

Leveraging dynamic capabilities in the post-acquisition integration phase of an acquisition

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Declaration

I declare that this journal article and attached supplement is my own \boldsymbol{v}	work. It is submitted in	
partial fulfilment of the requirements for the degree of Master of Busin	ness Administration at	
the Gordon Institute of Business Science, University of Pretoria. It has	as not been submitted	
before for any degree or examination in any other University. I further	er declare that I have	
obtained the necessary authorisation and consent to carry out this research.		
<u> </u>		
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Date: 01 December 2020

Motivation for journal choice

Long Range Planning (LRP) is a peer reviewed journal that has been rated a 3 by the

Academic Journal Guide 2018 (Scopus Indexed). According to Clarivate Analytics Journal

Citation Reports 2020, the journal impact factor is 4.041 (2019).

LRP is a research journal in the field of strategic management, with a research focus on

strategy. The article, titled "Leveraging dynamic capabilities in the post-acquisition

integration phase of an acquisition" supports the call by LRP, for research in the field of

strategy. In addition, the data collection method of case study methodology is supported

by the journal. The journal welcomes research from all parts of the world, and thus a South

African setting is suitable for the journal requirement. The journal has published recent

articles (2019) in the fields of both post-acquisition integration and dynamic capabilities

making this research study a suitable fit.

The article has been written in accordance with the authors guideline, these guidelines

are not prescriptive regarding page count, word count or font style. The sequence of

authorship will reflect the researcher as first author and research supervisor as second

author.

Kind Regards,

Adisha Singh

1. Literature review

Introduction

This research study aims to understand the role of dynamic capabilities in the post-acquisition integration of acquisitions. In doing so, two prominent streams of literature are reviewed, i.e. Mergers and Acquisitions (M&A) and Dynamic Capabilities. From an M&A perspective, the literature review is structured to first understand the benefits of M&A as a growth strategy, then highlight the high failure rates, before examining the different schools of thought that have emerged over time.

This is followed by a detailed discussion on the post-acquisition integration phase of M&As and the role that it plays in the overall M&A performance. The next segment reviews the literature on dynamic capabilities, analysing its link to acquisitions. This section further highlights the three dynamic capabilities explored in this research (sensing, seizing and reconfiguring), as well as organisational learning and its role in the M&A process. The review concludes with an analysis of the performance integration link in the M&A research.

Mergers and acquisitions

M&As provide organisations with an increased competitive advantage in the market, as they present efficiencies and synergistic benefits (Porter, 1985). Over the years, M&As have remained a preferred means to gain competitive advantage by facilitating market expansion; unlocking cost synergies; providing access to new customer channels and different market segments; creating a pipeline of research and development; and raising competitive barriers to entry (Renneboog & Vansteenkiste, 2019). Given the multiple benefits presented by M&As, it is clear why this is a preferred growth strategy for many organisations.

Yet, despite these benefits, the actual success rate of M&A transactions remains mediocre at best – on average 40% to 60% of these transactions fail to achieve value (Bauer & Matzler, 2014). Despite the existence of empirical evidence regarding the benefits accruing from an acquisition, it is still difficult to establish whether these transactions are value-creating or value-destroying events (Renneboog & Vansteenkiste, 2019). One possible reason for the lacklustre performance of M&As is the complexity of acquisitions

(Heimeriks et al., 2012), which consist of the interdependent processes of selecting a target, conducting due diligence, holding negotiations and post-acquisition integration.

Schools of thought on M&As

M&A research takes place across four distinct schools of thought, which have emerged over time (Haspeslagh & Jemison, 1991). These include the financial economic school, which analyses performance using share price or accounting measures; the strategic management school, which studies the effect of pre-merger relatedness on performance; the organisational behaviour school, which looks at the effect of M&A deals on organisational culture and individuals; and the process school, which looks at pre-merger issues of cultural fit as well as post-merger issues of degree of integration (Bauer & Matzler, 2014).

Financial economic school

The financial economic school is widely used in M&A literature (Cartwright & Schoenberg, 2006; Haleblian et al., 2009; Stahl & Voigt, 2008). The school looks at whether value has been created from mergers and acquisitions, and studies the impact of acquisitions on wealth creation, issues of agency, the role of investors, and public vs. private firms (Haleblian et al., 2009). From a financial perspective, target firm shareholders have typically reaped positive returns from M&A deals, while the acquiring firms often experience a decline in share price post-acquisition, with limited to no shareholder returns (Agrawal & Jaffe, 2000). In addition, managers of the acquiring firms report that only 56% of their acquisitions could be considered successful when compared against their original targets (Schoenberg, 2006). What is therefore known is that from a financial standpoint, M&A transactions fail to create their intended value. However, Sarala, Vaara and Junni (2019) indicate that financial examinations provide incomplete explanations as to the factors of success or failure of M&As.

Strategic management school

This school focuses on a firm's diversification strategy Cartwright and Schoenberg (2006) explaining that strategic management research focuses on the identification of strategic and process factors to explain differences in performance amongst acquisitions, adding that the literature on 'strategic fit' has focused on the link between performance and the extent of relatedness of a target company business model to that of the acquirer. Healy et

al. (1997) found that in some strategic M&As, returns were positive, while conversely, hostile, non-strategic M&As managed to barely break-even. Despite this, Cartwright and Schoenberg (2006) established that M&A underperformance cannot be adequately explained by strategic fit in isolation of the wider integration process.

Organisational behaviour school

The need to go beyond the financial indicators of success was noted by Graebner et al. (2017), who indicated that while financial and strategic examinations have in the past explained the success or failure of M&As, they provide inadequate explanations. Instead, Sarala, Junni, Cooper and Tarba (2016) found a growing need to research the role of sociocultural factors such as human resource management practices, employees, social processes and the role of culture in attaining important strategic M&A goals of post-acquisition synergy and knowledge transfer. Their conceptual paper emphasised the importance of knowledge transfer enablement among firms by creating sociocultural interfirm links (Sarala et al., 2016). Building upon this work, Sarala, Vaara and Junni (2019) emphasised an urgent need to consider the "human side" of M&As in order to explore the depth of this perspective, by highlighting the relationship M&A actors and their sensemaking, habits and behaviours. Most recently, Zhou, Fey and Yildiz (2020) indicated that the human side of M&As are impacted by the acquiree organisation's absorptive capacity in the post-acquisition integration.

Human resource management problems and cultural differences are often seen at the executive level, as executives in the target firms frequently experience cultural clashes. It has been noted, that close to 70% of senior level management leave in the five year period after the deal had closed (Krug & Aguilera, 2005). Bauer and Matzler (2014) found that little had been done to develop an integrated understanding of M&A performance, which is why they performed a study to determine the need for a model that looked at strategic complementarity, cultural fit, and the degree of integration in relation to M&A performance. Cartwright and Schoenberg (2006) found that this school accounts for premerger issues of cultural fit or compatibility, as well as post-merger issues of extent of integration.

Process school

The process school focuses on the chosen integration strategy as well as the acquisition process. In this stream, it has been widely recognised by organisational behaviour and strategy scholars that inadequate decision-making, deal mediation and strategies for integration may result in sub-standard acquisition outcomes (Birkinshaw et al., 2000; Cartwright & Schoenberg, 2006; Haspeslagh & Jemison, 1991). Greater domestic acquisition experience enhances an organisation's acquisition-related capabilities with regard to initial target identification and selection, a robust due diligence process, negotiation, and ultimate integration (Alessandri et al., 2014; Galavotti et al., 2017). Distinctive types of routines generate different experiences; when a firm engages in a deal, it develops competencies related to that specific type of acquisition, which encourages the repetition of the same type of acquisition over time. This repetitive behaviour contributes to a refinement of those competencies (Galavotti et al., 2017).

While each school of thought presents a distinct view of the antecedents of M&A performance, it is contended by both academics and practitioners that post-acquisition integration may be the single most important determinant of acquisition success (Heimeriks et al., 2012). This view was supported by Brueller, Carmeli and Markman (2018), who indicated that numerous studies have attributed the degree of failure of M&As to the intricate post-merger integration phase. It is therefore known and understood that integration plays a pivotal role in achieving an acquisition's objectives.

How, then, do organisations improve the integration process to facilitate improved performance? Despite an expansive body of knowledge on acquisition performance (Zollo & Meier, 2008), this question remains largely unanswered. Given the importance of the integration phase to overall acquisition success, it is critical to understand the enablers and barriers to a successful integration. Put differently, with the integration phase being linked to M&A failure, the lack of understanding with regard to integration enablers may be considered a research gap (Angwin & Meadows, 2015).

Post-acquisition integration (PAI)

Post-acquisition integration may be described as "the making of changes in the functional activity arrangements, organisational structures and systems, and cultures of combining organisations to facilitate their consolidation into a functioning whole" (Pablo, 1994: 806).

Graebner et al. (2017: 2) later expanded on this to describe post-acquisition integration as a "multifaceted, dynamic process in which the merging firms or their components are combined to form a new organisation". It is thus evident that PAI is made up of various sub-processes, some of which involve the planned integration of actions and resources for value creation, while others involve social and cultural issues. It is also known that PAI is a key to successful integration, which requires oversight of the individual sub-processes while addressing any conflicts that may arise.

Previous research on M&As has examined post-acquisition integration as a stand-alone event in the M&A process (Laamanen & Keil, 2008). It has, however, been argued that this singular focus comes at the exclusion of the broader organisational context, and that to further understand the dynamics, complexities and intricacies of post-acquisition integration, there is a need to broaden research beyond integration operationalisation (Rouzies et al., 2019). To this end, strategic decision making and planning for M&A integration should commence early on in the M&A process, with the operational process of integration commencing after deal closure (Ellis et al., 2011; Steigenberger, 2017). The role of planning in integrations may therefore be considered an important element in the integration process, which starts with the overarching integration strategy being followed.

PAI is made up of two key, yet distinct, concepts, i.e. the extent of integration and the integration strategy (Wei & Clegg, 2020). The extent of integration refers to the degree to which the acquiree is integrated into the acquirer (Cording et al., 2008; King et al., 2004), while the integration strategy refers to the approach used to manage resources in order to capture value for the acquirer (King et al., 2008). This is indicative that the extent of integration is a core determinant of functional integration strategies.

The post-acquisition integration model created by Haspeslagh and Jemison (1991) focuses on the dimensions of strategic interdependence and organisational autonomy (Angwin & Meadows, 2015). Strategic interdependence, in the context of M&As, explains the interdependence of merging firms with respect to capability transfer and resource sharing (Angwin & Meadows, 2015). These capability transfers create value that would not have existed had the firms worked independently (Barney, 1991). At an operational level, these capability transfers entail the integration of organisational structures, systems and cultures to create a new unit (Pablo, 1994). Organisational autonomy, meanwhile, looks at the extent to which an organisation's culture is preserved or dissolved.

Researchers have posited that where a change in culture occurs due to a loss of autonomy, this yields dire consequences for an organisational culture (Angwin & Meadows, 2015; Buono & Bowditch, 1989). This implies that a level of autonomy is required over decision-making when new resources are brought to the acquiring firm (Puranam et al., 2006).

The level of integration a company embarks on is dependent on their need for strategic interdependence and organisational autonomy, and lies on a continuum from on absorption, strategy of low autonomy and high interdependence; preservation, being a high level of autonomy with a low interdependence; or symbiosis, being a high level of both strategic interdependence and autonomy (Haspeslagh & Jemison, 1991). The dilemma between integrating a newly acquired business and keeping it autonomous in the post-merger period has been identified as a central challenge for management (Zhu, Xia, & Makino, 2015). This dichotomy is often due to the conflicting priorities of management, i.e. realising immediate cost savings and synergies while trying to preserve the essence of what makes an acquiree successful.

In order to secure the transfer of capabilities between firms, integration is still seen to be an essential step (Ambrosini et al., 2011; Datta, 1991). However, firms need to be aware that when a decline in autonomy is experienced in a target firm after integration, this often causes an interruption of the acquired firm's innovative capabilities, leading to the depletion of capabilities, and in some instances results in the loss of key personnel (Puranam & Srikanth, 2007). This further exacerbates the strategic tension faced by managers between preserving a business essence and realising synergies.

A capabilities perspective offers a slightly nuanced view in that the transfer of capabilities subsequent to acquisition occurs through a dynamic and interactive process that involves management from both firms. This transfer of capabilities requires both the retention of the target's capabilities and managerial actions to facilitate the integration (Colman, 2020). With regard to knowledge-based resource transfer, these have long been considered a driver of post-acquisition integration, with growing calls for an integrated view needed of both knowledge transfer and absorptive capacity (Zhou et al., 2020). An understanding of the capabilities that allow a company to execute on the integration strategy thus requires further exploration.

Dynamic capabilities

The resource-based view of the firm contends that a company gains a competitive advantage when its resources are valuable, rare, inimitable and non-substitutable, and that different combinations of these resources enable firms to create business strategies that their competitors are unable to match (Barney, 1991). This view differs to prior models, namely the Five Forces Model and Strategic Conflict Model, by focusing on a firm's unique resources and how to best leverage these resources in the market (Teece et al., 1997).

However, while the resource-based view provides a superior view of strategy to previous models, its shortcoming exists in its inability to address the agility and flexibility required to respond to changing conditions in the environment (Teece et al., 1997). In light of the limitations raised about the resource-based view's applicability in the context of changing environments, Teece et al. (1997: 516) advanced the dynamic capabilities perspective by highlighting an organisation's ability to "integrate, build, and reconfigure internal and external competencies to address rapidly changing environments". A different perspective was provided by Zollo and Winter (2002: 5), who proposed that a dynamic capability was a "learned and stable pattern of collective activity through which the organisation systematically generates and modifies its operating routines in pursuit of improved effectiveness". Thus, when comparing the resource-based view to the Dynamic Capabilities Model, it is evident that at their core, both the resource-based view (RBV) and the Dynamic Capabilities Model see a firm's resource base as its source of competitiveness. Their main difference lies is that the RBV highlights a firm's current resource base as a source of competitiveness, while the Dynamic Capabilities Model's perspective addresses intentional modifications to the firm's resource base (Schilke et al., 2018).

Teece et al. (1997) explained that the winners in the global marketplace have been firms that demonstrated agility, responsiveness and rapid product innovation, together with sound management expertise, which resulted in the effective coordination and redeployment of internal and external competences. Dynamic capabilities research may therefore be used to explain a firm's sources of competitive advantage, with firm performance being a key aspect of the theory that is typically seen as the aim of dynamic capabilities (Laaksonen & Peltoniemi, 2018; Teece, 2007; Teece et al., 1997).

Fainshmidt et al. (2019) concluded that the link between a firm's source of competitive advantage and dynamic capabilities is contingent on the strategic fit between organisation and environmental factors. In explaining the interdependency between a firm's business model, its dynamic capabilities and its strategy, Teece (2018) explained that the strength of a firm's dynamic capabilities enhances its expertise in business model design. In addition, in order to restore a business' competitive advantage, organisations require business model transitions which should be combined with assets and corporate strategies that often make replication complex (Teece, 2018).

Dynamic capabilities in the context of M&As

Acquisitions play a vital role in firms achieving their growth objectives. A firm's capacity to identify suitable targets, and create value from its acquisitions, is seen to be an important factor in shaping their overall performance and long term sustainability (Meyer-Doyle et al., 2019). Scholars have long viewed an organisation's ability to actively engage in mergers and acquisitions to be an important dynamic capability (Bingham et al., 2015; Meyer-Doyle et al., 2019). Dynamic capabilities can therefore be seen to support the crucial firm level activities of strategic planning and acquisitions (Helfat & Winter, 2011; Teece, 2007).

At the overall acquisition level, dynamic capabilities that enhance a firm's growth potential are known as acquisition-based dynamic capabilities (ABDC), which manifest themselves in a firm's ability to create, extend, or modify its resource base (Amiryany et al., 2012; Anand & Capron, 2007). This is further supported at the post-acquisition integration level, where an organisation's ability to plan and effectively execute the integration phase in M&A deals is seen to be an example of a dynamic capability, as the process of integration involves changes to operating routines for both the acquirer and the acquiree (Zollo & Winter, 2002).

Based on this comparison, it is evident that the M&A process lends itself to a dynamic capabilities' perspective through its similarity to the way in which firms obtain new resources and capabilities, however while the link between capability-based resources and acquisitions are increasing in research, the instances of such research studies remain limited (Ferreira et al., 2014). It is therefore crucial to explore this relationship between an organisation's internally generated capabilities and their M&A integration processes.

Dynamic capabilities can be separated into the capacity to sense opportunities and threats, to seize opportunities, and to reconfigure capabilities in order to maintain competitiveness (Pitelis & Wagner, 2019; Teece, 2007). Teece (2007) defined the sensing and shaping of opportunities and threats to be a scanning, creating, learning and interpretive activity, which occurs through the interpretation of existing or new information. Sensing also involves investments made in research and development, customer needs analyses, and understanding demand as well as industry and market dynamics (Teece, 2007). Once a new opportunity is sensed or recognised, new product development is required to seize the opportunity (Teece, 2007). Seizing opportunities requires the continuous maintenance and enhancement of relevant competencies, which include technology and investment in those competencies already accepted by the market (Teece, 2007).

Transformation

Karim (2006) contended that integration on its own does not yield optimal benefits, arguing that instead, several iterations of reconfiguration need to be performed before these acquisitive benefits are achieved. In a study conducted on Johnson and Johnson over a 23-year period, Karim and Mitchell (2004) found that the organisation was able to create greater firm value by reconfiguring their units at several different junctures, especially with regard to acquisitions. This illustrates that the development of internal capabilities is a key strategic lever for organisations. This view was echoed by Barkema and Schijven (2008), who described the integration process as being split into two parts, with the first being the initial combination of two entities. They explained that this leads to suboptimal performance, resulting in the second stage being a restructuring to fully unlock the synergistic potential.

While the concepts of sensing, seizing and reconfiguring are interconnected, they are not interchangeable. Notably, reconfiguration in the absence of sensing or seizing may fail to create resources that fit with the environmental conditions (Drnevich & Kriauciunas, 2011; Fainshmidt et al., 2019; Wilden et al., 2013).

Organisational learning capability

Acquisitions provide a good platform from which to study organisational learning, as they occur multiple times in an organisation's history and provide the opportunity to assess performance improvements (Haleblian et al., 2009). Firms adopt a mix of learning behaviours, made up of semi-automatic experience accumulation, knowledge articulation and codification activities (Zollo & Winter, 2002). High levels of knowledge codification may weaken organisational decision inertia, which implies that as codification increases, its role switches from strengthening inertia to promoting learning (Castellaneta et al., 2018). It may therefore be understood that acquiring firms must understand when post-acquisition integration-related capabilities are applicable, and when they should apply adhoc problem solving.

A study conducted by Heimeriks et al. (2012), which was based on codification and dynamic capabilities, found that codification still remains an important step in the post-acquisition process, but requires the adoption of higher order routines to ensure capability development. Applying this to acquisitions, a dynamic capability for post-acquisition integration should encompass zero-order routines that are codified to allow firms to efficiently apply lessons learned from prior experience, as well as higher-order routines that mitigate the risk of negative experience transfer. Similarly, Fainshmidt and Frazier (2017) found dynamic capabilities to be dependent on collective learning in organisations, explaining that an organisation's social climate may be a driver of dynamic capabilities.

The integration process still requires a degree of customisation from one deal to the next, however, as no two acquisitions are quite the same (Haspeslagh & Jemison, 1991; Heimeriks et al., 2012). Research has begun to examine acquisitions from a learning perspective, advancing the argument that prior experience may be crucial for managing the complexity that firms encounter during the post-acquisition integration phase (Heimeriks et al., 2012).

In the context of a volatile, complex, uncertain and ambiguous business environment, the dynamic capabilities approach, as expounded by Teece (2007), embraces the external dynamism of an organisation and changes the focus from defending existing rare and valuable resources or capabilities from imitation, towards the reconfiguration of the business that become valuable in the future (Matysiak et al., 2018). In addition, in order

to restore a business' competitive advantage, organisations require business model transitions which should be combined with assets and corporate strategies that make replication complex (Teece, 2018).

From ordinary capabilities to dynamic capabilities

A firm's dynamic capabilities create new opportunities for value creation by modifying its ordinary capabilities (Eisenhardt & Martin, 2000). To understand the uniqueness of the dynamic capabilities perspective, Schilke et al. (2018), emphasised that firm capabilities can be distinguished as operational or ordinary capabilities, which are used primarily to maintain the status quo; and dynamic capabilities, which are directed toward strategic change (Helfat & Winter, 2011; Winter, 2003; Zahra et al., 2006).

The literature on dynamic capabilities makes a conceptual distinction between the ordinary capabilities and dynamic capabilities of the firm, with the main difference being that ordinary capabilities are focused on current performance while dynamic capabilities allow for a firm to change and adapt for future performance (Laaksonen & Peltoniemi, 2018; Zollo & Winter, 2002). This change in a firm's resource base or ordinary capabilities, through the use of dynamic capabilities, may be used to explain changes in firm performance (Laaksonen & Peltoniemi, 2018).

If a firm continues to utilise the same operating routines in a business environment that is characterised by rapid levels of technological, regulatory and competitive changes, this can put the organisation in a perilous situation (Zollo & Winter, 2002). Systematic efforts of change are therefore required to respond to changes in the environment, as competitiveness will be temporary for an organisation lacking dynamic capabilities (Zollo & Winter, 2002).

Dynamic capabilities exist at an organisational, individual and interpersonal level. At an organisational level, these are seen as higher order routines that may be learned and codified by organisations, yet they continue to remain a topic of debate regarding how they emerge and operate within organisations (Salvato & Vassolo, 2018). On the other hand, a micro-foundational approach views dynamic capabilities as decision-making skills exclusively at the senior executive level, factoring out not only junior employee contributions, but also excluding collective actions that function independently of senior leadership (Adler & Obstfeld, 2007; Helfat & Peteraf, 2015). To address the disconnect in

these approaches, Salvato and Vassolo (2018) created a model that joined the micro level with the macro level, by proposing an element of interpersonal connections among a firm's employees, thereby revealing how individual level action aggregates into firm level dynamic capabilities.

Laaksonen and Peltoniemi (2018) assessed how measuring dynamic capabilities corresponds to the theoretical viewpoint of dynamic capabilities, and found four types of operationalisation strategies. The first was managers' evaluations of how well their firms perform particular tasks, the second was financial data, the third was a company's experience in tracking past experience, actions and performance, and the fourth was managers' or employees' experience, actions and performance.

Performance-Integration link

King et al. (2004) defined acquisition performance as the amount of value the acquirer gains from an acquisition. A significant discussion in M&A literature surrounds the success or performance of M&As (Teerikangas & Thanos, 2018). Value creation occurs in the post-acquisition integration, when the expected value pre-acquisition has been achieved, while the failure thereof is known as value leakage. Organisations that seek to succeed in post-acquisition integration therefore require an understanding of the complex link between integration and performance, which is influenced by the acquiring organisation's integration strategy (Wei & Clegg, 2020). Despite numerous studies in this field, there are increasing calls for further research on the mediating role of the post-integration phase on acquisition performance (Teerikangas & Thanos, 2018).

Based on the literature review performed, the questions below emerged which formed the basis of the research study:

- 1. What are the antecedents for post-acquisition integration?
- 2. How do dynamic capabilities contribute to the success of the post-acquisition integration phase?
- 3. How does the post-acquisition integration phase impact value creation in an M&A deal?

2. Research methodology and design

Introduction

The research methodology was based on the scope of the research questions, and was predicated on the literature review performed. Data were collected through semi-structured, in-depth interviews with those involved in M&A activity at a JSE-listed South African pharmaceutical company. In addition, data were triangulated by interviewing industry experts in the fields of M&A and dynamic capabilities in order to enhance the validity and reliability of the study. A thematic analysis was then performed to gain insights from the qualitative interview data.

Research design and choice of methodology

An interpretivism philosophy was deemed to be most suitable for this study, given that this philosophy is predicated on studying social phenomena in their natural surroundings (Saunders & Lewis, 2018). In order for the researcher to gain a deep and rich understanding of the strategy and internal capabilities demonstrated and applied during a post-merger integration by the acquiring organisation, it was important to examine the roles of individuals as social actors, as well as the roles played by them during the acquisition process. This study therefore adopted an interpretivism research philosophy, as it was crucial for the researcher to gain a deep understanding of the unique business context in which the specific individuals involved in the M&A deal within the organisation found themselves.

This research study contributes to the dynamic capabilities' body of knowledge, and specifically addresses how a firm's dynamics capabilities impact the post-acquisition integration phase of M&A transactions. An inductive method was therefore considered suitable as the researcher attempted to make sense of the emphasis and meaning associated with the event being studied (Saunders & Lewis, 2018). In addition, inductive reasoning follows a research approach that is considered "bottom-up" by moving away from specific interpretations to broader theories.

A mono-qualitative research method was used for this study due to the nature of the research objectives. Yin (2018) explained that case study research is used when the

researcher attempts to answer "how" or "why" style questions, when they have little control over behavioural patterns, and when the study itself is a contemporary "case".

The research strategy used was the case study method, as the study examines the specific acquisition of a family-owned healthcare business by a JSE-listed pharmaceutical organisation. This organisation was selected due to its accessibility, and is therefore not intended to represent the ideal acquirer, nor is it necessarily an example of how to effectively utilise dynamic capabilities. Instead, the case organisation was selected as a suitable research context within which this study could make sense of the role of dynamic capabilities in acquisitions.

Bengtsson and Larsson (2012) found that M&A case studies contribute considerable value to the study of M&As, particularly as they provide a rich idiographic interpretation of the complexity found in the integration processes of M&As, where the longitudinal, multi-aspect, and multi-level depth of the case study method supersedes others. The benefit of such studies lies in their longitudinal time horizons, as they encapsulate the complexity of combining and integrating two or more organisations, which tends to occur over a number of years.

The research was intended to be exploratory, and sought to discover new insights and views into an existing topic, in a new light (Saunders & Lewis, 2018). This was aligned with the objective of the research, which was to ascertain how dynamic capabilities are used during a complex and crucial stage in an M&A cycle, being the integration phase, by examining a specific acquisition within an organisation.

This cross-sectional study was performed at a point in time, but it was reflective in nature and gained a deep understanding of historical events, as the acquisition requires a thorough examination of the M&A transaction that took place within the organisation in 2018 and follows the post-acquisition integration that follows through to 2020. The timeframe corresponded with the findings of a wide body of literature that proposes that the two years post-acquisition are essential to acquisition performance (Morosini et al., 1998), and that at the conclusion of the two year period, the process of combining the firms has usually been completed and the results of the underlying integration effort can be measured (Jemison & Sitkin, 1986).

Two data collection methods were used, the first being a qualitative research design as the primary data gathering method was semi-structured interviews. Secondary data collection was performed by reviewing multiple sources of company information, which included SENS announcements, news reports, company integrated reports and press releases (Saunders, Lewis, & Thornhill, 2016). The data were then triangulated by the inclusion of expert interviews. Triangulation is the use of multiple methods or data sources to develop a comprehensive understanding of a phenomena (Patton, 1999). In this study, it offered the additional benefit of testing the validity of the data through the convergence of information from different sources (Carter et al., 2014).

Semi-structured, qualitative research interviews were conducted. The sample size was determined when saturation was reached, i.e. when no new insights were being identified from further data analysis (Guest et al., 2006). The interviewer had a list of topics and questions to be covered, but these varied from one interview to the next depending on the responses received, as well as each participant's role and involvement in the M&A process being studied (Saunders & Lewis, 2018).

Population

Gerring (2007) referred to the population as the universe of cases and observations to which an inference occurs, which is typically larger than the sample under investigation. For the purposes of this case study, the intended population included all executives, senior managers and middle managers involved in the acquisition, from both the acquirer and acquiree perspective.

Unit of analysis

For the case study, the unit of analysis was the insights, opinions and experiences of the executives, senior managers and middle managers who formed part of the mergers and acquisitions process, as it related specifically to the purpose of the research. Zikmund, Carr and Griffin (2013) described the unit of analysis as referring to the "who" or "what" that forms the focus of a research study, while Benbasat, Goldstein and Mead (1987) stated that when defining the unit of analysis, a researcher must consider whether the study will focus on an individual, group or an entire organisation, or if it will be specific to a project or decision. In this study, it was imperative to obtain the opinions and insights of

the individuals involved in the transaction, which provided different and rich perspectives and insights.

Sampling method and size

The sampling method was judgemental, purposive sampling. Saunders and Lewis (2018) described purposive sampling as non-probability sampling where a researcher utilises their own judgement to decide who will be best positioned to answer the research questions and meet the research objectives. Purposive sampling was considered suitable as the researcher aimed to discover, understand and gain insight into the perceived factors that influenced the integration of the acquired organisation. In order for a participant to have been included in the sample, they were required to have been in the employ of either the acquirer or acquiree company during the acquisition. This was done to ensure a detail-rich perspective while gaining an in-depth knowledge of the transaction; as such the researcher needed to utilise her judgment when selecting the appropriate participants.

Table 1 below summarises the profile of participants in this study:

Respondent	Designation	Acquirer	Acquiree	Expert
R01	Chief Financial Officer	✓		
R02	Managing Director – Prescription Business Unit	✓		
R03	Head IT & Operations	✓		
R04	Managing Director - Acquiree		√	
R05	Chief Executive Officer	✓		
R06	Managing Director – Consumer Business Unit	✓		
R07	Head M&A and Risk	✓		
R08	Commercial Head	✓		
R09	Commercial Manager		√	
R10	Prior MD – Acquiree		√	
R11	Distribution Executive	✓		
R12	Senior Managing Consultant (Capabilities theory,			
	M&A)			✓
R13	Associate Director – Post-Merger Integration, Carve-			
	out and Separation Management			✓
R14	Prior Owner (Acquiree)		✓	
R15	Senior Managing Consultant – Expert in Dynamic			
	Capabilities and working closely with David Teece			✓
	Total	8	4	3

Table 1: Respondent Profiles

The management of the acquirer company included the CEO, CFO, Head of Mergers and Acquisitions, Divisional MDs and Commercial Managers. By including different layers of management, this provided a sound foundation from which the researcher could gain insights into how different people experienced the M&A transaction. Management from the acquiree included the previous owner, the current MD, the previous MD and a Commercial Manager, who all provided rich insights into how they experienced the acquisition, from the perspective of the acquiree. The industry experts interviewed were senior specialists working in the field of post-acquisition integration and experts working in the field of dynamic capabilities and capabilities theory. These interviewees were considered seasoned experts who held senior management positions, ranging from the Director level to Senior Managing Consultant.

Measurement instrument

The measurement instrument utilised was an interview guide (see Appendix A), which contained a list of questions that were asked during the interviews. As the study made use of semi-structured interviews to obtain the necessary primary qualitative data, the interview guide contained a mix of specific questions and open-ended questions that allowed for further probing and discussion (Merriam & Tisdell, 2015). This mix allowed the researcher to have a flexible approach to the interviewing process, using relevant themes that she identified in order to guide the discussion. The interview questions were based on the insights obtained from a thorough literature review compiled by the researcher, as well as relevant themes that began to emerge during the interview process. The openended questions allowed the participants to extensively describe their lived experiences and focus on what they considered to be pertinent events (Saunders, Lewis, & Thornhill, 2016).

Pilot process

Before commencing with the data collection process, it was important for the researcher to run pilot interviews to test the interview questions and technique ahead of the actual participant interviews. This was done in order to confirm the suitability of the interview format, to identify possible problems, to test for understanding, and to identify how long the interviews would be (Saunders & Lewis, 2018).

Two pilot interviews were conducted, one of which was with a member of middle management who had worked in the acquiree organisation and transferred to the acquirer organisation. The second pilot interview was held with a third party outside the case organisation. This process allowed the researcher to test for understanding of the language used, as well as the suitability and relevance of the questions.

The feedback gathered from both the pilot interviews aided the researcher to adjust the interview guide from being theory heavy to business friendly. This process assessed the suitability of the research questions as the process tested whether the interview questions were able to address the research objectives. Minor changes were made to the interview guide before the actual interviews commenced. The pilot interviews were the first step in ensuring the rigour and trustworthiness of the measurement instruments.

Data gathering process

Case studies often use a combination of various data collection methods that incorporate documentation, interviews, surveys and observation, of which the evidence may be qualitative, quantitative or both (Eisenhardt, 1989). For this study, it was necessary to perform primary data collection to collect the insights and opinions of those involved in the M&A process, as well as those of industry experts, however secondary data collection was also required in order to increase the study's validity and reliability, as well as to corroborate certain financial and non-financial data.

Primary data collection

As an initial step, a request for permission to conduct the research on the organisation was submitted ahead of any interviews. Once the researcher received a signed permission letter from the organisation, the data gathering process commenced with the identification of suitable participants within the acquirer and acquiree organisations, as well as suitable industry experts who could provide an overview of non-sector specific trends. Selected participants were then invited to participate in the interview process, who were provided a brief overview as to the research being conducted and the need for such research.

Merriam and Tisdell (2015) explained that interviews in a qualitative investigation tend to be more open-ended and contain less structure. This less formal structure is based on the assumption that respondents define the world in distinctive ways. Rule and John (2011)

noted that the semi-structured interview approach allows for flexibility during questioning, and allows the interviewer to pursue a stimulating line of inquiry that may emerge during the interview.

Each interview lasted approximately one hour. At the outset, each participant was thanked for their willingness to participate, and was taken through an overview of the research study. It was reiterated that were no right or wrong answers, as the researcher was attempting to ascertain the opinions, insights and lived experiences of the participants as they pertained to their involvement in M&As. The interviewer provided a timeframe for the interview, and explained that the interview would only be conducted with the participants' informed consent. Before proceeding, the researcher explained that the interviews would remain confidential, with the company's and respondents' identities remaining anonymous, and that the interview would be recorded and transcribed.

The researcher made use of a digital recording and transcription software in order to record the interviews. Merriam and Tisdell (2015) explained that audio recording is the most common method of recording an interview, as it preserves the data for analysis after the interview, and can also help the interviewer to listen to the interviews with a view to improving their technique. Participant permission was sought ahead of the interviews, with no reluctance noted from any of the interviewees. The researcher than made use of a transcriber to listen to the recorded interviews and analyse the transcripts as generated by the software, in order to correct any errors that may have occurred during transcription. A non-disclosure agreement was signed by the transcriber to ensure confidentiality of all information transcribed.

Secondary data collection

Saunders and Lewis (2018) noted that using data that were collected for a different intent, but that can be used in a current research project, is known as secondary data. Secondary data collection was done in this study by reviewing multiple sources that contained information on M&A activity conducted by the company under study. This included SENS announcements, news reports, company integrated reports and press releases that made mention of the acquisition (Saunders, Lewis, & Thornhill, 2016). The major benefits of reviewing the secondary data was that the data had appeared in the public domain, and were a way of corroborating information obtained from participants where possible (Saunders & Lewis, 2018).

Analysis approach

Flick (2014) described data analysis as "the interpretation of linguistic material in order to make statements about implicit or explicit dimensions and structures of meaning-making in the material and what is represented in it". As the interviews were audio recorded and transcribed, where possible, the researcher analysed the data after each interview as suggested by Merriam and Tisdell (2015).

The next stage saw thematic analysis being undertaken. Braun and Clarke (2006) proposed six separate phases to thematic analysis, i.e. a thorough review of the data, code generation, identification of themes, review of themes, defining and designating of themes, and producing a completed report. The process commenced with the researcher carefully reading each transcript in order for her to become familiar with the content and to understand the opinions and insights shared. These transcripts were then loaded on to Atlas.ti, a qualitative data analysis software tool. The next phase involved the coding of the data, based on the insights obtained from the interviews. This was followed by assessing codes for similarity, and grouping codes based on their relevance to a specific idea or theme. These themes were then analysed and refined, with consideration of internal homogeneity and external heterogeneity (Patton, 1990). The next step was to prepare a detailed written analysis, and to identify the existence of any sub-themes within the main themes. The final step involved producing a written report on the thematic analysis.

Reliability and validity

In order to ensure reliability and validity throughout the study, criteria for credibility, transferability, confirmability and dependability were employed during the process (Anney, 2014). Validity is the extent to which a data collection method reflects its intended measurement and the research findings reflect what they were intended to, which is crucial in a research study, while reliability refers to the consistency of the data collection methods used (Saunders & Lewis, 2018).

For the research to achieve credibility, the researcher made use of regular peer-debriefing, whereby she sought support from her academic supervisor who provided scholarly guidance that aided the quality of the findings. Data triangulation was performed using multiple sources of data to obtain corroborating evidence. This involved interviewing

individuals from both the acquirer and acquiree perspectives, as well as industry experts, in order to obtain rich data from people with different perspectives. In addition, as the company was listed on the Johannesburg Stock Exchange, a vast amount of company information was publicly available, which allowed the researcher to corroborate much of the primary data with secondary sources of data. The triangulation methods employed thus ensured credibility, dependability and confirmability.

To ensure transferability, purposive sampling was applied to keep the researcher focused on key informants who had a deep and rich knowledge of the issues under investigation. To establish confirmability and dependability, a detailed audit trail was retained, which include recorded interviews and transcripts. The researcher ensured appropriate data storage through the use of an online cloud-based storage service.

Limitations

Timeframe

The first limitation of the study is that the timeframe spans from 2018 to 2020, which ran the risk of recollection and memory of participants being obscure, making the absolute reliability of the data limited. In addition, an inherent risk to the process was that certain key members may have left the employment of the company during this period, potentially compromising the quality of the data received. This risk was partially mitigated through the review of secondary, publicly available data to corroborate the information received.

Generalisability

The second limitation, as noted by Yin (2018), was the generalisability of the findings to sectors outside the pharmaceutical sector, as the type of acquisitive strategy pursued may vary from one company to the next. The findings may therefore be very specific to the company environment where the study was conducted, and similar results may potentially not be replicable (Saunders et al., 2016). Given that the purpose of the study was to understand the dynamic capabilities developed and utilised by the company, the findings are not sector specific and thus reduces the risk of non-applicability to other organisations. In addition, by triangulating the data and interviewing M&A subject matter experts, this allowed for the findings to be tested against those of other industries.

Participant bias

A third limitation of the study was the possibility of bias due to the participants having a subjective view of the organisation and their role in the M&A process. Similar to the first limitation noted, this risk was partially mitigated by corroboration using secondary data where available.

Researcher bias

Researcher bias may have presented a fourth limitation to the study as the researcher was employed by the organisation at the time of the study, and may have certain preconceived ideas and beliefs that may have influenced the case study findings. The researcher therefore requested that the participants review the transcripts to verify them as being line with their beliefs and recollection of the interviews.

Qualitative study

Lastly, the study is qualitative in nature, which limits its ability to fully validate any of the causal relationships discovered. While it may be a limitation for this case study, this presents an opportunity for further quantitative research to build on the findings.

3. References

- Adler, P. S., & Obstfeld, D. (2007). The role of affect in creative projects and exploratory search. *Industrial and Corporate Change*, *16*(1), 19–50. https://doi.org/10.1093/icc/dtl032
- Agrawal, A., & Jaffe, J. F. (2000). The post merger performance puzzle. *Advances in Mergers and Acquisitions*, *1*, 119–156.
- Alessandri, T., Cerrato, D., & Depperu, D. (2014). Organizational slack, experience, and acquisition behavior across varying economic environments. *Management Decision*, *52*(5), 967–982. https://doi.org/10.1108/MD-11-2013-0608
- Ambrosini, V., Bowman, C., & Schoenberg, R. (2011). Should Acquiring Firms Pursue More Than One Value Creation Strategy? An Empirical Test of Acquisition Performance. *British Journal of Management*, 22(1), 173–185.
- Amiryany, N., Huysman, M., de Man, A. P., & Cloodt, M. (2012). Acquisition reconfiguration capability. *European Journal of Innovation Management*, *15*(2), 177–191.

 https://doi.org/10.1108/14601061211220968
- Anand, J., & Capron, L. (2007). Acquisition-based dynamic capability. In C.E. Helfat, S. Finkelstein, W. Mitchell, M.A. Peteraf, H. Singh, D.J. Teece & S.G. Winter. *Dynamic Capabilities:*Understanding Strategic Change in Organizations.
- Angwin, D., & Meadows, M. (2015). New Integration Strategies for Post-Acquisition Management. Long Range Planning, 48(4), 235–251. https://doi.org/10.1016/j.lrp.2014.04.001
- Angwin, D., & Urs, U. (2014). The effect of routine amalgamations in post-acquisition integration performance: Whether to "combine" or "superimpose" for synergy gains? *Advances in Mergers and Acquisitions*, 13, 153–179. https://doi.org/10.1108/S1479-361X20140000013006
- Anney, V. (2014). Ensuring the quality of the findings of qualitative research: looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, *5*(2), 272–281.
- Barkema, H.G., & Schijven, M. (2008). Toward unlocking the full potential of acquisitions: The role of organizational restructuring. *Academy of Management Journal*, *51*(4), 696–722. https://doi.org/10.5465/amr.2008.33665204
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. https://doi.org/10.1177/014920639101700108
- Bauer, F., & Matzler, K. (2014). Antecedents of M&A success: The role of strategic complementarity, cultural fit, and degree and speed of integration. *Strategic Management Journal*, *35*(2), 269–291.
- Benbasat, I., Goldstein, D. K., & Mead, M. (1987). The Case Research Strategy in Studies of Information Systems. In *MIS Quarterly*.
- Bengtsson, L., & Larsson, R. (2012). Researching mergers and acquisitions with the case study method: Idiographic understanding of longitudinal integration processes. In *Handbook of*

- Research on Mergers and Acquisitions (pp. 172–202). Edward Elgar Publishing Ltd. https://doi.org/10.4337/9781781953655.00015
- Bingham, C. B., Heimeriks, K. H., Schijven, M., & Gates, S. (2015). Concurrent learning: How firms develop multiple dynamic capabilities in parallel. *Strategic Management Journal*, *36*(12), 1802–1825. https://doi.org/10.1002/smj.2347
- Birkinshaw, J., Bresman, H., & Håkanson, L. (2000). Managing the Post-acquisition Integration Process: How the Human lintegration and Task Integration Processes Interact to Foster Value Creation. *Journal of Management Studies*, *37*(3), 395–425. https://doi.org/10.1111/1467-6486.00186
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Brueller, N. N., Carmeli, A., & Markman, G. D. (2018). Linking Merger and Acquisition Strategies to Postmerger Integration: A Configurational Perspective of Human Resource Management. *Journal of Management*, *44*(5), 1793–1818. https://doi.org/10.1177/0149206315626270
- Buono, A. F., & Bowditch, J. L. (1989). The Human Side of Mergers and Acquisitions: Managing Collisions between People, Cultures, and Organizations. In *Journal of Management* (Issue 4). Jossey-Bass Publishers. https://doi.org/10.1177/014920639001600416
- Carter, N., Bryant-Lukosius, D., Dicenso, A., Blythe, J., & Neville, A. J. (2014). The Use of Triangulation in Qualitative Research. *Oncology Nursing Forum*, 41(5), 545–547. https://doi.org/10.1188/14.ONF.545-547
- Cartwright, S., & Schoenberg, R. (2006). Thirty years of mergers and acquisitions research: Recent advances and future opportunities. *British Journal of Management*, *17*(S1). https://doi.org/10.1111/j.1467-8551.2006.00475.x
- Castellaneta, F., Valentini, G., & Zollo, M. (2018). Learning or inertia? The impact of experience and knowledge codification on post-acquisition integration. *Industrial and Corporate Change*, *27*(3), 577–593. https://doi.org/10.1093/icc/dtx043
- Colman, H. L. (2020). Facilitating integration and maintaining autonomy: The role of managerial action and interaction in post-acquisition cabability transfer. *Journal of Business Research*.
- Cording, M., Christmann, P., & King, D. R. (2008). Reducing Causal Ambiguity In Acquisition Integration: Intermediate Goals as Mediators of Integration Decisions and Acquisition Performance. *Academy of Management Journal*, *51*(4), 744–767. https://doi.org/10.5465/amr.2008.33665279
- Datta, D. K. (1991). Organizational fit and acquisition performance: Effects of post-acquisition integration. *Strategic Management Journal*, *12*(4), 281–297.
- Drnevich, P. L., & Kriauciunas, A. P. (2011). Clarifying the conditions and limits of the contributions of ordinary and dynamic capabilities to relative firm performance. *Strategic Management Journal*, 32(3), 254–279. https://doi.org/10.1002/smj.882
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532–550.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? Strategic Management

- Journal, 21(10-11), 1105-1121.
- Ellis, K. M., Reus, T. H., Lamont, B. T., & Ranft, A. L. (2011). Transfer effects in large acquisitions: How size-specific experience matters. *Academy of Management Journal*, *54*(6), 1261–1276. https://doi.org/10.5465/amj.2009.0122
- Fainshmidt, S., & Frazier, M. L. (2017). What Facilitates Dynamic Capabilities? The Role of Organizational Climate for Trust. *Long Range Planning*, *50*(5), 550–566. https://doi.org/10.1016/j.lrp.2016.05.005
- Fainshmidt, S., Wenger, L., Pezeshkan, A., & Mallon, M. R. (2019). When do Dynamic Capabilities Lead to Competitive Advantage? The Importance of Strategic Fit. *Journal of Management Studies*, *56*(4), 758–787. https://doi.org/10.1111/joms.12415
- Ferreira, M. P., Santos, J. C., De Almeira, R., & Reis, N. R. (2014). Mergers & acquisitions research: A bibliometric study of top strategy and international business journals. *Journal of Business Research*, 67(12), 2550–2558. https://doi.org/10.1016/j.jbusres.2014.03.015
- Flick, U. (2014). The SAGE Handbook of Qualitative Data Analysis. Sage.
- Galavotti, I., Cerrato, D., & Depperu, D. (2017). Experience and Cross-Border Acquisitions: An Organizational Learning Perspective. *European Management Review*, *14*(2), 119–131. https://doi.org/10.1111/emre.12094
- Gerring, J. (2007). Case study research: Principles and practices. Cambridge University Press.
- Graebner, M. E., Heimeriks, K. H., Huy, Q. N., & Vaara, E. (2017). The process of postmerger integration: A review and agenda for future research. *Academy of Management Annals*, *11*(1), 1–32.
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822X05279903
- Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A., & Davison, R. B. (2009). Taking stock of what we know about mergers and acquisitions: A review and research agenda. *Journal of Management*, *35*(3), 469–502. https://doi.org/10.1177/0149206308330554
- Haspeslagh, P., & Jemison, D. (1991). *Managing acquisitions: Creating value through corporate renewal.* New York: Free Press. https://library.wur.nl/WebQuery/titel/1869872
- Healy, P. M., Palepu, K. G., & Ruback, R. S. (1997). Which takeovers are profitable? Strategic or financial. MIT Sloan Management Review, 38(4). http://search.proquest.com/openview/447f38089829003d58b95293190c52ef/1?pq-origsite=gscholar&cbl=26142
- Heimeriks, K. H., Schijven, M., & Gates, S. (2012). Manifestations Of Higher-Order Routines: The Underlying Mechanisms Of Deliberate Learning In The Context Of Post-acquisition Integration. *Academy of Management Journal*, *55*(3), 703–726.
- Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic Management Journal*, 36(6), 831–850. https://doi.org/10.1002/smj.2247
- Helfat, C. E., & Winter, S. G. (2011). Untangling dynamic and operational capabilities: Strategy for the

- (N)ever-changing world. *Strategic Management Journal*, *32*(11), 1243–1250. https://doi.org/10.1002/smj.955
- Jemison, D. B., & Sitkin, S. B. (1986). Corporate Acquisitions: A Process Perspective. *Academy of Management Review*, *11*(1), 145–163. https://doi.org/10.5465/amr.1986.4282648
- King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. (2004). Meta-analyses of Post-acquisition Performance: Indications of Unidentified Moderators. *Strategic Management Journal*, 25(2), 187–200. https://doi.org/10.1002/smj.371
- King, D. R., Slotegraaf, R. J., & Kesner, I. (2008). Performance Implications of Firm Resource Interactions in the Acquisition of R&D-Intensive Firms. *Organization Science*, 19(2), 327–340. https://doi.org/10.1287/orsc.1070.0313
- Krug, J. A., & Aguilera, R. V. (2005). Top management team turnover in mergers & acquisitions. *Advances in Mergers and Acquisitions*, *4*, 123–151. https://doi.org/10.1016/S1479-361X(04)04005-0
- Laaksonen, O., & Peltoniemi, M. (2018). The Essence of Dynamic Capabilities and their Measurement. *International Journal of Management Reviews*, *20*(2), 184–205. https://doi.org/10.1111/ijmr.12122
- Laamanen, T., & Keil, T. (2008). Performance of serial acquirers: Toward an acquisition program perspective. *Strategic Management Journal*, *29*(6), 663–672. https://doi.org/10.1002/smj.670
- Martin, J. A. (2011). Dynamic managerial capabilities and the multibusiness team: The role of episodic teams in executive leadership groups. *Organization Science*, 22(1), 118–140. https://doi.org/10.1287/orsc.1090.0515
- Matysiak, L., Rugman, A. M., & Bausch, A. (2018). Dynamic Capabilities of Multinational Enterprises:

 The Dominant Logics Behind Sensing, Seizing, and Transforming Matter! *Management International Review*, *58*(2), 225–250. https://doi.org/10.1007/s11575-017-0337-8
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative Research: A Guide to Design and Implementation*. Jossey-Bass.
- Meyer-Doyle, P., Lee, S., & Helfat, C. E. (2019). Disentangling the microfoundations of acquisition behavior and performance. *Strategic Management Journal*, *40*(11), 1733–1756. https://doi.org/10.1002/smj.3069
- Morosini, P., Shane, S., & Singh, H. (1998). National Cultural Distance and Cross-Border Acquisition Performance. *Journal of International Business Studies*, *29*(1), 137–158. https://doi.org/10.1057/palgrave.jibs.8490029
- Pablo, A. L. (1994). Determinants of Acquisition Integration Level: A Decision-Making Perspective. Academy of Management Journal, 37(4), 803–836. https://doi.org/10.5465/256601
- Patton, M. (1990). Qualitative evaluation and research methods (2nd ed.). Sage.
- Patton, M. (1999). Enhancing the Quality and Credibility of Qualitative Analysis. *Health Sciences Research*, *34*, 1189–1208.
- Pitelis, C. N., & Wagner, J. D. (2019). Strategic Shared Leadership and Organizational Dynamic Capabilities. *Leadership Quarterly*, *30*(2), 233–242. https://doi.org/10.1016/j.leaqua.2018.08.002 Porter, M. (1985). *Competitive Advantage*. Free Press.

- Puranam, P., Singh, H., & Zollo, M. (2006). Organizing for innovation: Managing the coordination-autonomy dilemma in technology acquisitions. *Academy of Management Journal*, 49(2), 263–280. https://doi.org/10.5465/AMJ.2006.20786062
- Puranam, P., & Srikanth, K. (2007). What they know vs. what they do: How acquirers leverage technology acquisitions. *Strategic Management Journal*, *28*(8), 805–825.
- Renneboog, L., & Vansteenkiste, C. (2019). Failure and success in mergers and acquisitions. *Journal of Corporate Finance*, *58*, 650–699.
- Rouzies, A., Colman, H. L., & Angwin, D. (2019). Recasting the dynamics of post-acquisition integration: An embeddedness perspective. *Long Range Planning*, *52*(2), 271–282. https://doi.org/10.1016/j.lrp.2018.03.003
- Rule, P., & John, V. (2011). Your guide to case study research. Van Schaik Publishers.
- Salvato, C., & Vassolo, R. (2018). The sources of dynamism in dynamic capabilities. *Strategic Management Journal*, 39(6), 1728–1752. https://doi.org/10.1002/smj.2703
- Sarala, Riikka M., Vaara, E., & Junni, P. (2019). Beyond merger syndrome and cultural differences: New avenues for research on the "human side" of global mergers and acquisitions. *Journal of World Business*, *54*(4), 307–321.
- Sarala, Riikka Mirja, Junni, P., Cooper, C. L., & Tarba, S. Y. (2016). A Sociocultural Perspective on Knowledge Transfer in Mergers and Acquisitions. *Journal of Management*, *42*(5), 1230–1249. https://doi.org/10.1177/0149206314530167
- Saunders, M., & Lewis, P. (2018). *Doing Research in Business and Management*. Pearson Education.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business students* (7th ed.). Harlow: FT Prentice Hall.
- Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of Management Annals*, *12*(1), 390–439. https://doi.org/10.5465/annals.2016.0014
- Schoenberg, R. (2006). Measuring the performance of corporate acquisitions: An empirical comparison of alternative metrics. *British Journal of Management*, *17*(4), 361–370.
- Stahl, G. K., & Voigt, A. (2008). Do cultural differences matter in mergers and acquisitions? A tentative model and examination. *Organization Science*, *19*(1), 160–176. https://doi.org/10.1287/orsc.1070.0270
- Steigenberger, N. (2017). The challenge of integration: A review of the M&A integration literature.

 International Journal of Management Reviews, 19(4), 408–431.

 https://onlinelibrary.wiley.com/doi/abs/10.1111/ijmr.12099
- Teece, D. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, *28*(13), 1319–1350. https://doi.org/10.1002/smj.640
- Teece, D. (2018). Business models and dynamic capabilities. Long Range Planning, 51(1), 40–49.
- Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509–533.

- Teerikangas, S., & Thanos, I. C. (2018). Looking into the 'black box' unlocking the effect of integration on acquisition performance. *European Management Journal*, *36*(3), 366–380.
- Wei, T., & Clegg, J. (2020). Untangling the Integration—Performance Link: Levels of Integration and Functional Integration Strategies in Post-Acquisition Integration. *Journal of Management Studies*. https://doi.org/10.1111/joms.12571
- Wilden, R, & Gudergan, S. (2015). The impact of dynamic capabilities on operational marketing and technological capabilities: investigating the role of environmental turbulence. *Journal of the Academy of Marketing Science*, *43*(2), 181–199. https://doi.org/10.1007/s11747-014-0380-y
- Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic Capabilities and Performance: Strategy, Structure and Environment. *Long Range Planning*, *46*(1–2), 72–96. https://doi.org/10.1016/j.lrp.2012.12.001
- Winter, S. G. (2003). Understanding Dynamic Capabilities. *Strategic Management Journal*, 24(10), 991. https://doi.org/10.1002/smj.318
- Wollersheim, J., & Heimeriks, K. H. (2016). Dynamic capabilities and their characteristic qualities: Insights from a lab experiment. *Organization Science*, *27*(2), 233–248. https://doi.org/10.1287/orsc.2016.1053
- Yin, R. (2018). Case Study Research and Applications: Design and methods. SAGE Publications.
- Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal of Management Studies*, *43*(4), 917–955. https://doi.org/10.1111/j.1467-6486.2006.00616.x
- Zhou, A. J., Fey, C., & Yildiz, H. E. (2020). Fostering integration through HRM practices: An empirical examination of absorptive capacity and knowledge transfer in cross-border M&As. *Journal of World Business*, *55*(2), 100947. https://doi.org/10.1016/j.jwb.2018.05.005
- Zhu, H., Xia, J., & Makino, S. (2015). How do high-technology firms create value in international M&A? Integration, autonomy and cross-border contingencies. *Journal of World Business*, *50*(4), 718–728.
- Zikmund, W., Carr, J., & Griffin, M. (2013). Business Research Methods. Cengage Learning.
- Zollo, M., & Meier, D. (2008). What is M&A performance? *Academy of Management Perspectives*, 22(3), 55–77. https://doi.org/10.5465/AMP.2008.34587995
- Zollo, M., & Winter, S. G. (2002). Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science*, *13*(3), 339–351. https://doi.org/10.1287/orsc.13.3.339.2780

	ACQUIRER INTERVIEW QUESTIONS
1	Tell me more about yourself and your role within the organisation?
2	How have you been involved in the acquisition of Healthcare Co?
3	 What was the rationale for the acquisition? What synergies did you think would come out of this acquisition?
4	 Do you think the acquisition was successful, and what do you consider measures of its success? What do you think A. Pharma did that contributed to the success of this acquisition?
5	What do you understand by the term post-acquisition integration?
6	For the integration process: What was the view on keeping Healthcare Co running autonomously, or integrating them? What was the rationale for this?
7	 Can you describe the integration that took place in the following areas? Management (did A. Pharma replace management), Operational processes (such as distribution & warehousing, debtors credit limits, governance and controls), IT Systems (change to the ERP used by A. Pharma), HR policies (remuneration, bonuses, leave etc), Sales and marketing processes (increase in customer base on new market), Financial systems and reporting (the same reporting software as A. Pharma and management reporting), Other relevant processes? Were these changes made all at once or phased, and if so, what was the reason for this.
8	What do you believe worked well, in the execution of the integration? What core competencies do you consider were the most crucial in the integration process?
9	What do you believe could have been improved in the execution of the integration?
10	How did Healthcare Co manage customer engagement and communication about the acquisition?
11	Has COVID-19 impacted the strategy for integration in terms of further structural changes? How will this impact business operations and performance?
12	Dynamic capabilities can be split into the capacity to sense opportunities and threats, seize opportunities, and reconfigure capabilities in order to maintain competitiveness. Do you think A. Pharma displays these capabilities in the acquisition process? Explain.
13	What do you consider the learning capabilities of A. Pharma, e.g. its ability to apply its learnings from one acquisition to the next?
14	What unique capabilities or competitive advantage allows A. Pharma to be successful in M&As? How would you say these capabilities have been built?

	ACQUIREE INTERVIEW QUESTIONS		
1	Tell me more about yourself and your role within the organisation?		
2	How have you been involved in the acquisition of Healthcare Co?		
3	What was the rationale for the acquisition?		
	What synergies did you think would come out of this acquisition?		
4	Do you think the acquisition was successful, and what do you consider measures of its success?		
	What do you think A. Pharma did that contributed to the performance of this acquisition?		
5	What do you understand by the term post-acquisition integration?		
6	For the integration process:		
6	What is your view on speed and degree to which the integration took place?		
	Can you describe the integration that took place in the following areas?		
	Management (did A. Pharma replace management).		
	Operational processes (such as distribution and warehousing, debtors credit limits, governance)		
	and controls).		
	IT Systems (change to the ERP used by A. Pharma).		
7	HR policies (remuneration, bonuses, leave etc).		
	 Sales and marketing processes (increase in customer base on new market). 		
	Financial systems and reporting (the same reporting software as A. Pharma and management)		
	reporting).		
	Other relevant processes?		
	Were these changes made all at once or phased, and if so, what was the reason for this?		
8	What do you believe worked well, in the execution of the integration?		
	What core competencies do you consider were the most crucial in the integration process?		
9	What do you believe could have been improved in the execution of the integration?		
10	How did Healthcare Co manage customer engagement and communication about the acquisition?		
	How did staff feel about the acquisition and the changes that would arise?		
11	Was there turnover of staff, were there signs of lack of motivation in staff?		
' '	How do you view the cultural and organisational fit of the two companies?		
	How was the change management managed?		
	Dynamic capabilities can be split into the capacity to sense opportunities and threats, seize opportunities,		
12	and reconfigure capabilities in order to maintain competitiveness. Do you think A. Pharma displays these		
	capabilities in the acquisition process? Explain.		
13	What do you consider the learning capabilities of A. Pharma, e.g. its ability to apply its learnings from one		
. ,	acquisition to the next?		
14	What unique capabilities or competitive advantage allows A. Pharma to be successful in M&As?		
	How would you say these capabilities have been built?		

	EXPERT INTERVIEW QUESTIONS
1	Tell me about yourself, your role and your experience with M&As (including sectors)?
2	Sensing What do you think are the key reasons companies embark on M&A activity? What role do you think acquisitions play in terms of the company's general strategy? What synergies do companies usually envision emerging from the process?
3	Do you think that acquisitions are successful, and what do you consider measures of their success? What do you think companies do to contribute to the success of their acquisitions? Can you provide examples. You may mention sectors to maintain confidentiality in all examples requested to be provided.
4	What do you understand by the term post-acquisition integration?
5	Seizing With regard to the types of integration strategies a company can embark on: In your experience, to what extent are acquired organisations integrated? What is your view on keeping an acquiree running autonomously, integrating them, or even applying a phased approach based on timing of the different approaches? What is the rationale for this? How do you think this impacts the performance of the transaction? Please provide examples.
6	 What have you seen as the main areas of integration in post acquisitions integration strategies? Examples: replacing management, operational processes, debtors' credit limits, governance and controls, IT systems, HR policies (remuneration, bonuses, leave etc.), sales and marketing processes (increase in customer base on new market), financial systems and reporting, other relevant processes? Please provide examples.
7	What do you see as the enablers and barriers to successful integration? What core competencies do you consider are most crucial in the integration process? Please provide examples.
8	What do you think companies can improve in the execution of their integration strategies? Please provide examples from your personal experience.
9	How do companies handle customer engagement and communication about their acquisitions?
10	Dynamic capabilities can be split into the capacity to sense opportunities and threats, seize opportunities, and reconfigure capabilities in order to maintain competitiveness. Do you see companies displaying these capabilities in their acquisition processes? Please provide examples.
11	Transforming/Reconfiguring Would you consider COVID-19 to be a change in the environment as envisioned by the dynamic capabilities' framework, that companies must now respond/adapt to?

Do you think COVID-19 has impacted companies' acquisition and integration strategies (examples structural
changes, type of integration strategy etc.).
Could you elaborate?
 How do you think the need for these changes are Identified?
How do you think this will impact business operations and performance?
What other trends or changes in the environment do you think will require companies to respond to, with
changes in their business models (the ability to sense, seize, transform based on changes in the
environment).
Please provide examples.
Learning Capabilities
What do you consider the learning capabilities of organisations with regard to M&As, e.g. its ability to apply
its learnings from one acquisition to the next?
Please provide examples.
What unique capabilities or competitive advantage allows companies to be successful in M&As? How would
you say these capabilities have been built?
Resource-based view vs. Dynamic capabilities
What are the main differences you see in these models, and their implication on competitive advantage for
a company?
What recommendations or advice would you provide to organisations with regard to creating and applying
dynamic capabilities to their acquisition process?

Declaration

I declare that this journal article and attached supplement is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

& L	1.12.20
Adisha Singh	Date

CERTIFICATION OF ADDITIONAL SUPPORT 25. APPENDIX 6

(Additional support retained or not - to be completed by all students)

Please note that failure to comply and report on this honestly will result in disciplinary action

Thereby certify that (please indicate which statement applies):
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Gordon Institute of Business Science

Ethical Clearance Approved

University of Pretoria

Dear Adisha Singh,

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

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Recasting the dynamics of post-acquisition integration: An embeddedness perspective



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ABSTRACT

M&A scholars have generally assumed that post-acquisition integration is a self-contained process. However this ignores that this process rarely unfolds as the only ongoing initiative in an organization. We contend that post-acquisition integration is not detached from other simultaneous change processes in the organizational context and this has important implications for our understanding of how integration dynamics actually evolve. To further understand this embeddedness we examine the unfolding of a post-acquisition integration process in a company faced with an unanticipated drop in demand due to the global economic crisis. Through a qualitative, longitudinal study conducted over three years, we carried out 151 interviews to uncover the unfolding of the post-acquisition process. We find that post-acquisition integration is embedded in a set of co-evolving processes. We highlight four mechanisms (coordination, cohesion, disconnection, alienation) that arise from the co-evolution of processes that either facilitate or impede integration. Our findings contribute to our understanding of post-acquisition integration dynamics by recasting the integration process as embedded in a set of co-evolving processes that shape its unfolding.

Introduction

Post-acquisition integration is critical for reaping the expected benefits of the deal, harvesting synergies and creating value (Haspeslagh and Jemison, 1991). Post-acquisition integration represents a major organizational change process that requires extensive effort and resource dedication (Larsson and Finkelstein, 1999) and may divert managerial attention away from core activities (Yu et al., 2005). A challenge for acquiring firms is thus to deal with a demanding integration process, while maintaining focus on their ongoing activities (Puranam et al., 2003). However, an integration process rarely unfolds as a single initiative in an organization. Rather, organizations often carry out multiple and overlapping changes (Hafsi, 2001; Pettigrew et al., 2001). Managers in acquiring firms are thus faced with balancing integration of the focal acquisition and ongoing operations, while simultaneously managing other change processes.

Extant Mergers and Acquisitions ("M&A") research has largely examined post-acquisition integration processes as isolated events (Laamanen and Keil, 2008). In this manner scholars have focused on managerial decisions and outcomes of the focal integration process without acknowledging the broader organizational context within which these decisions and outcomes unfold. This organizational context consists of strategic issues and change processes that, although exogenous to the focal acquisition, may

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significantly shape the integration process and its outcomes. We argue that to further our understanding of the dynamics and complexities of post-acquisition integration, we need to broaden the focus of inquiry beyond the specific integration process. Thus, in this study, we ask: 'how is the unfolding of the integration process shaped by other strategic initiatives and ongoing changes in the organizational context?'

In order to gain a rich understanding of how post acquisition integration may unfold, we gained access to a French multinational company (MNC-Metals) as it was acquiring a Norwegian firm (Beta-Mang). Shortly after the acquisition announcement, the companies faced a significant drop in demand due to the economic crisis of 2008. This presented managers with major challenges in carrying out the integration process, while managing the consequences of the drop in demand. Distressed firms face scarce resources, diminished managerial discretion and restrictive stakeholders (Trahms et al., 2013). As such, the case represented a particularly revealing opportunity to explore inductively how the unfolding integration process is shaped by other ongoing initiatives in the organization.

Our findings are twofold. First, we identified three ongoing processes in the firms: operations, crisis management, and post-acquisition integration processes. We found that organizational members' perceptions and actions, and ultimately integration outcomes, are intertwined across these processes. In this manner, the focal integration process does not unfold as a self-contained process, but rather as embedded within a set of co-evolving organizational processes. Second, we identified four mechanisms (co-ordination, cohesion, disconnection, alienation) that either facilitate or impede integration, thus shaping the unfolding of the integration process.

Our findings contribute to the understanding of post-acquisition integration dynamics. First, we theorize integration dynamics by recasting the post-acquisition integration process as embedded in a set of ongoing, simultaneous and co-evolving processes. Second, we conceptualize the micro tensions inherent in task and human integration processes that shape the unfolding of post-acquisition integration. Third, we uncover how the loci of causal ambiguity between integration decisions and outcomes may be exogenous to the integration process itself. Finally, we identify the contingencies for managerial agency in post-acquisition integration as dynamic and emergent, leading to a refined understanding of unintended integration outcomes.

Literature review

Post-acquisition integration is a means to manage interdependencies and secure efficient and effective use of resources by making "changes in the functional activity arrangements, organizational structures and systems, and cultures of combining organizations" (Pablo, 1994: 806). M&A scholars have addressed the challenge managers face in defining the appropriate level of integration as the integration-autonomy dilemma (Zaheer et al., 2013). On the one hand, integration is required for knowledge and capability transfers and to achieve coordination benefits and synergies (Bresman et al., 1999; Haspeslagh and Jemison, 1991). On the other hand, there is a need to preserve the autonomy of the target, as integration may disrupt the task environment, and subsequently destroy the target's capabilities (Graebner, 2004; Puranam et al., 2003, 2009, 2006).

Depending on the need for autonomy and the need for strategic interdependence, managers can choose different integration approaches to secure value creation. The target and the acquiring firms may blend into one new organization, the acquirer may assimilate the target, or the target may become a stand-alone after the acquisition (Angwin and Meadows, 2015). Scholars have suggested hybrid approaches to integration, allowing for linking of non-core activities, while preserving the strategic capabilities of the firm (Haspeslagh and Jemison, 1991; Schweizer, 2005).

Research has focused on the integration process as shaped by managers' decisions regarding mode and speed of integration, that ultimately influence acquisition outcomes (Haspeslagh and Jemison, 1991; Jemison and Sitkin, 1986; Pablo, 1994). Birkinshaw et al. (2000) contend that managers seek to limit the risks associated with integration by first attending to the pre-acquisition units' performance, before coordinating activities between the units. They distinguish between task integration and human integration. Task integration involves the transfer of capabilities and sharing of resources, while human integration is defined as the generation of satisfaction and the development of a shared identity among employees of both firms. Successful integration requires initial limited task integration, allowing firms to develop social relations, subsequently laying the foundations for later coordination. Noting the lack of clarity in the causal link between integration decisions and their performance outcomes, Cording et al. (2008) introduced the concept of "intermediate goals" that mediate the relationship between acquisition decisions and acquisition outcomes within the focal integration process. Extant research has thus searched for explanatory factors for M&A outcomes by exploring the link between integration decisions and outcomes, largely ignoring the context the integration process is embedded in.

Organizations regularly undergo multiple and overlapping changes (Pettigrew et al., 2001). Subsequently, the integration process unfolds in a context of other ongoing organizational changes and strategic initiatives that are exogenous to the integration process itself. The organizational context is not just a stimulus environment, but a nested arrangement of structures and processes shaped by the subjective interpretations of actors (Pettigrew, 1992). The organizational context in which decision makers operate, determines what issues they give attention to, and their subsequent actions (Ocasio, 1997). Post-acquisition, managerial resources are strained as managers need to deal with business-as-usual and resource demanding integration activities. We know that lack of managerial attention to integration issues is detrimental to acquisition outcomes (Yu et al., 2005). However, our knowledge is limited of how strategic initiatives and organizational changes exogenous to post-acquisition integration, may strain managerial resources and thus shape integration decisions and managerial actions during post-acquisition integration. We argue that to further our knowledge of the

dynamics of post-acquisition integration processes and the link between integration decisions and integration outcomes, it is necessary to go beyond the integration process itself, and examine it in its context.

Methods

Research method

In July 2008, the first author met the newly appointed integration manager from MNC-Metals at a yearly meeting of a professional association. This person was sensitive to the difficulties that companies usually face during integration processes and was willing to launch a research project designed to examine the integration process over time. The original goal of the research project was to analyze the integration process within the organizations and to examine employees' perceptions during this major organizational change through a longitudinal, qualitative case study approach. The case study is the appropriate research technique for studying complex phenomena within their contexts (Yin, 1994). To understand the complexities of the post-acquisition integration process, it is necessary to let the integration process reveal itself in a temporal and contextual manner (Pettigrew, 1990). Qualitative methods offer rich information (Miles and Huberman, 1994), not accessible by cross sectional survey based methodologies and are well suited to access organizational members' accounts and interpretations (Maitlis, 2005). In this study, we adopted an interpretivist approach and analyzed the case from the perspective of those living it (Corley, 2015).

As we were planning our first data gathering in September 2008, a drop in demand suddenly and strongly, hit the case companies. Even though the case, as such, is a convenience case, it is also a revelatory case (Harrison and Rouse, 2015; Patton, 1990) as it provided us with an unexpected and unique opportunity to examine in real time how the consequences of an event, exogenous to the integration process itself, shapes managerial actions and ultimately integration activities.

Research setting

We examine the acquisition of Beta-Mang by MNC-Metals. MNC-Metals is a French Multinational operating in 20 countries over five continents. It is the second largest producer of high-grade manganese ore and manganese alloys, and the leading producer of refined manganese alloys worldwide. At the industry level, more than 90% of the total world production of manganese is used in the form of ferro-alloys, mainly in the steel industry (construction, automobile). Before the acquisition of Beta-Mang in 2008, MNC-Metals already had a Norwegian subsidiary: Alpha-Mang. Alpha-Mang consisted of two manganese plants acquired by MNC-Metals in 1999. Each plant had around 200 employees. Since 1999, MNC-Metals had invested considerably in the Norwegian plants. The central headquarters of MNC-Metals in Paris allowed Alpha-Mang substantial autonomy on operational issues. The top management team of Alpha-Mang consisted of Norwegian nationals, except for the CFO, who was French. Alpha-Mang and Beta-Mang had a long-standing, commercial relationship prior to the acquisition.

Beta-Mang was a Norwegian family-owned company founded in 1875. Beta-Mang consisted of a silico-manganese plant (200 employees) and a titanium and high purity iron plant (200 employees). Beta-Mang had a trading subsidiary for metallurgical product (67 employees) and shares in several power plants in Norway. In 2007, Beta-Mang recorded a turnover of €931 million.

Immediately after the acquisition, MNC-Metals divested the trading subsidiary and the power plants of Beta-Mang. The titanium plant was integrated into another branch of MNC-Metals. Our case is thus the integration of Beta-Mang silico-manganese plant, into the existing Norwegian operations of Alpha-Mang, implying the coordination of the three plants at the Norwegian subsidiary level.

Data gathering

Our case data consists of rich, longitudinal, primary data (in-depth interviews and informal observations and conversations) and secondary archival data (integration newsletters, integration plans and other internal documents). The archival data mostly addressed the financial structure of the deal and helped us to understand the timeline of events. These documents complemented our indepth interviews and helped triangulate some of our findings.

We conducted 3 rounds of data collection in the headquarters of MNC-Metals and in the Norwegian plants of Alpha-Mang and Beta-Mang. The first consisted of 56 interviews, from May to July 2009. Through these interviews we gained insight into the research setting and built interactional expertise, which is needed to fully grasp context in a qualitative process study (Collins, 2004; Langley et al., 2013). At this point, the plants were directly impacted by the drop in demand thus allowing us to collect real-time data about managers' actions to cope with the crisis and employees' perceptions on these initiatives. From November 2009 to February 2010, production slowly returned to pre-crisis levels. During this period, we conducted our second round of data collection consisting of 49 interviews. Finally, from November 2010 to January 2011, we conducted our third round of data collection consisting of 46 interviews. At this point the production and the support functions (R&D and HRM) of the three plants were coordinated at the Norwegian level. Furthermore, the Norwegian subsidiary began coordinating its activities with MNC-Metals'subsidiaries in Gabon and in the USA.

In order to ensure that multiple viewpoints were captured in our data, we interviewed people from different plants and at different levels of the organizations. Key informants were chosen on the basis that they had access to specific information relevant to the research enquiry. This included top management team, HR personnel, and employees with specific integration responsibilities. Table 1 details the breakdown of interviews.

Table 1 Breakdown of Interviews (n = 151) by Company, Hierarchical Level, and Period.

Company/Hierarchical Level	Round 1 Spring-Summer 2009	Round 2 Fall 2009 to Winter 2010	Round 3 Fall 2010 to Winter 2011	Total	
MNC-Metals managers	7	6	7	20	
Alpha-Mang managers	8	5	7	20	
Alpha-Mang employees	15	15	13	43	
Beta-Mang managers	9	10	9	28	
Beta-Mang employees	17	13	10	40	
Total	56	49	46	151	

The interview guide consisted of open-ended questions in order to encourage informants to account for their experiences of the integration and the crisis. For instance, we asked informants to share their perceptions about how the integration process was managed; how the drop in demand was handled and how they were affected by the changes linked to the integration process or to the crisis management initiatives. Follow-up questions were used to get beneath general responses and to further explore key issues. As the informants shared their experiences, they were also encouraged to give their assessments and feelings towards the events and actions they described. We conducted the interviews in the native language of each respondent (either Norwegian or French). Interviews typically lasted between 45 and 90 min. We interviewed until saturation in each phase, that is, until each new interview added little new information (Charmaz, 2006). After each phase of data collection, we presented our findings to the top management of MNC-Metals in Paris. This feedback process constituted an opportunity to discuss and validate our findings.

Data analysis

All interviews were transcribed, yielding approximately 2700 double spaced pages of transcripts. We read and re-read the transcripts, looking for recurring themes in the data (Van Maanen, 1998). We conducted an inductive and iterative analysis organized in four main phases. In the first phase, we extracted quotes that reflected the stories of the post-acquisition integration process (Langley et al., 2012). Dominant themes in our informants' accounts were their perceptions of events and activities unfolding related to the three distinct processes of crisis management, post-acquisition integration and ongoing operations. We gathered raw data into categories (Coffey and Atkinson, 1996) that encompassed operations management, crisis management, integration management. This prompted us to focus on how these processes were intertwined. We specifically paid attention to our informant's descriptions of the relationships between the processes, exemplified by claims such as: "it has been implemented faster because of the crisis" or "it was slowed down because of temporary lay-offs due to the crisis". Parallel to this first step of inductive coding of interviews, we carefully analyzed the content of archival data. For example, we juxtaposed quotes from our interview data related to expected and achieved synergies with descriptions of planned and achieved synergies in the integration newsletters. MNC-Metals and Beta-Mang had defined, in the pre-acquisition phase, the time (in months) needed to implement the main synergies (optimization of raw material supply, specialization of plants and coordination in purchase and logistics). We compared the schedule with actual progress to see whether the changes associated with each synergy were implemented faster or slower than planned.

In the second coding phase, we went back to the data and uncovered four mechanisms that underlie faster or slower achievement of synergies. We identified *cohesion* (i.e. informants' descriptions of the crisis as a common enemy to fight against), *alienation* (i.e. informants' descriptions of lack of interactions between the plants), *coordination* (i.e. informants' descriptions of increased synergy hunt and implementation of coordination structures) and *disconnection* (i.e. informants' descriptions of perception of competition for resources) as key categories.

Third, we reverted to the literature on post-acquisition integration to make sense of our preliminary findings on the four mechanisms. In line with Birkinshaw et al. (2000), we identified *coordination* and *disconnection* as components of task integration and *cohesion* and *alienation* as components of human integration.

Fourth, following axial coding (Strauss and Corbin, 1998), we searched for relationships between the mechanisms identified in the previous coding phases. As such, we abstracted dynamic tensions between *coordination* and *disconnection* and dynamic tensions between *alienation* and *cohesion* as presented in our emergent model in the findings section.

Findings

In the following section, we present our findings in a narrative manner with quotes to illustrate our interpretations. Following Langley's recommendations (1999) on temporal bracketing, we first present our findings as a description of events that reflects the reality of the integration process. We have identified three phases: (1) pre-acquisition: acquisition announcement and integration planning, (2) early post-acquisition: drop in demand and crisis management and (3) later post-acquisition: back to normal operations and finalizing integration. From this longitudinal and narrative analysis, we then present two models that emerged from our data analysis. First, our data show how the post-acquisition integration process co-evolves with other ongoing and overlapping processes in the organization. We identified three main ongoing processes: 1) integration, 2) crisis management and 3) operations. We observed that organizational members' perceptions, actions and outcomes, related to each process, were intertwined. Second, we found a set of mechanisms (cohesion, alienation, coordination and disconnection) that arise from this set of co-evolving processes and that both facilitated and impeded task and human integration.

Pre-acquisition: acquisition announcement and integration planning

MNC-Metals announced the friendly acquisition of Beta-Mang in April 2008. The overall goal of the acquisition was to reinforce MNC-Metals' position as one of the world's leading producers of manganese alloy. MNC-Metals estimated an increase in the production of manganese alloy from the acquisition of approximately 20%. Top managers of both firms expected minimum annual operational synergies of €10 million to €15 million from cost saving, revenue enhancement and knowledge sharing. These would be achieved by securing Beta-Mang's supplies of low-carbon manganese, increasing production capacity, improving value chain coordination and gaining economies of scale in purchasing and logistics. To achieve these synergies, the two Alpha-Mang plants' furnaces would now specialize in low carbon manganese, while the Beta-Mang plant would specialize in silico-manganese. By only focusing on only one product per furnace, maintenance costs would be reduced and production capacity and efficiency increased. No reduction in workforce was planned.

Synergies were also expected from exchanges of knowledge and best practices in operation management, health and safety at work. Indeed, the Beta-Mang plant had outstanding records for health and safety at work (few incidents were recorded the five years prior to the acquisition). MNC-Metals intended to transfer Beta-Mang's health and safety procedures to Alpha-Mang plants to reduce the frequency and severity rates of incidents in its plants. The integration plan included the implementation of all operational synergies within a year post-acquisition. To facilitate control, IT systems coordination was to be implemented in approximately nine months post-acquisition.

In June 2008, MNC-Metals acquired 56% of Beta-Mang shares. Beta-Mang had had two main owners with 93% of the total shares (respectively 56 and 37%). The deal stated that the remaining 37% of shares, belonging to the other main owner, were due to be acquired in December 2008. In June 2008, management established 13 integration workshops involving 50 employees and managers from both companies. These workshops were tasked to map processes and practices and evaluate synergies and cost savings opportunities in all functions. The 13 workshops included Logistic, Production reallocation, R&D, Benchmarking, Management team, Energy, Accounting, Human Resources Management, Health and Safety, Purchasing, IT, Legal Structure and Commercial. Each integration workshop involved 3 to 11 persons. The integration manager, the top management team and two employees of the three plants were in charge of following the progression of the 13 integration workshops.

In this early phase employees from both side of the deal were positive towards the opportunities presented by the acquisition:

"The merger plan was met with positive minds (....). When the integration process began, we found it very exciting to explore how another organization is working to reach similar goals" (Employee, Alpha-Mang).

Employees from Alpha-Mang and Beta-Mang were acquainted through pre-existing labor union affiliation and commercial relationships. Alpha-Mang informants explained that MNC-Metals had been a "good owner" to the Norwegian plants. They appreciated the management style of MNC-Metals and acknowledged the investments MNC-Metals had made in the plants. When interacting with their new colleagues of Beta-Mang, Alpha-Mang employees communicated their positive perceptions of MNC-Metals and the integration process. Beta-Mang employees described how the workshops were key arenas for developing collaborative relationships and sharing knowledge between the firms. They indicated that they felt that their voice was heard and their opinion valued:

"I'm very satisfied with this first phase [workshops]. Alpha-Mang has included us in all parts of the work. We have had the possibility to give comments and to work as a team from day one. (Employee, Beta-Mang).

Employees, both from Alpha-Mang and Beta-Mang, indicated that they were motivated to work on the development of integration initiatives through the workshops:

It has been a lot of work but the results and the synergies, which are pointed out, give me a great motivation" (Employee, Beta-Mang).

Top managers disclosed that a key concern in the integration process was respecting the organizational cultures and the balance of power between Alpha-Mang and Beta-Mang. Top management's willingness to respect the partner was diffused into all hierarchical level and facilitated the emergence of a collaborative work environment. This was echoed in the accounts of the participants of the workshops:

"The atmosphere in the workshop is positive. In all groups, we have focused on opening up, sharing knowledge and looking for synergies, which could give savings. Also, we have learned to know each other and work together. This will be important in the time to come" (Manager, Beta-Mang).

In the summer 2008, the integration process was proceeding smoothly. Employees from both sides of the deal were positive about the acquisition. It was perceived as a smart move and organizational members were satisfied with their commitment in integration workshops.

Early post-acquisition: drop in demand and crisis management

In the fall of 2008, a collapse of steel consumption led to a dramatic drop in demand for the firms' products:

"The market had turned around: steel production in Europe, in North America and in China has dramatically dropped as a consequence of a brutal collapse of the steel consumption (...). We have gone almost overnight from a seller's market to a buyer's market. Orders are hard to find, prices are decreasing (...)" (Manager, Alpha-Mang).

The drop in demand led to the deterioration of MNC-Metals' share price. Subsequently, the conditions of the exchange of shares with the second shareholder could no longer be met. He thus postponed the sale of his shares (37%). This delay in full ownership

impeded MNC-Metals' ability to implement the specialization of plants, thus slowing down the original integration plan. The delay in full ownership created uncertainty among employees about the future integration. Some employees voiced doubts about MNC-Metals' full ownership of Beta-Mang, and thus their ability to implement the integration plan and to realize the synergies.

The drop in demand implied that managers, already burdened by integration activities, also needed to address the crisis. The integration team and the managers were suddenly tasked with the responsibilities for reducing costs and gaining gain control over inventories to avoid over-capacity.

During the winter of 2009, the top management team decided to temporarily shut down production and temporarily lay-off employees to cope with over-capacity. This resulted in limited activity in the plants and minimal interaction between employees:

"Now we have temporary lay-offs, but of course, when we are in full operation again, and when we are allowed to travel again, then we can get access to how they do things, and there are synergies, specifically in R&D and operations management." (Employee, Alpha-Mang).

In addition to temporary lay-offs, managers implemented additional cost reduction actions that further reduced interactions between plants. Planned travels and visits between the plants were cancelled and restrictions were made on future travel for linemanagers and lower level employees. Top-level management was exempt from restrictions on travel, and the union representatives from the plants still interacted throughout their union networks. As one employee describes:

"There are cost-cutting initiatives, so there is not a lot of travelling. It is not that easy to learn from one another when we can't come and see what the others are doing. There is no contact across the plants." (Employee, Beta-Mang).

Securing low-cost access to raw materials for Beta-Mang production plants was a key driver behind the deal. This became even more important as the crisis hit the plants. To address the crisis, efforts were made to facilitate the circulation of raw materials from Alpha-Mang to Beta-Mang and to increase the coordination between the different steps in the value chain. Alpha-Mang's IT systems and reporting systems were also implemented in Beta-Mang faster than initially planned, as the need to monitor costs increased due to the crisis. The emergent need for cost-control also triggered the establishment of coordination structures that were not initially forecasted in the integration plan. A task force was thus created and worked as an efficient coordination structure:

"During the summer 2009, to face the crisis, we created a task force to manage inventories. The team made of Norwegians and French from the sales and the production departments met every 10 days. (Manager, Alpha-Mang).

Organizing the temporary lay-off was a task for general managers and HR managers. HR managers were involved in securing compensation for employees and organizing the schedule for the operators and this took focus away from integration issues. Management resources were also involved in extensive communication with the organization to mitigate employee unrest and worries about lay-offs.

Management attention and resources were already strained from integration efforts, and, dealing with the crisis further spread attention and resources more thinly still. The increased focus on financial reporting and coordinating cost initiatives was time consuming for top managers, line managers and controlling function. In addition, these initiatives were described by the plant managers as having shifted management attention from coordination and building ties between the plants, to managing issues within each plant.

"We have been allowed to loosen the tie to the other plants to focus on this plant. We are running at a lower capacity, we have a different culture, and there will be lower production before there is an up-turn, so I think it is right to let our plant run its own, independent developmental process and self-cultivate" (Alpha-Mang manager).

The delay in full ownership and the crisis management initiatives created some uncertainties about the acquisition amongst employees and their initial positive perceptions of the merits of the acquisition waned. As the drop in demand hit the plants, employees' perceptions about the cause of the crisis became blurred. Employees tended to blame the acquisition for the economic troubles and the shutdown of the plants. As described by these Alpha-Mang managers:

"We had to manage the risk of confusion between crisis related issues and integration issues in [Beta-Mang] employees' mind. We had to communicate a lot to clarify the situation" (Alpha-Mang Sales VP).

"The main challenge now for us, as leaders, is to communicate and make people understand the crisis." (Alpha-Mang manager).

In addition to the confusion around the cause of the economic problems, employees also claimed that Beta-Mang management would have handled the crisis better than Alpha-Mang. For example, when addressing the shutdown of his plant, one Beta-Mang employee described: "We at Beta-Mang, we would have done differently (regarding plant shutdown)". One manager described how the fear and discontent about the crisis "spilled over" into perceptions about the acquisition:

"When everything is OK, people are happy with the merger with Alpha-Mang. When there is a negative situation, it's Alpha-Mang's fault. Employees in my plant think that the crisis would have been softer without Alpha-Mang" (Plant Manager, Beta-Mang).

In parallel, our informants described their perceptions of "fighting against a common enemy" and "being in the same boat" as all the

plants were exposed to the drop in demand and shared the same challenges in dealing with this crisis. Beta-Mang and Alpha-Mang employees and managers described that they needed to work together in a cohesive way to cooperate and face the crisis.

"When the crisis hit us, we all stuck together. Nobody tried to save himself at the expense of others. We were not pulling dirty tricks on each other. People were trying to solve the problems; they were helping each other whatever their plants or their nationalities. I would say that we were solidary in adversity. I wonder whether this will last once the crisis is over" (CFO Alpha-Mang)

Our informants also described how the crisis brought the Norwegian plants together as they were lobbying for resources in competition with all production units worldwide in a strained MNC. Informants described the importance of making the Norwegian plants as an entity geared towards competing with low-cost resources in the rest of the world:

"The challenge is to make MNC-Metals happy with us. They are global, and can get their ore processed in other places (...). Our challenge is to make sure the Norwegian plants are prioritized in the future." (Beta-Mang employee)

Employees in the acquired plant voiced their fear of losing bargaining power at the plant level. As one of many plants in MNC-Metals, they felt alienated and removed from decisions made at the headquarters in Paris. Pre-acquisition they had been close to decision making processes and without other plants competing for resources. As the decision to temporarily shut down production was made, the acquired plant employees were concerned about the future of their plants, as MNC-Metals had many other plants they could use.

"Now people here feel the competition. We are three of sixteen furnaces in Norway, and we have to do what we can do to make sure that our furnaces are up and running. We cannot produce to store anymore. We are publicly listed and everything needs to be reported. We are challenged on the numbers – what last month's numbers were. (...) there is now competition between the plants about who gets to produce." (Beta-Mang employee)

"If you compare us with the other plants (in Norway) we are at the top. (...) We have to show them that we are good, so that we get the necessary investments to run the plant the way it was run before. "(Beta-Mang employee)

In the same vein, the existing Alpha-Mang plants in Norway were concerned about internal competition from the newly acquired plant. The pre-acquisition relationship between the two Alpha-Mang plants in Norway had been very competitive. The crisis and the acquisition increased competition for resources from the French headquarters of MNC-Metals. In one of the Alpha-Mang plants their fear was grounded in their perception of the other plant was closer to the top management of the Norwegian subsidiary:

"We are further away from the corporate [Norwegian] headquarter, and they are prioritized (...) that is where the management team is, they are preferred" (Employee, Alpha-Mang).

Beyond fears and perceptions, facts and figures about cut backs on investments from MNC-Metals headquarters were an objective measure of an increased competition between plants:

"In terms of investments, if something breaks or something needs an improvement ... there are projects that have been approved that are postponed" (Employee, Alpha-Mang).

Later post-acquisition: back to normal operations and finalizing integration

After twelve months of uncertainty, demand increased in September 2009. The plants resumed to normal production levels, temporary lay-offs ceased and integration activities were continued. In the spring of 2010, the planned integration activities had all been carried out. Our informants described how the crisis had pushed some aspects of the integration process forward unintentionally, as crisis management efforts were conducive to hunting for new ideas and solutions:

"The crisis literally boosted the hunt for new ideas and solutions. Some decisions taken to manage the crisis, even if they had no direct link with the synergies, had a positive effect on the integration process. This effervescence of solution was very good for the success of the integration" (Manager, Alpha-Mang).

We observed that of the five integration objectives defined by top managers in the pre-deal phase to create value from the acquisition, some were implemented faster and some were delayed. On the one hand, IT Systems integration, optimization of raw material supply and coordination in purchasing and logistics were carried out sooner than planned as a result of the crisis management activities. Managers described how the crisis management initiatives pushed forward the integration process:

"Before the merger, we had defined a schedule for the implementation of our cost control and cash management software in the plants acquired. Because of the crisis, we had to accelerate its implementation; consequently, we now have efficient reporting six months in advance compared to what was initially planned" (Manager, Alpha-Mang).

On the other hand, the crisis management initiatives to control costs and avoid over-capacity together with lack of full ownership had led to a delay in plant specialization and knowledge transfer. Indeed, employees could not meet up to share best practices because of temporary lay-offs and cut back in travel expenses, thus slowing down these integration activities.

Tables 2 and 3 detail the integration objectives that were reached faster or slower as a result of crisis management initiatives.

Table 2Integration areas that sped up: Comparison of intended and actual integration implementation.

Integration Objectives	Intended integration timeline ^a	Actual integration timeline	
IT Systems integration	$T_0 = > T_9$	$T_0=>T_3$	Implementation of IT systems in Beta-Mang plants was accelerated to better control costs in a crisis context.
Optimization of raw material supply	$T_0 = > T_{12}$	$T_0 = > T_3$	Optimization of raw material supply was accelerated to secure low-cost access to raw material and subsequently reduce costs in a crisis context.
Coordination in purchasing and logistics	$T_0 = > T_{12}$	$T_0 = > T_6$	Coordination in purchasing and $\overline{\text{logistics}}$ was accelerated to reduce costs in a crisis context.

^a Duration is expressed in months elapsed since the start of the acquisition in June 2008 (T₀).

Table 3Integration areas that slowed down: Comparison of intended and actual integration implementation.

Integration Objectives	Intended integration timeline ^a	Actual integration timeline	
Plant specialization	$T_0 = > T_{12}$	$T_0 = > T_{18}$	Plant specialization was delayed because Alpha-Mang could not get full ownership of Beta-Mang.
Knowledge Transfer (best practices sharing)	$T_0 = > T_{12}$	$T_0 = > T_{18}$	Knowledge transfer was delayed because of temporary lay-offs and cut back on travel expenses. Employees could not meet to share best practices.

a Duration is expressed in months elapsed since the start of the acquisition in June 2008 (T₀).

In addition to accelerating or slowing down the implementation of synergies, we also observed that management structures put in place during the crisis became permanent structures after the plants resumed normal production levels. This was because they were conducive to integration at the Norwegian level and also functioned as wider integration mechanisms within MNC-Metals. As a manager explains:

"This task force was supposed to be a transient structure of adjustment during the crisis. But as it worked out very well, we decide to perennialize this mode of management" (Manager, MNC-Metals).

"We created task forces to manage inventories. We involved people from management control, purchasing, sales and production. These structures were created spontaneously to face the crisis and they actually last because they work. They help strengthening the ties between Paris and Norway and also between the different plants" (CFO Alpha-Mang).

Post-acquisition integration as embedded in the context of co-evolving processes

We identified three simultaneously unfolding processes in our case; post-acquisition integration, crisis management and ongoing operations of the plants. Whereas we identified these processes as conceptually distinct and discernible, our findings also show how they were nested and intertwined. Organizational members' perceptions and actions, and the outcomes of post-acquisition integration were shaped by their perceptions and actions, and the outcomes of the processes of crisis management and ongoing operations. Thus, the integration outcomes we observed could not be attributed solely to integration decisions and initiatives.

First, we observed that crisis management initiatives shifted employees' perceptions about the acquisition. Initially employees were cooperative and optimistic about the future coordination of the value chain. With the event of the crisis they developed negative attitudes towards the acquisition, as they confused organizational crisis issues with post-acquisition integration related issues. Employees' positive perceptions about the merits of the acquisition vanished as they perceived that crisis management initiatives to avoid over-capacity could have been implemented differently. In this manner, perceptions of the crisis and the acquisition were muddled.

Second, the actions aimed at managing the drop in demand had unintended consequences for the unfolding integration process. For example, shutdown in production and cost-cutting initiatives limited interactions between employees from the three plants and reduced knowledge transfer that was a key part of the original integration plan. Also, we observed that the coordination structure implemented to cope with over-capacity was then subsequently sustained as an integration structure to facilitate coordination between the Norwegian subsidiary and headquarters. In this manner, actions and outcomes of the crisis, ongoing operations and acquisition were muddled.

Third, we observed the feed-back loop, wherein the outcomes of the various processes contributed to the perceptions of the acquisition or the crisis. For example, purchasing and logistics were coordinated across the plants six months ahead of schedule as part of the crisis management initiatives. This, in turn, shaped organizational members' perceptions of the acquisition.

Our findings show that post-acquisition integration does not unfold as a self-contained process but rather that it is embedded within a set of co-evolving organizational processes. Each dimension of a process (perceptions, actions, outcomes), is nested and mutually constitutive with those of the other processes, making the various processes intertwined (See Fig. 1).

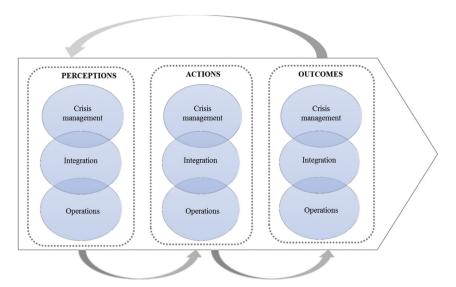


Fig. 1. An embeddedness perspective on post-acquisition integration.

The dynamic tensions of post-acquisition-integration

We identified four mechanisms at work in the integration process that arise from the set of co-evolving processes presented above: *coordination, cohesion, disconnection,* and *alienation.*

First, coordination and cohesion facilitated integration. Crisis management initiatives boosted the hunt for solutions to face the drop in demand. For example, task-force structures that enhanced coordination of activities between the plants were established thus improving task integration. Furthermore, organizational members 'perceptions of the crisis as a common enemy to fight against, fostered cohesion between the three plants, thus enhancing human integration.

Second, disconnection and alienation impeded integration. Competition between plants and lack of knowledge sharing generated disconnection between employees and impeded task integration. Organizational members perceived themselves as not belonging to

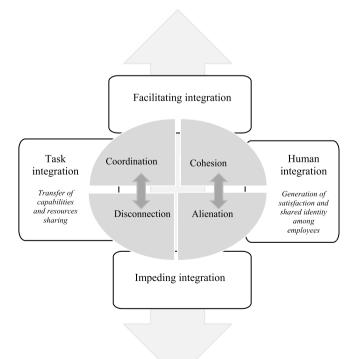


Fig. 2. The dynamic tensions of post-acquisition integration.

MNC-Metals and felt excluded from decision-making processes in MNC-Metals, leading to their *alienation* from the acquiring firm. Such *alienation* impeded human integration.

Overall, our findings show that *coordination* and *cohesion* are mechanisms that facilitate integration while *disconnection* and *alienation* are mechanisms that impede integration. Our emergent model conceptualizes the tension between *coordination* and *disconnection* and the tension between *cohesion* and *alienation* as tensions between facilitators and impediments of integration processes. We thus argue that integration processes unfold in a dialectic and dynamic manner with forces simultaneously impeding and facilitating integration. Fig. 2 represents the dynamic tensions observed in the post-acquisition integration process.

Discussion

We explored how post-acquisition integration processes are shaped by strategic initiatives and ongoing changes in the organization exogenous to the integration process. We found that organizational members are faced with a host of issues and initiatives to make sense of, and act upon. This resulted in a complexity of intertwined perceptions, actions and outcomes. We thus identified post-acquisition integration as embedded in the context of co-evolving processes. From these co-evolving processes, we found four mechanisms at work. Coordination and cohesion operate as integration facilitators while disconnection and alienation operate integration impediments. Our model conceptualizes the tensions between integration facilitators and integration impediments that shape the unfolding of the integration process. We thus recast the integration process as embedded in a set of co-evolving processes, wherein the conceptualized tensions between integration facilitators and integration impediments lead to its dialectic, emergent and dynamic unfolding.

Contributions and implications

Recent calls have been made to explore the dynamics of post-acquisition integration (Graebner et al., 2017). Our findings contribute to the existing literature on post-M&A integration by exposing the complexities of these dynamics. First, we recast the post-acquisition integration process as embedded in a set of ongoing, simultaneous and co-evolving processes. Our findings identify the loci of the integration dynamics in processes exogenous to the integration process itself. Doing so, we show how the discrepancy between integration decision and integration outcomes can reside in the tensions we observed. Indeed, these tensions shape the integration process, diverting its intended linear trajectory.

Second, we extend Birkinshaw et al. (2000) work by identifying and conceptualizing the micro tensions inherent in task and human integration. We highlight the dynamic tensions of coordination/disconnection and cohesion/alienation that impede and facilitate both sub-processes of human and task integration and lead to the dialectic unfolding of integration.

Third, adopting an embedded perspective, we contribute to the understanding of acquisition outcomes by pinpointing important "unidentified variables" (King et al., 2004) and "intermediate variables" (Cording et al., 2008). We challenge the conception of the integration process as self-contained by identifying "intermediate variables" emerging from the set of co-evolving processes. Thus the loci of causal ambiguity between integration decisions and outcomes, may be exogenous to the integration process itself. The extant M&A literature has been rather silent as to the role of the organizational context in which post-acquisition integration is situated. Our findings conceptualize the mechanisms through which organizational context matters and thus challenge the traditional view of the boundaries of the integration process. Our findings imply the need to adopt an embedded perspective on M&As and address post-acquisition integration as unfolding in a context of co-evolving processes.

Finally, our study exposes the dynamic, emergent and practice based aspects of M&A integration that lead to the uncertainty commonly observed in post-acquisition integration (Teerikangas, 2012). Acquisition scholars have adopted a contingent approach that breaks with the original rational and intended view of post-acquisition integration (Cartwright and Cooper, 1993; Monin et al., 2013; Vaara, 2003). From extant research both on acquisitions and on strategic change, we know that managerial attention (Ocasio, 2011), managerial actions (Colman and Lunnan, 2011; Graebner, 2004), and managerial sense-making (Balogun and Johnson, 2005) shape how strategic intent translates into intended and unintended outcomes. Our findings build on this literature and identify the manner in which perceptions, actions and outcomes unfold and interact post-acquisition. We thus theorize the contingencies and consequences of integration outcomes, by identifying the mechanisms through which integration initiatives were facilitated or impeded.

Managerial implications

Previous studies have emphasized the need for communication to cope with employees' doubts and uncertainties post-acquisition (Angwin et al., 2016; Schweiger and Denisi, 1991). Our findings indicate the need for managers to take other strategic initiatives and ongoing processes in the organization into consideration in this communication. The M&A integration process should not be addressed as an isolated change effort, but rather as embedded in the organizational context with other confounding issues. It is important to gauge employees' perceptions of all changes and develop sensitive and targeted communication. Overall, in an M&A, managers should communicate clearly, proactively and interactively (Angwin et al., 2016) to enable organizational members to distinguish the decisions taken as a consequence of the integration and the decisions taken as a consequence of other processes exogenous to the integration process.

Our findings suggest that managers should adopt a less myopic view when evaluating the progress and efficiency of post-acquisition integration. Adopting an embedded perspective, managers can embrace the multiple objectives and the complexities of intertwined and co-evolving process. For instance, they could assess the capacity of their integration managers and teams (Trichterborn et al., 2016) to adapt and redefine integration initiatives in a changing integration context. Recasting the integration process as an embedded process implies the need to adopt a broader, more contextualized view to evaluate post-acquisition integration efficiency.

Boundary conditions and future directions

Our work is not without limitations and each of these limitations opens an avenue for future research. First, our case focuses on an acquisition implementation within one subsidiary of an MNC. The integration process is thus limited to one institutional context and does not encompass issues of national cultural differences and geographical distance. Future research could replicate our work on integration processes involving cross-border units to study how the integration process is embedded in a larger set of co-evolving processes at the level of the MNC.

Second, in our case the acquiring firm needed to mitigate the consequences of a drop in demand while carrying out the integration process. The economic crisis significantly reduced the amount of organizational slack available and forced managers to focused on cost reducing activities and short-term profitability. Integration initiatives with less certain and immediate performance improvement effects were inhibited. If the acquiring firm was facing a change that increased organizational slack, this could reduce the urgency for cost reduction actions and increase focus on activities, such as knowledge exchange, that might lead to longer-term performance improvement. Other events and processes may affect merging organizations, and facilitate or impede integration. For instance, a sudden increase in demand, regulatory changes, stock market booms, political shocks, scandals and corruption may all shape the integration process. In the case of serial acquirers, there are continuous and overlapping integration or restructuring processes, both likely to influence the focal integration process. Future researches could replicate our study in other contexts to continue deepening our understanding of how events and processes, exogenous to the integration process itself, affect merging organizations.

Third, as our case study illustrates, although post-acquisition integration processes are major events in an organization, they may be embedded in a variety of ongoing organizational processes and events as important as an integration process. The event of a major crisis may shape the integration process in a different manner than a more minor event. Future research could examine a variety of events with various significances and impacts to further analyze their impeding and facilitating effects on the integration process.

Overall, we conclude that multi-vocal influences are likely on the focal integration process, and applying an embedded perspective is valuable for understanding how the integration process unfolds and how integration decisions may differ from integration outcomes.

References

realization. Organ. Sci. 10, 1-26.

Maitlis, S., 2005. The social processes of organizational sensemaking. Acad. Manag. J. 48, 21–49. Miles, M.B., Huberman, A.M., 1994. Qualitative Data Analysis: an Expanded Sourcebook. Sage.

Angwin, D.N., Meadows, M., 2015. New integration strategies for post-acquisition management. Long. Range Plan. 15, 235-251. Angwin, D.N., Mellahi, K., Gomes, E., Peters, E., 2016. How communication approaches impact mergers and acquisitions outcomes. Int. J. Hum. Resour. Manag. 27, 2370-2397 Balogun, J., Johnson, G., 2005. From intended strategies to unintended outcomes: the impact of change recipient sensemaking. Organ. Stud. 26 (11), 1573-1601. Birkinshaw, J., Bresman, H., Hakanson, L., 2000. Managing the post-acquisition integration process: how the human integration and task integration processes interact to foster value creation. J. Manag. Stud. 37, 395-425. Bresman, H., Birkinshaw, J., Nobel, R., 1999. Knowledge transfer in international acquisitions. J. Int. Bus. Stud. 41 (1), 5-20. Cartwright, S., Cooper, C.L., 1993. The psychological impact of merger and acquisition on the individual: a study of building society managers. Hum. Relat. 46, Charmaz, K., 2006. Constructing Grounded Theory: a Practical Guide through Qualitative Analysis. SAGE, London, UK. Coffey, A., Atkinson, P., 1996. Making Sense of Qualitative Data: Complementary Research Strategies. Sage. Collins, H., 2004. Interactional expertise as a third kind of knowledge. Phenomenol. Cognitive Sci. 3, 125-143. Colman, H.L., Lunnan, R., 2011. Organizational identification and serendipitous value creation in post-acquisition integration. J. Manag. 37, 839-860. Cording, M., Christmann, P., King, D.R., 2008. Reducing causal ambiguity in acquisition integration: intermediate goals as mediators of integration decisions and acquisition performance. Acad. Manag. J. 51, 744-767. Corley, K.G., 2015. A commentary on "what grounded theory is..." Engaging a phenomenon from the perspective of those living it. Organ. Res. Meth. 18, 600-605. Graebner, M.E., 2004. Momentum and serendipity: how acquired leaders create value in the integration of technology firms. Strat. Manag. J. 25, 751-777. Graebner, M.E., Heimeriks, K.H., Nguyen Huy, Q., Vaara, E., 2017. The process of postmerger integration: a review and agenda for future research. Acad. Manag. Ann. Hafsi, T., 2001. Fundamental dynamics in complex organizational change: a longitudinal inquiry into hydro-québec's management. Long. Range Plan. 34 (5), 557-583. Harrison, S.H., Rouse, E.D., 2015. An inductive study of feedback interactions over the course of creative projects. Acad. Manag. J. 58, 375-404. Haspeslagh, P.C., Jemison, D.B., 1991. Managing Acquisitions. Creating Value through Corporate Renewal. The Free Press, New York. Jemison, D.B., Sitkin, S., 1986. Corporate acquisitions: a process perspective. Acad. Manag. Rev. 11, 145-163. King, D.R., Dalton, E.R., Daily, C.M., Covin, J.G., 2004. Meta-analyses of post-acquisition performance: indiciations of unidentified moderators. Strat. Manag. J. 25, 187-200. Laamanen, T., Keil, T., 2008. Performance of serial acquirers: toward an acquisition program perspective. Strat. Manag. J. 29 (6), 663-672. Langley, A., 1999. Strategies for theorizing from process data. Acad. Manag. Rev. 24 (4), 691-710. Langley, A., Golden-Biddle, K., Reay, T., Denis, J.-L., Hébert, Y., Lamothe, L., Gervais, J., 2012. Identity struggles in merging organizations: renegotiating the sameness-difference dialectic. J. Appl. Behav. Sci. 48, 135-167. Langley, A.N.N., Smallman, C., Tsoukas, H., Van De Ven, A.H., 2013. Process studies of change in organization and management: unveiling temporality, activity, and flow. Acad. Manag. J. 56, 1-13. Larsson, R., Finkelstein, S., 1999. Integrating strategic, organizational and human resources perspectives on mergers and acquisitions: a case survey of synergy

Monin, P., Noorderhaven, N., Vaara, E., Kroon, D., 2013. Giving sense to and making sense of justice in potsmerger integration. Acad. Manag. J. 56, 256–284. Ocasio, W., 2011. Attention to attention. Organ. Sci. 22 (5), 1286–1296.

Ocasio, W., 1997. Towards an attention-based view of the firm. Strat. Manag. J. 18, 187-207.

Pablo, A., 1994. Determinants of acquisition integration level: a decision making perspective. Acad. Manag. J. 37, 803-836.

Patton, M.Q., 1990. Qualitative Evaluation and Research Methods, second ed. Sage, Newbury Park, CA.

Pettigrew, A.M., 1990. Longitudinal field research on change: theory and practice. Organ. Sci. 1 (3), 267-292.

Pettigrew, A.M., 1992. The character and significance of strategy process research. Strat. Manag. J. 13, 5-16.

Pettigrew, A.M., Woodman, R.W., Cameron, K.S., 2001. Studying organizational change and development: challenges for future research. Acad. Manag. J. 44 (4), 697–713.

Puranam, P., Singh, H., Zollo, M., 2003. A bird in the hand or two in the Bush?: integration trade-offs in technology-grafting acquisitions. Eur. Manag. J. 21 (2), 179. Puranam, P., Singh, H., Zollo, M., 2006. Organizing for innovation:managing the coordination-autonomy dilemma in technology acquisitions. Acad. Manag. J. 49 (2), 263–280.

Puranam, P., Singh, H., Chaudhuri, S., 2009. Integrating acquired capabilities: when structural integration is (Un)necessary. Organ. Sci. 20 (2), 313–328.

Schweiger, D.M., Denisi, A., 1991. Communication with employees following a merger: a longitudinal field experiment. Acad. Manag. J. 34, 110-135.

Schweizer, L., 2005. Organizational integration of acquired biotechnology companies into pharmaceutical companies: the need for a hybird approach. Acad. Manag. J. 48 (6), 1051–1074.

Strauss, A.L., Corbin, J., 1998. Basics of Qualitative Research, second ed. Sage ,Thousand Oaks, CA.

Teerikangas, S., 2012. Dynamics of acquired firm pre-acquisition employee reactions. J. Manag. 38, 599-639.

Trahms, C.A., Ndofor, H.A., Sirmon, D.G., 2013. Organizational decline and turnaround: a review and agenda for future research. J. Manag. 39 (5), 1277–1307. Trichterborn, A., Zu Knyphausen-Aufseß, D., Schweizer, L., 2016. How to improve acquisition performance: the role of a dedicated M&A function, M&A learning

process, and M&A capability. Strat. Manag. J. 37 (4), 763–773.

Vaara, E., 2003. Post-acquisition integration as sensemaking: glimpses of ambiguity, confusion, hypocrisy, and politicization. J. Manag. Stud. 40, 859–894.

Van Maanen, J., 1998. Qualitative Studies of Organizations. Sage.

Yin, R., 1994. Case Study Research - Design and Methods, second ed. Sage, CA.

Yu, J., Engleman, R.M., Van de Ven, A.H., 2005. The integration journey: an attention-based view of the merger and acquisition integration process. Organ. Stud. 25, 1501–1528.

Zaheer, A., Castañer, X., Souder, D., 2013. Synergy sources, target autonomy, and integration in acquisitions. J. Manag. 39, 604-632.

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