller and Kunisch [15] also concluded that researchers from a dialectical perspective tend to study the change leader's influence on discrete events or change episodes.

In line with these suggestions, and to keep the scale of the research manageable, we restricted the in-depth interviews to the region covering Eastern and Central Europe, the Middle East, and Africa (ECEMEA). This is a large and very diverse region, and its management, therefore, provides a considerable challenge. The region also contains developing countries, where demand for on-premises solutions was still growing, making this business area lucrative. The 'investing in the cloud' meant abandoning highly profitable businesses, which suggested that the buy-in and involvement of middle management were likely to be critical.

A multi-level approach was used for data collection to enrich insights into different managerial layers of the company. We analysed 11 public speeches made by the CEO and the Chairman of the Board during major events between 2009 and Spring 2018. Data were also collected via in-depth interviews with 23 employees at various levels of the company. All interviews took place at the respondent's place of work and lasted about 90–120 min. In order to validate findings, 4 employees were interviewed 2 times between late 2016 and early 2018.

Based on the company's definition of 'senior officers' in its Code of

Ethics and Business Conduct, we categorised the chairman of the board, the chief executive officer and the senior vice president as part of the top management team. Vice presidents, directors, managers and sales account managers were all considered to be middle managers.

The interviewees were chosen from several lines of business, including sales, business development, industry experts, finance and consulting. All of them were required to have frequent interaction with customers, business partners, peers, and the field of operations. This ensured that they had their own perceptions about the external environment because this plays an important role in evaluating the proposed renewal journey. Other business lines, such as product development, also played an important role in the company's renewal, but employees in those business units are not part of the hierarchy of the study region and report through their hierarchy to the CEO. The company also added missing competences by acquisitions during the study period. In this study, therefore, we focused on the go-to-market side (marketing, sales, and business development) of the strategic renewal of the company.

One-fifth of the interviewees were with the top management, and the rest at middle managerial levels. The sample was representative of the ratio of top to middle management in the organisation, of four direct reports to one top manager. At lower levels, this ratio is more variable across functions. Table 1 shows the distribution of interviewees by managerial level.

The interviews started with questions used to elicit the background and role of the interviewee, followed by questions about how the renewal journey unfolded. The interview protocols included semi-structured questions such as: '*Describe the way the external environment has changed; Describe the way cloud computing changed the industry; How the structure of the company has changed since the introduction of cloud; How incentives and other motivational factors have changed since the introduction of cloud; and How did you perceive the strategic change and renewal of the company?*' etc. The aim of the questions was to explore the views, attitudes and feelings of those involved in the renewal of the company and augment the hard data obtained through document analysis. Data analysis involved reorganising the stories into chronological order, identifying key aspects, and thematic analysis. All the interviews were recorded and analysed using NVivo 11 computer-aided text-analysis software.

To understand the evolution of the strategic renewal journey from traditional on-premises business to cloud, we also collected data through observations, participation in key events (e.g. annual company meetings) and informal conversations. This ultimately allowed the triangulation of the data and deeper insight into the process. Secondary data were also collected from the company's annual reports from 2010 to 2017 and company press releases. We converted public speeches, reports and press releases, and other sources of communications into texts, and then used automated text analysis to examine archival data.

This approach is consistent with previous research, which suggested that official papers, such as letters to shareholders or minutes of boards of directors, and observations of meetings or informal events, can provide a retrospective map of the rhetorical tactics and strategic agenda of the top management [71]. An analysis of different forms of communications, including written and oral, therefore helped us to understand how strategic agendas were articulated throughout the organisation, and how organisational members were mobilised to take particular actions.

Table 1
Overview of interviewees and their organisational positions.

Position	Number of interviewees
Top management level	
CEO, Chairman of the Board	3
Senior vice president (sales)	3
Middle management level	
Vice president (sales, customer success)	4
Director (sales, business development, consulting, finance)	8
Sales team (sales manager, sales account managers)	5

4. Findings

4.1. Centralisation of the company

The company consolidated its global IT operations in 2000. Before the consolidation, it had dozens of data centres worldwide. After consolidation, all the company's IT operations were centralised into one large data centre at the company's headquarters and backup site. That centralised IT system becomes the 'single source of truth' for company data and provided the top management with reliable and up-to-date information. As a member of the top management team said:

> "We use the technology we sell. [In the past] we come to meetings with spreadsheets and PowerPoints, but nobody had any data in sync with one another; each of us had our own versions. Now it doesn't matter where I am, who am I with, everybody looks at the same dashboard."

After the IT consolidation, organisational decision-making was based on a management control system called the Sales Intelligence (SI) system. It was mandatory to update the data in the SI system regularly. Sales representatives were required to enter details of all their sales opportunities, including product mix, expected revenue, discount level, contract date, sales phase, and competition. Those records were aggregated into reports, showing, for example, the volume of open opportunities, pipeline growth after a marketing campaign, historical win-loss ratio, pipeline-to-revenue conversion rate, sales revenue per account manager and sales cycle length by deal size.

The sales intelligence system allowed the TMT to monitor and compare performance between products or regions on a real-time basis. They could also use that information to identify opportunities or actions to avoid and correct non-conformance. For example, knowing the pipeline volume and the historic pipeline-to-revenue conversion rate of a specific territory, the SI system would predict whether the sales revenue target would be met in that territory. When the sales pipeline volume was large but the historical data for 'sales revenue per account executive' did not match, the SI might predict that the sales target would not be met, and additional actions would then be required.

Besides the sales intelligence system, the company's other important IT systems (financial, human resources, compensation, procurement, and customer service) were also centralised. Before the centralisation, local operations defined, for example, the sales compensation scheme for sales account managers. Country directors had the flexibility to decide the commission rate for different products, based on their business priorities. After consolidation, all sales compensation globally was calculated by the central business application system, and compensation schemes were defined and approved by the top management, with no local deviation allowed.

The consolidated IT systems enabled the TMT to centralise operations and decrease the autonomy of local units. This increased headquarters' power to influence strategy implementation. The CEO was clear in an interview in 2006 that unifying IT systems had to be seen as an organisational issue, rather than technological.

The unified IT systems supported the creation of an operating model where the top management was able to intervene, take actions, or make decisions without the involvement of middle or frontline managers. As the ex-CFO remembered in an interview, the CEO wanted to create a single centralised point of authority within the company: the CEO. The CEO's view was that when orders from top managers have to go through several layers, they are likely to have changed significantly by the time they reach employees. He, therefore, wanted to create a structure where orders were communicated clearly and executed precisely down the hierarchy, and implementation could be tightly monitored.

The country-based model, where all employees in a particular country reported to the Country Manager, was gradually replaced by a regional model. In the regional model, only the sales account managers reported to the Country Leader. Local managers of sales support, marketing, customer services, finance, HR, legal, IT and other supporting functions reported directly to their own regional managers. The first 'common boss' of the internal organisation's local managers was often at the top management level. This organisational structure ensured that each business unit executed top-down orders. For example, IT would follow the direction of the global head of IT and not the local Country Leader. Changes in the IT policy (e.g. ordering different computers for employees, using the centralised procurement system) could therefore easily be implemented globally.

One of the sales directors recalled the structural centralisation process:

> "Traditionally, we were very much a country-based model. The company existed as a number of countries that had a certain degree of autonomy …. Later that started changing to a more regional-based model. Local reporting lines started to become regional and global … That was beneficial. If we had still been using a country-based model, the regional leaders would have been very much dependent on hundreds of country managing directors to embrace the strategy or not."

4.2. The evolution of organisational attention

The content analysis confirmed that the corporate strategy in 2009 was about maintaining the company's leadership position in the traditional (on-premises) software industry. There was no indication that cloud computing was on the top management's radar. The confidence in on-premises business was justified by the CEO in an interview in 2009:

> "*Will cloud computing kill us? The answer is no … it is only a rental system.*"

Our data collection did not reveal when exactly the top management team started to consider cloud technology as an industry to enter. The company does not publish the minutes of board meetings or internal discussions among the top management team. It is, however, clear that the decision was made between 2009 and 2011 because the CEO declared in a public speech in 2011:

> "*Everyone has got a cloud, we need a cloud.*"

From 2011, top management communications were increasingly focused on the cloud. In the 'Form 10-K' annual report, the weighted percentage of the word 'cloud(s)' grew from 0% (0 mentions) in FY10 to 0.2% (112 mentions) in FY11. After FY11, it grew continuously year-on-year, except in FY15, to 0.93% (505 mentions) in FY17. In FY17, the word 'cloud(s)' was mentioned nearly as many times in the annual report as 'software', which is the broader core business of the company (505 mentions of 'cloud' and 536 of 'software').

The key message gradually changed, and in 2012, the company announced the 'Industry's broadest cloud strategy'. Since then, all corporate communications have aimed to emphasize and justify the renewal strategy. For example, a year later during the company's annual conference, the CEO said:

> "Forecasts say that by 2025, 80% of the business applications used by enterprises will be in the cloud. The movement to the cloud is inevitable and accelerating."

As well as increased use of the word 'cloud', other words which co-occurred in management communications also showed a pattern. In its internal communications, the top management team started to clarify the "new" future for the organisation, how it would be different from the past, and how organisational members should contribute. The driving forces were identified, such as changing customer needs and organisational benefits. Besides defining the situation – the emerging new industry that threatened the organisation's core – the communications aimed to generate organisation-wide support for change. They, therefore, communicated the risks, both of investing into an as-yet-unproven technology and of losing competence if no investment was made. This ambivalence helped to mobilise and unite the workforce by reinforcing the corporate identity and sending a signal that "we must and can beat this challenge".

Analysis of both documentation and interviews confirmed that repositioning the business model into cloud solutions was a bold, risky move. The word risk consequently began to appear in association with the cloud. For example, the risk associated with the transition into cloud business was in 26th position of the 29 'risk' items in the company's FY11 annual report, but in the FY16 annual report, it was the number one threat and remained so in FY17. At that point, the risk was defined in the annual report as "*our cloud strategy … may adversely affect our revenues and profitability*". At the beginning of the process, the risk could not be fully anticipated, as there was too much ambiguity. As the opportunity unfolded and the transformation became clearer, the risks – and communication of the risk – also became more explicit.

4.3. The evolution of the journey

The analysis of the interviews and documents showed a clear renewal journey for the study company. The beginning of the strategic renewal journey coincided with the appointment of a new President in 2010, who had been named to the company's Board of Directors. The new president was an external hire and reported directly to the CEO. The CEO commented on the new member of the TMT:

> "There is no executive in the IT world with more relevant experience: an outstanding executive and a proven winner … [the company's] future are engineering complete and integrated hardware-software systems, and we need people like him."

However, when the appointment was announced, there was no mention of a new strategy or renewal of the company. The introduction of new members to the TMT is important for the successful implementation of strategic change [77]. In this particular case, the appointment of the new president can retrospectively be understood as a signal for the transformation. The top management team was preparing to take the business to the next level. Hiring from outside is known to help rejuvenate businesses because outside candidates are not burdened by the past, they likely to have fresh perspectives on doing business, hence they can put change strategies into perspective. All this was confirmed in the study company.

It is important to emphasize, that when the top management team announced the cloud strategy in 2011, cloud as an industry was in its 'early adoption' phase. The company was a market leader in on-premises business software solutions. Its key customers, large enterprises, were far from considering cloud-based solutions. The top management, however, anticipated that cloud adoption was likely to be a major market trend in the future. Drawing on their understanding of this, they decided to change their focus and become ambidextrous. They initiated a significant investment in the resources needed to build cloud-based products.

The top management also decided to mobilise the salesforce to explore the feasibility of cloud solutions, even though the ongoing exploitation of on-premises products was also required. There was no structural separation. The same sales representatives were selling both types of products, creating a contextually ambidextrous organisation. The temptation to favour pre-existing assets over the moving to the new core technology was high. In the study company, the double focus created confusion, and the expected results did not fully materialise. The sales of on-premises products remained high in volume, with sales representatives arguing that existing customers still insisted on buying on-premises solutions.

The contextual ambidexterity also created some tension in the sales team. The number of new opportunities was potentially greater with cloud, but the sales process became more challenging. Existing customers were not ready to move. They had usually made large investments in hardware, which made them reluctant to change. It was also not financially attractive for the salesforce to sell cloud solutions. For on-premises solutions, the inflow of revenue to the company was a single, large, upfront payment, so the commission to the sales representative was one, large amount. In contrast, when a subscription-based cloud deal was closed, the revenue was approximately one-third of an on-premises deal, which resulted in a lower commission. Cloud revenues, however, are earned annually, at the same amount, which makes the organisation better off after the third year. The difference in commission was a major drawback for the sales team because it was painfully costly for individuals. Not surprisingly, the actual sales of on-premises products remained high despite the signals communicated by the TMT.

The top management acted quickly to address the situation. To speed up the transition, new financial incentives and KPIs were introduced. Multipliers were introduced in the sales compensation plan: sales representatives earned a bonus that was three to four times higher by selling cloud than on-premises solutions. Financial rewards and incentives have had a positive influence on achieving ambidextrous goals. Intensive training was also launched in 2013 to mobilise the salesforce. When the organisation still did not follow the strategy fully, the top management applied administrative restrictions to the sale of certain on-premises products, to discourage their sales. Sales representatives had to request special approval from top managers in advance, and even if approval was given, they received only a fraction of the normal commission.

Meanwhile, a new sales unit was established in the EMEA region, with 1400 employees. This unit's role was to focus exclusively on selling cloud solutions to SMEs, a customer segment which had not previously been part of the company's focus. The subscription model meant that cloud solutions required much smaller up-front investment than on-premises solutions. SMEs could therefore afford these solutions. By embracing the new technology, the company aimed to turn non-consumers into consumers. The sales method was different from the traditional account management model, and the new sales organisation used telemarketing and telesales.

The 'SME' sales unit was structurally separated from the core enterprise sales unit. The new sales unit operated as a highly cost-effective call-centre supported by the latest technology. Potential customers were contacted by telephone, email, chat, video calls, and even social media. As one interviewee (Sales VP) explained, there was a shift in sales communication with customers:

> "*With key accounts, one prefers face-to-face negotiation. With small customers that would be too expensive. And this is about to change … in 2014, only 30% of communication with customers took place by phone, in 2016 it's 80% and in the future, it could be 100%!*"

The required profile of sales account managers therefore also changed. Previously, many years of experience in selling IT systems had been required for new employees to join the sales team. Sales representatives selling cloud solutions, however, did not need in-depth IT knowledge. Instead, they needed background in HR, finance, and marketing, because their customers were from the functional departments of target companies. The sales representatives needed to discuss and understand their clients' specific functional problems to advise them on suitable cloud solutions. The overall sales process required different skills, mostly understanding the business needs rather than technical.

The core customers, large enterprises, were initially concerned about the performance and features of the cloud products. In particular, they were worried that these would be inferior to existing solutions. However, the company strongly communicated the benefits of cloud to these customers. The traditional sales team was given incentives to offer a combination of hardware and software products to their clientele. Gradually, however, more and more sanctions were placed on the sales of on-premises products (e.g. withdrawal of discounts, and lower commissions), which discouraged sales. The sales team were encouraged to promote elements of the product portfolio that could be combined into integrated hardware and software stacks. As one member of the TMT said during their interview, the company aimed to provide "enterprises with a complete and comprehensive solution by improving product stability, performance, scalability, reliability, and manageability, as well as reduced complexity".

The organisational culture is also rooted in high performance and innovativeness. This meant that the tension from the rivalry between "new" competence and "old" competence was not new but instead seen as something institutionalised and part of everyday work. As one interviewee said:

> "There has been always a lot of internal competition with other teams. This built-in rivalry is the fundamental nature of the company, unlike in other companies I used work for. I guess this mentality, the culture of rivalry, has made the company very successful especially in times of change."

4.4. The role of middle managers in the journey

The company's renewal journey from a focused business to an ambidextrous organisation was a deliberate, top-down initiative. One member of the top management team recalled:

> "It is a choice of a model of transformation. No consensus, top-down. And it can work. The difficulty is if you don't engage with the minds and hearts of the people, there is a risk that they become mercenaries."

The involvement of frontline and middle management was limited to the execution of the strategy. One middle manager interviewee commented:

> "It started as a firm mandate. We did not have a choice. We were told this is your number for the cloud, just do it. All of the sayings like let me talk to my customer, let me see what is in my pipeline – all of them were ignored. People were told, 'just do it'. That was harsh because it removed any discussion from the table whether it was the right thing to do or not."

It was evident that middle managers were not active in shaping the strategy and only had a passive role in executing the strategy. One middle-manager interviewee commented that there were no attempts to decentralise decision-making:

> "The strategy is defined at headquarters and rolled out to be executed. This is clear … certain decisions are made only at the CEO level and maybe one level down. I don't think that there was a lot of debate below that level in the company. We may or may not like it, but that's the way it is. And on balance, it works pretty well."

Despite the restricted information and lack of debate, people from the lower ranks—including middle management—accepted their passive role and restricted influence throughout the strategy. The opinion of top managers dominated, and the consensus was to "go with the flow". Individuals, therefore, worked to achieve their individual goals on their own. The middle management interviewees indicated that when they encountered setbacks (e.g. risks of not meeting the targets) they felt that they needed to "sort it out for themselves".

The passive role of the middle managers in strategy formulation did not mean they had no decision-making power when executing it. As one interviewee explained, while strategy was formulated top-down, the middle management had considerable freedom in its daily execution.

> "There is a whole range of different strategic activities at all levels. Nobody is telling me precisely how to go to the market in my territory. Nobody is telling me how to inspire my team and how to take the solutions to the market. …. There is a lot of empowerment in the company regarding the execution of the strategy, but at the same time it is very clear that fundamental decisions are not taken democratically."

The centralised management control system, which was widely used across the entire organization, supported the top management with timely information about everything that happened in the organisation. The TMT was, therefore, able to enforce the new strategy with minimal organisational inertia and resistance. The management control system allowed the TMT to bypass middle management. For example, when the change in sales compensation was decided by the top management, to increase motivation for selling cloud, global implementation was very fast, and the commission calculation was changed for all sales associates globally without any active middle management involvement. One middle manager explained:

> "*It's not a company that rewards sharing responsibility or a very broad scope of contribution. Each of us has a very clear target, very clear assignments, and a very clear measurement system. The good thing is that it is very clear.*"

The top management team could monitor the impact of the new compensation system on the sales pipeline even in the short term. When an intervention was needed, further financial incentives were added. The implementation of these changes was again fast and smooth, without organisation-wide discussion or any middle management involvement in the decision-making.

When the hiring of 1400 new employees for the new sales organisation was decided, the top management could monitor the progress of the entire hiring and onboarding process in the HR system. The goal was to hire the new employees fast, and a monthly target was set for new hires in each location. The top managers could follow the number of candidates in different phases of the hiring process, and therefore keep the middle managers in the new organisation under pressure to meet the hiring targets.

Another example of the top-down approach is changes introduced in product marketing. Both cloud products and the new target customers, SMEs, required different messages and communications. The new marketing messages and activities were defined from the top and monitored closely. The local organisations had very little influence over those messages. The impact of the new marketing messages was measured by the amount generated in the sales pipeline, which appeared in SI, the management control system. This real-time market intelligence allowed top managers to intervene when it was necessary. They could, for example, monitor how the new marketing messages resonated with customers and modify them if necessary, based on the results reported by the system.

Cloud was a new market, so the pricing of cloud-based products was challenging. Top managers monitored the win-loss ratio and the reasons deals were lost through the sales intelligence system, and regularly adjusted the prices. If needed, extra discounts were given for a limited time to be competitive on price.

5. Discussion: Shaping a dynamic environment by the controlled renewal

The case study highlighted the process of becoming an ambidextrous organisation. There are several novel contributions. First, the study reveals that a large, multi-unit firm needed structural separation to ensure the transition into a new core technology. Second, the middle managers, despite their structural position to seize power, were rather passive in the strategy formulation process. This does not mean that they were merely executing orders. While the top managers had the power to define the strategy, middle managers still had decision-making power when implementing it along with their daily routines. Nevertheless, the management control system allowed top managers to regain influence over the organisation's actions in balancing exploitation with exploration. Third, the structural separation, as well as the reliance on MCS during the renewal journey together, mobilised and incentivized middle managers and the entire organisation to 'unlearn' old routines. Fourth, the management control system allowed the top managers to maintain flexibility as well as control over the execution, and make timely interventions when needed. Fifth, the MCS ensured uniformity and consensus for middle managers in translating goals into initiatives. Therefore, management control systems can have a profound impact on the development of organisational ambidexterity. The next sections briefly elaborate on these contributions.

5.1. The major learning points of the journey

The journey to becoming ambidextrous offers several learning points emerged, which are shown in Table 2.

Organisational ambidexterity requires the simultaneous presence of exploitation and exploration, coinciding with differences in technology and market maturation. It is characterised by the simultaneous presence of mature and emerging activities [78]. We believe that putting the firm's actions into perspective helps to answer Gilsing and Nooteboom's [79] question of how one firm gets away from the dominant designs in technology into a round of (radical) innovation. It provides insights about the potential of novel elements, and the constraints imposed by existing designs on the realisation of that potential.

The journey began with the aim of establishing contextual ambidexterity. The sales team was asked to extend its portfolio by selling the newly-developed and acquired cloud products. This strategy, however, did not fully work. The TMT, therefore, decided to create a structurally-separate unit that would solely focus on explorative activities. The structural separation was achieved in two consecutive steps. The first step was to start supply-side search activities (2nd phase), and the third step was to engage in demand-side search activities (3rd phase).

Table 2
The learning points in the journey to becoming an ambidextrous organisation.

	1st phase Contextual ambidexterity	2nd phase Structural ambidexterity	3rd phase Structural ambidexterity
Strategic renewal milestones	Appointment of a TMT member	Supply-side search	Demand-side search
Exploitation	Traditional sales organisation selling on-premises solutions to existing, large customers.	Continue technological trajectory: combining software with hardware	Existing customers
Exploration	Traditional sales organisation selling cloud solution to the existing customers.	Boundary-spanning acquisition of unfamiliar, cloud technology	New customer segment (SMEs)
Role of middle management	Influential: Slow reaction, signs of organisational inertia	Passive: A new, "fresh" organisation is set up to sell the new technology	Mobilised: Incentives and new KPIs are introduced across the organisation
Communication message	Concerns to maintain a leading position, create awareness to change	Cloud is a threat; profound changes are needed	We can beat it, embrace the changes

During the 2nd phase, the original sales team focused on the exploitation of existing technology and local knowledge by delivering the best value in the industry with integrated hardware-software solutions. This was characterised by the combination of resources across different parts of the portfolio, and actively pursuing synergies between them. It ultimately resulted in the development of new products and/or market applications. The exploitation strategy proved to be successful and increased the overall size of the attainable market. The process required tremendous innovation, but the knowledge and competencies required were local and familiar to the firm. The firm's expertise consequently deepened, which is very much a definition of exploitation.

Meanwhile, the TMT continued to fund the development and acquisition of cloud businesses. The boundary-spanning acquisitions allowed the company to step away from its technological trajectory and venture into new and emerging technology. Back then, the technology was still at an early stage of development, and the eventual direction of the market was not clear. The TMT also faced the risk, at least in the short term, of being outperformed by competing organisations with more focus. Nevertheless, the acquisitions allowed the company to broaden its competences. By expanding its operations into cloud services, the TMT definitively acted as visionaries and active influencers of the environment. Sidhu et al. [22] found that greater non-local supply-side search is positively associated with innovativeness in more dynamic environments.

The uncertainty and risks involved in entering an emerging industry in its early stages are both very high. The study company purposefully restrained its initial demand-side search to its existing customers. At that time, there was also not yet strong market demand for cloud solutions.

In the second phase, technological knowledge played an important role in becoming an ambidextrous organisation. Once the competence in cloud technology had been accumulated, the firm started to look for opportunities to commercialise it in the form of new products. That was the point of transition to the next (3rd) phase, where the company engaged in a demand-based search for both local and more remote groups of customers. Danneels [80] argued that a deep understanding of customer needs is necessary to understand how the technology satisfies those needs and the value that customers would place on satisfying those needs. This understanding drove the TMT's attention and organisational efforts.

In the 3rd phase, the demand-side search was initiated in two directions. First, existing customers were targeted for both on-premises and cloud products. Second, the new sales organization targeted small- and medium-sized organisations, mainly with cloud products. As far as we are aware, selling IT products via telesales had never previously been tested by an incumbent at such a large scale. There had been a limited number of trials, but no one had experimented with that level of expansion: where an enterprise-focused multinational IT company targeted a non-traditional market segment, SMEs, with a different sales model and emerging technology. By targeting low-end, initially unserved customers with emerging technology, we argue that the study company disrupted the industry. In summary, the demand-side search for new knowledge allowed the organization to accumulate knowledge as well as experiences in testing the viability of its renewal strategy.

Consequently, the organization become truly ambidextrous through Stages 2 and 3, which are both characterized as highly experimental and involving exploratory learning. The contextual ambidexterity was not a suitable organizational setup to address the business opportunity that the TMT intended to explore. Results, therefore, confirm the findings of [89] that an adequately-resourced, spatially-separated organization is crucial for inventing a new business that is in many ways very different from the old one.

The communication agenda also changed in line with the phases of the renewal journey. As more competence and knowledge were accumulated, the messages became more optimistic. They moved from awareness of emerging technology, through describing a profound threat, to painting a confident and winning future.

5.2. Shaping a dynamic environment by the controlled renewal

This longitudinal case study has shown that business intelligence systems allowed the study firm to become ambidextrous in a top-down, closely controlled journey. The data-driven and automated feedback system enabled the TMT to learn fast, with less effort required to coordinate activity. This, in turn, substituted for the active involvement of middle managers.

Previous research (e.g. Ref. [6] suggested that the involvement of frontline managers is essential to the renewal process in organisations facing permanent turbulence and uncertainty. Both top and middle management should take an active role. However, in our study organization, the received wisdom that the renewal process may be initiated from the top but requires considerable engagement from all levels in shaping the direction of the transformation did not hold. Wilden et al. [81] also argued that renewal in highly competitive and turbulent markets is possible with an organic organizational structure that provides a basis for the use of processes to sense and seize external opportunities via decentralized decision-making.

The industry in this study is hypercompetitive. The technological development in the first decades of the 21st century was evolving exponentially rather than linearly [82], creating a hypercompetitive environment. Our results are therefore surprising. The incumbent firm did not behave in line with predictions but took a new approach in several ways. First, the top management did not aim to involve middle management in giving meaning to the emerging technology. The middle management did not actively participate in setting the strategic direction of the firm. Frontline staff and middle managers remained largely excluded from strategy-making, with a fairly passive role. The performance evaluation of units remained revenue-driven, and rewards were based on market achievements. There was limited team-working across levels and functions while the new renewal strategy was unfolding. The interviews confirmed that the top-down change was hard for middle management, particularly because there was no room for discussion or negotiation about its content and scope.

The results also confirm Chang and Hughes' [83] point that when used intelligently, reward systems signal strategically relevant goals and consequently reinforce certain behaviours among organizational members.

The organization therefore does not fit into any of the idealized renewal journeys suggested by previous studies. We suggest that it is necessary to rethink the role of middle management in the face of a dynamic environment and technology change. Business intelligence can provide accurate real-time information to decision-makers, eliminating the need for the involvement of lower-level managers. The well-functioning decision support system and organizational communication strategy can together substitute for collective sense-making and shared strategic schemas. Our findings, however, appear to contradict the assumption that a directed renewal journey is less suited for firms in dynamic, rapidly-changing environments.

This renewal journey was therefore a hybrid form of the two types of journeys (directed and transformative) suggested by Volberda et al. [6]. We describe it as a controlled renewal journey (Table 3).

In this journey, top managers explicitly managed the balance of exploration and exploitation by bringing in new competencies to some units and using well-developed competencies in others. In controlled renewal, the shift from one direction to another can be driven by a small strategic apex even in a multi-unit firm with many thousands of employees. The main advantage of this type of journey is that the organization can fully realize the advantage of highly centralized formal planning and control while becoming resilient and ambidextrous. This could provide a new competitive advantage.

This matches the perspective of Prahalad and Hamel [84]; who argued that strategic renewal depends on the strategic intent of the CEO or corporate management and should be based on superior industry foresight. The study also shed light on organizational learning. With

Table 3
Types of renewal journeys in multi-unit firms.

	Top management is passive concerning the environment	Top management is active concerning the environment
Frontline and middle managers are passive (stable competition)	**Emergent Renewal**	**Directed Renewal**
Frontline and middle managers are passive, but support systems are active (hyper-competition)	-	***Controlled Renewal***
Frontline and middle managers are active (hyper-competition)	**Facilitated Renewal**	**Transformational Renewal**

Source: adapted from Volberda et al. (2001:163) (our extension is shown in italic)

strong central control and directives, the new explorative learning from the field – which is important in a dynamic environment – as restricted to the top management level. This silo effect is likely to reduce the benefit for the whole organization [85].

The case study also confirms the threat–rigidity thesis. The external threat situation was used by the top managers to reduce participation and increase centralized decision-making. In anticipation of the pressure for uniformity, middle managers adjusted their behaviour. Instead of demanding involvement, they sought consensus and in doing so, supported the policies or position of the existing leadership. As a result, the top managers' influence over the actions of organizational members became greater and eventually, they gained the power to deliver the strategy.

6. Summary and future research directions

The strategic renewal attempts are highly challenging and can generate huge organizational tension, especially in multi-unit firms. Successful implementation requires a significant amount of innovation, experimentation, and trial-and-error learning. Successful structural separation of exploitation and exploration can help the organization to live through the challenging times until the ambiguity is cleared up and enough knowledge is gained about the real value of the new strategy.

The longitudinal study of a multi-unit firm allowed us to highlight how ambidexterity was achieved, including from the middle managers' perspective. Previous studies have had contradictory results, which might be explained by the differences between the management control systems used in other organisations.

Our study was limited to a single case study, and its results may therefore not be widely generalizable. However, it could be a role model for successful large-scale strategic renewals which will be numerous in hypercompetitive environments. The lack of a comparative case and avoid the trap of over-determination of historical events, multiple data sources were analysed. The analysis of organisation rhetoric allowed historical counterfactual analysis and to contrast interviewees perceptions with facts. The replication of the study across cases is also challenging. This kind of renewal journey calls for cases which used to show similarity in processes across different settings rather than to explain differences as suggested by Yin (2014).

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