Combinations of absorptive capacity metaroutines: The role of organizational disruptions and time constraints

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A B S T R A C T
This paper explores absorptive capacity metaroutines in a financial organization that experienced a large-scale misappropriation episode. We selected an instrumental case and collected individual semi-structured interviews, on-site nonparticipant observations, and documents to better understand the combination of absorptive capacity in organizational contexts. Findings revealed that the magnitude of organizational disruptions related to the intensity of required change for innovation adoption and the persistence of outcomes, while time constraints influenced the degree of involvement and cohesiveness of organizational members. In addition, findings showed that the combination of absorptive capacity metaroutines experienced asymmetries and had incremental and cumulative features. This work extends current theorizations of absorptive capacity conceptualized from a micro-foundation perspective as a collection of external and internal metaroutines and provides a means to start understanding potential factors that influence the combination of absorptive capacity metaroutines. Implications for theory and practice are discussed, and suggestions for future research are offered.

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1. Introduction

Absorptive capacity is “the ability to identify, assimilate, and exploit knowledge from the environment” (Cohen & Levinthal, 1989, p. 569–570) to meet organizational ends (Cohen & Levinthal, 1990). Absorptive capacity has been investigated in several contexts including emerging markets (Bilgili, Kedia, & Bilgili, 2016), banking industries (Cepeda-Carrion, Leal-Millan, Martelo-Landroguez, & Leal-Rodriguez, 2016), and scientific settings (Belderbos, Gilsing, & Suzuki, 2015) and has been related to organizational processes (Knoppen, Sáenz, & Johnston, 2011; Sun, 2010), innovation outcomes (Gebauer, Worch, & Truffer, 2012; Helfat, 1997; Hill & Rothaermel, 2003; Lichtenhaller & Lichtenhaller, 2009; Mariano & Walter, 2015; Mariano & Casey, 2015; Simonin, 1999; Tsai & Yang, 2015), innovative performance (Ali, Kan, & Sarstedt, 2016; Denicolai, Ramirez, & Tidd, 2016; Kim, Kim, & Foss, 2016; Tseng, Pai, & Hung, 2011), and organizational performance (Ben-Oz & Greve, 2012; Brettel, Greve, & Flatten, 2011; Lichtenhaler, 2016). Existing conceptualizations of absorptive capacity have pointed out its inter- and intra-organizational antecedents (Martinkenaite & Breunig, 2016; Volberda, Foss, & Lyles, 2010); discussed its mediating (Cockburn & Henderson, 1998) or moderating role in organizational innovative capabilities (Koza & Lewin, 1998; Tsai & Yang, 2015); distinguished between potential and realized absorptive capacity (Andersén & Kask, 2012; Ben-Oz & Greve, 2012; Kang & Lee, 2016; Zahra & George, 2002); with recent empirical work confirming a linear relationship among the internal components of absorptive capacity (Daspait & D’Souza, 2013); attempted to operationalize the construct (Flatten, Engelen, Zahra, & Brettel, 2011; van der Heiden, Pohl, Mansor, & van Genderen, 2016); and theorized about the existence of complementarities between its internal components (Todorova & Durisin, 2007). Because the construct has significantly expanded over the years, several reviews have also been conducted to synthesize existing theoretical discussions and empirical contributions, focusing on a managerial (Lane, Koka, & Pathak, 2006), information systems (Roberts, Galluch, Dinger, & Grover, 2012), or knowledge management and intellectual capital perspective (Mariano & Walter, 2015; Senivongse, Mariano, & Bennet, 2015).

Although the debate has exponentially grown over the years,
with research introducing refinements and, at times, substantial changes to the construct (Todorova & Durisin, 2007; Zahra & George, 2002), scholars have not yet reached a common understanding of what still appears to be a controversial phenomenon of investigation. Current research has agreed upon and theorized that acquisition, assimilation, transformation, and exploitation are the four major components of absorptive capacity, proposing their sequential (Zahra & George, 2002) or complementary (Todorova & Durisin, 2007) relationship conditioned by antecedents and contingency factors whose influence has been differently theorized in the literature (Lewin, Massini, & Peeters, 2011; Volberda et al., 2010).

However, research has still not yet understood the extent to which absorptive capacity capabilities relate to each other (Jansen, Van Den Bosch, & Volberda, 2005) and how internal capabilities and routines are likely to increase new knowledge absorption (Inkpen, 1998; Lane et al., 2006; Lewin & Massini, 2003; Lewin et al., 2011), largely because of the proven struggle in the operationalization of the construct, which has forced the use of indirect methods of evaluation and proxy measures such as patents (Mowery & Oxley, 1995), self-reports (Szulanski, 1996), relative absorptive capacity measures (Lane & Lubatkin, 1998), and R&D spending (Veugelers, 1997).

To overcome the limits of current theorizations whose empirical observation remains a challenging attempt, more recent contributions have proposed the study of absorptive capacity from a micro-foundation perspective that investigates observable organization-specific routines and metaroutines (Lewin & Massini, 2003; Lewin et al., 2011), in the hope of clarifying and helping in identifying those external and internal mechanisms that contribute to knowledge absorption but still remain largely ambiguous and unclear (Lewin & Massini, 2003; van der Heiden et al., 2016). Compared to previous theorizations emphasizing the sequential nature of absorptive capacity potential and realized capabilities (Zahra & George, 2002), its strengthening influence on learning processes (Ferreras-Méndez, Fernández-Mesa, & Alegre, 2016; Lane et al., 2006), or the alternative path of its assimilation and transformation components (Todorova & Durisin, 2007), the micro-foundation perspective distinguishes between internal and external absorptive capacity capabilities and relates them to higher level absorptive capacity metaroutines (Lewin et al., 2011). Metaroutines are in turn connected to organization-specific routines that are observable in nature and whose combination is proposed to influence an organization’s overall absorption levels. From a micro-foundation perspective, this would thus explain the reasons why some organizations are better at externally acquiring relevant new knowledge and internally absorbing it, while others struggle in achieving similar results because of differences in the combination of their external and internal metaroutines and organization-specific routines.

Therefore, the study of absorptive capacity from a metaroutines perspective aims to guide explorations of microdynamics that are likely to promote higher levels of knowledge absorption. From a theoretical perspective, discovering and documenting the combination of metaroutines and organization-specific practiced routines will contribute to a refined understanding of absorptive capacity internal and external influencing factors, the complementarities and combinative capabilities of its components, and the interactions that occur at the interface between the two levels. From a practitioner perspective, the study of absorptive capacity metaroutines will help managers select and combine those practices that will more likely produce higher levels of knowledge absorption, which, in turn, will have a positive influence on exploitative and innovative capabilities at the organizational level.

This study aims, thus, to contribute to the absorptive capacity debate from a micro-foundation perspective to help explain factors that are more likely to influence internal and external absorptive capacity metaroutines in a financial organization that experienced a large-scale misappropriation episode. To accomplish this aim, we selected an instrumental case and collected individual semi-structured interviews, observations, and documents.

Findings revealed that the magnitude of organizational disruptions and time constraints influenced absorptive capacity metaroutines and that intensity of required change for innovation adoption, persistence of outcomes, and degree of involvement and cohesiveness of organizational members connected to these factors. In addition, findings showed that the combination of absorptive capacity metaroutines experienced a certain level of asymmetries and had incremental and cumulative features.

In this study, we define metaroutines as “higher-level routines that define the general, abstract purpose of routines that are expressed by practiced routines, which are firm specific, idiosyncratic, and observable” (Lewin et al., 2011, p. 85); we define organizational knowledge as valuable information that becomes embedded in new routines and practices. This definition derives from the academic debate on dynamic capabilities (Helfat, 1997; Helfat et al., 2009; Teece, Pisano, & Shuen, 1997; Zollo & Winter 2002) that measures organizational knowledge as a change in internal routines or practices so that learning has occurred (Levitt & March, 1988).

This paper is organized as follows. First, we briefly discuss the theoretical background. We then move to the case study methodology (Stake, 1995) including the discussion of research setting and design, data collection and analysis procedures, quality assurance techniques, and ethical considerations. We report findings in a narrative way (Creswell, 2009), and we support these findings with the use of tables and verbatim illustrative quotations from interview transcripts. Finally, we discuss conclusions, implications for theory and practice, limitations, and future research directions.

2. Theoretical background

2.1. Absorptive capacity major developments

The construct of absorptive capacity was first introduced by Cohen and Levinthal (1990) to explain the capacity of an organization to recognize, acquire, and exploit external knowledge with the intent to innovate, adapt, and being flexible. In their seminal work, Cohen and Levinthal conceptualized absorptive capacity as a dual construct of external and internal capabilities enabling knowledge absorption processes. Knowledge source and prior knowledge were conceptualized as antecedents of absorptive capacity, while ex-ante appropriability regimes (e.g., spillovers) were proposed to influence performance. Over the years, the construct received increased interests and grew exponentially, with many attempts of operationalization (Flatten et al., 2011; van der Heiden et al., 2016) and refinements (Andersén & Kask, 2012; Lane et al., 2006; Todorova & Durisin, 2007; Volberda et al., 2010; Zahra & George, 2002).

In the work of Zahra and George (2002), absorptive capacity was re-conceptualized from the seminal work (Cohen & Levinthal, 1990) into two distinct but related capabilities, i.e., potential and realized absorptive capacity, where the former related to the acquisition and assimilation components, while the latter referred to transformation and exploitation components. In this refined model, absorptive capacity was linked to competitive advantage expressed in terms of flexibility, innovation, and performance. Knowledge source, complementarities, and prior knowledge were conceptualized as potential antecedents of the construct, while activation triggers, social integration mechanisms, and regimes of