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Structural and Contextual Ambidexterity: Towards an Integrated Approach

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ABSTRACT

One major feature of ambidexterity literature is its focus on how organizational ambidexterity can be achieved for superior organizational outcomes. Extant literature by and large propose that organizational ambidexterity could be attained by adopting one of the two approaches i.e. structural or contextual. By doing so, studies see the organizational structure and organizational context as contradictory factors in achieving organizational ambidexterity, hence adopt a trade-off approach and vacillate the applicability of both structure and context simultaneously. Only few studies, if any, have looked into the organizational structure and organizational context in combination for organizational ambidexterity, leaving an integrated approach unexplored. This study, therefore, addresses such a prevailing gap and proposes that both structural and contextual approaches are complementary in attaining organizational ambidexterity. As a result, this study contributes to elucidating underlying misconceptions and extend the ambidexterity literature by presenting the structurally and contextually integrated approach towards organizational ambidexterity which will serve as a reference for future conceptual and empirical research

1. Introduction

The inexorable advance of globalization has inflicted competitive challenges and forced business organizations to device strategies for long term superior performance. For doing so organizations desperately need to consolidate existing businesses while simultaneously pursuit new opportunities (Agostini, Nosella, & Filippini, 2016; Wang & Rafiq, 2014). Put differently, organizations should profoundly have the ability to simultaneously manage the tension between exploration and exploitation activities. March (1991) refer exploration as “the experimentation of new alternatives” and exploitation as “the refinement and extension of existing competencies, technologies, and paradigms”. Here organizational ambidexterity (organizational capability to manage these paradoxical demands by achieving both equally well and with simultaneous fashion) becomes relevant as possible courses of action for long-run success (Agostini et al., 2016; Junni, Sarala, Taras, & Tarba, 2013; O'Reilly & Tushman, 2013).

How organizational ambidexterity (OA) is achieved remained central debate in the literature, which proposes that OA is obtainable mainly through structural or contextual pathways (Gibson & Birkinshaw, 2004; Tushman & O’Reilly 1996). Structural ambidexterity refers to the segmentation or subdivision by creating separate organizational units independently engaged in exploitation and exploration activities (Tushman & O’Reilly, 1996), on the other hand, contextual ambidexterity advocates that OA can be attained by validating certain organization’s internal contextual factors by fostering a culture that harmonizes seemingly contradictory factors with certain level of performance management and social support (Ghoshal & Bartlett, 1994; Gibson & Birkinshaw, 2004). It seems that these two different viewpoints (i.e. structural and contextual) are considered competing rather than complementary, hence independently viewed as a pathway towards in the extant OA literature.

Notwithstanding that attaining OA through both structural and contextual approaches has been supported in standalone basis in different primary studies, however, voiced concerns in recent literature (e.g., Agostini et al., 2016; Fourné, Rosenbusch, Heyden, & Jansen, 2019; Ossenbrink, Hoppmann, & Hoffmann, 2019; Zimmermann, Hill, Birkinshaw, & Jäckel, 2017) about isolated approach (structural or contextual) opened up a new debate in ambidexterity literature. However, the debate on the integrated approach is in its initial stage and needed to be explored for a better understanding of the ambidexterity theory. Therefore, this study endeavors to address such a gap by exploring how both organizational structure and organizational context could be complementary approaches in attaining OA since both are recognized for influencing organizational behavior. This study argues that both organizational structure and organizational context are complementary factors, contrary to what is assumed as competing, in attaining OA. Such theoretical clarification pertaining to an integrated approach could be indispensable for academicians and practitioners interested in developing theories and strategies to achieve OA for organizational long term success.

This paper henceforth is structured as follows. The subsequent section briefly presents background on OA. Then, this study evaluates the organizational structure and organizational context and their link with OA. Afterward, existing discrepancies and counterarguments are explained.

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Finally, the paper concludes by discussing the need for a conducive integrative approach by taking these pathways as complimentary, which may lay a solid foundation for future research.

2. Organizational Ambidexterity

While the underlying paradox between flexibility and efficiency has long been established in the literary works on organizational theory, however building on the initial term of ambidexterity coined by Duncan (1976), the founding work of March (1991) considered to be the first to conceptualize exploration and exploitation as two different approaches of learning. Exploration involves searching and experiencing different possibilities and choices beyond the current knowledge base to improve organizational flexibility. Exploitation, on the contrary, encompasses refinement of existing knowledge to foster efficiency (March 1991).

Following March's framework, scholars turned towards exploring how organizations can handle the tradeoff between these apparently contradictory factors i.e. exploration and exploitation (Guisado-González, González-Blanco & Coca-Pérez, 2017; Lavie, Stettner & Tushman, 2010). While some researchers advocated temporal cycling between the two approaches (e.g., Chou, Yang & Chiu, 2018; Ossenbrink et al., 2019) or inter-organizational equilibrium (e.g., joint-ventures, alliances, or acquisitions; (e.g., Lucena & Roper, 2016; Stettner & Lavie 2014; Wang, Luo, Maksimov, Sun, & Celly, 2019), a third type of studies focused on intra-organizations possibility of simultaneously managing contradictions and tensions, such as evolutionary and revolutionary change (Tushman & O'Reilly, 1996; Velu, 2016), differentiation and low-cost strategy (Porter, 1996), efficiency and flexibility (Adler, Goldoftas, & Levine, 1999; Eisenhardt, Furr, & Bingham, 2010; Papachroni, Heracleous & Paroutis, 2016; Yu, Gudergan & Chen, 2018), alignment and adaptation (Birkinshaw & Gibson, 2004; Simsek, Heavey, Veiga, & Souder, 2009), zero-level capabilities and higher-order capabilities (Winter, 2008), and incremental and radical innovation (Benner & Tushman, 2003; Coccia, 2017).

Since organizational ambidexterity (OA) phenomenon has conceptualized by different theoretical perspectives, hence its definitions are fragmented. However, in border terms, OA refer to organizations' ability to simultaneously deal with two paradoxical demands. The organizational ability to reconcile these tensions in simultaneous fashion, which corresponds to actualizing ambidexterity, has generally been established to induce organizational superior performance (e.g., Cao, Gedajlovis & Zhang, 2009; Junni et al., 2013; Luger, Raisch, & Schimmer, 2018; McCardle, Rousseau & Krumwiede, 2019; O'Reilly & Tushman, 2013), organizational innovation (e.g., Bernal, Maicas & Vargas, 2019; Guisado-González, et al., 2017; Popadić, Černe & Milohnić, 2015), and organizational survival (e.g., Dolz, Iborra, & Safón, 2019; Paeleman, & Vanacker, 2015).

3. Structural versus Contextual Approaches to Ambidexterity

Two streams of research on the antecedents of OA are frequently studied in the literature, first focusing on organizational design, namely structural ambidexterity, and second routing through organizational context usually termed as contextual ambidexterity. While structural ambidexterity denotes creation of isolated organizational units explicitly devoted to performing exploitation and exploration activities (Tushman & O'Reilly, 1996), contextual ambidexterity, on the other hand, is a behavioral approach which emerges when organizational management is able to shape a context with appropriate level of performance management context (combination of discipline and stretch) and social context (includes trust and support) (Gibson & Birkinshaw, 2004). These two approaches differ along the lines of three substantive standards: (a) the nature and degree of structural differentiation/ separation between exploration and exploitation activities; (b) the level of organizational members' specialization on exploration or exploitation; and (c) management/managers facilitation role in ambidexterity (Ossenbrink et al., 2019) (see Table 1). Both of these types are discussed in sub-sections.

Table 1. Distinctive Criteria of Structural and Contextual Ambidexterity

Factor	Structural ambidexterity	Contextual ambidexterity
Degree of structural separation between exploration and exploitation	Structurally separated	Not structurally separated
Degree of specialization of frontline employees in exploration and exploitation	Highly specialized in either exploration or exploitation	Frontline employees switch between exploration and exploitation
Role of senior management	Integrating and balancing between exploration and exploitation units	Providing context that facilitates cycling of frontline employees between exploration and exploitation

Adapted: Ossenbrink et al., (2019)

3.1. Structural Ambidexterity

The structural ambidexterity schools of thought suggest that paradoxical challenge of addressing both exploration and exploitation could be managed by structurally separating them in different units (Jansen, Tempelaar, Van den Bosch, & Volberda, 2009; Lavie et al., 2010; Lavie & Rosenkopf 1996; O'Reilly & Tushman 2008, 2013). Such independent units could be founded on certain skills, incentive systems, procedures, and cultures that are internally aligned and explicitly customized required to address exploration or exploitation processes (Gilbert 2006, O'Reilly & Tushman 2008; Tushman & O'Reilly 1996). Such an arrangement may buffer exploration from exploitation and helps to overcome resource and routine rigidness (Gilbert, 2006; Tushman & O'Reilly, 1996). It allows for purpose-oriented systems, clarity of objective, processes, and incentives that are all outfitted towards specialization within organizational units (Benner & Tushman, 2003; Simsek et al., 2009; Tushman & O'Reilly, 1996). Such different processes and specialization protect the exploration unit activities from potentially cultural rigidity and procedural external shocks from the standard business (Benner & Tushman 2003, Gilbert 2006).

In a separate unit system, the exploitation unit can focus on improving existing products and services rather than worrying about future alternatives (Jansen et al. 2009; Simsek 2009), and exploration units may focus on exploring new opportunities without much concerning about the efficiency of the existing operations. Because of the different nature of actives these units may carry out, they may have differed in mind, time orientation, functionality, product, or market segment. On the one hand, the unit engaged in exploitation-oriented activities usually adhere to mechanistic structural design, with the centralized approach towards decision making, less flexible cultures, by largely focusing on efficiency (Benner & Tushman 2003). On the other hand, the exploration-oriented unit is more characterized with organic structural design, with a comparatively more decentralized model of decision making, risk-taking cultures, and focus remain on flexibility (Boumgarden, Nickerson, Zenger, 2012; Lavie et al., 2010).

Since dual structure operates independently within an organization, the inability to integrate may yield counterproductive outcomes. Creating separate sub-business for exploration and exploitation have little significance, most important is the ability to be integrated to create value (O'Reilly & Tushman, 2008). Therefore, the organization's overall strategic intentions, values, and structured structural linkage mechanisms to enable resource allocation and integration of results of exploration and exploitation across business units are mandatorily be properly managed (O'Reilly & Tushman, 2008). Therefore, the role of senior management is crucial to deal with integration challenges of reconciling the paradoxes inherent in exploration and exploitation by devising strategies at the organizational level to handle such tensions appropriately (Burgers, Jansen, Van den Bosch, Volberda, 2009, Fourné, et al., 2019; Jansen et al. 2009; Mom, Van Den Bosch, & Volberda, 2009).

3.2. Contextual Ambidexterity

In response to disadvantages associated with a structural solution more specifically in terms of integration across units, Gibson and Birkinshaw (2004) introduced organizational context as a pathway to OA, usually termed as contextual ambidexterity. Contextual approach maintains that rather than structurally separating exploration and exploitation activities into sub-units, organizations through validating certain firm's internal contextual factors by allowing employees to simultaneously demonstrate alignment (exploitation) and adaptability (exploration) within the same unit could result into OA (Birkinshaw & Gibson 2004; Birkinshaw & Gupta 2013; Gibson & Birkinshaw 2004; Patel, Messersmith & Lepak, 2013). Further, in contrast to the prerequisite for the structural approach of specialism in either exploration or exploitation, in contextual approach organizational members are privileged to make their own priorities of time engagement between exploration and exploitation activities (Gibson & Birkinshaw 2004, Raisch & Birkinshaw 2008). Such flexible switching ability improves the organizational member responsiveness towards demand trends without bothering the tensions between separate units. Meanwhile, the burden to balance exploration and exploitation will shift towards frontline employees, who have to cope with contradictory tasks and demands (Andriopoulos & Lewis, 2009; Gibson & Birkinshaw 2004).

Since, as opposed to the structural differentiation approach, the choice on the amount of exploration and exploitation remains with each staff member, therefore the direct engagement of top management stands irrelevant in integrating or balancing exploration and exploitation initiatives. However, the prime role of management is then to foster an organizational context that facilitates and encourages flexible switching of employees between exploration and exploitation as required. Thereby organizational context, as referred by Ghoshal and Bartlett (1994), comprises the "systems, processes, and beliefs that shape individual-level behaviors in an organization." In a nutshell, organizational management must formulate an organizational context including practices, culture, and a climate conducive for both efficiency and flexibility (Patel et al. 2013; Simsek 2009). Literature suggests such context for reconciles seemingly contradictory elements encompasses discipline, stretch, support, and trust (Andriopoulos & Lewis 2009; Gibson & Birkinshaw 2004; Patel et al. 2013).

4. Existing Discrepancies and Counter-arguments in Structural and Contextual Approaches

As mentioned earlier, literature has looked at structural and contextual ambidexterity in isolation by auguring that the choice of approach may depend at least one of three reasons (a) organizational size, (b) need is driven by exploration versus exploitation and (c) the firm environment (Ossenbrink et al., 2019). First, the studies which suggested that size is key factor in determining the appropriate approach argued that since large firms having greater resource availability, are able to proceed for structural ambidexterity by separating subsets of their activities and human resources, giving them due support to carry out either exploration or exploitation in more clearly delineated objectives and defined boundaries in their respective units (Gatignon & Xuereb, 1997; Gupta, Smith & Shalley, 2006). Lubatkin, Simsek, Ling, and Veiga (2006) also supported the notion of structural separation appropriateness for larger organizations in perusing the OA. Adding to this Hill & Birkinshaw, (2014) maintained that larger organizations having more slack resources are enabled to invest on exploratory activities, whereas the smaller firms due to resource scarcity are incapable to take a chance of long-term separated exploration activities (Burgers & Covin, 2016; Fourné et al., 2019). Further, Martin, Keller, and Fortwengel, (2019) and Patel et al., (2013) are in a view that since small organizations, having small-scale employment with flatter hierarchy, developing human capability is more critical for them rather than focusing on creating separate units. Therefore, literature has advocated that contextual ambidexterity is a better option for small and resource-constrained organizations (Lubatkin et al. 2006, Raisch, Birkinshaw, Probst & Tushman, 2009) due to resources deficiency and low scale economies to excel in both exploration and exploitation activities (Csaszar, 2013; Pertusa-Ortega, & Molina-Azorín, 2018).

However, the recent meta-analytical study by Fourné et al., (2019) has negated the size factor and argued that a structural separation is a suitable approach irrespective of organizational size for attaining OA. Fourné et al., (2019) found that structural separation benefits both large and small organizations by arguing that in large organizations the resource availability advantages may be offset by a lack of flexibility in allocating resources to different units, and by inertial forces that undermine these organizations' ability to foster a complementary interplay of exploration and exploitation. Conversely, despite smaller organizations may lack resources compare to their larger counterparts, but they are in a better position to separate exploration and exploitation activities in a more flexible, possibly faster and more effective manner, enabling a balanced pursuit of exploration and exploitation.

Second, it has been argued that contextual and structural approach towards OA is dependent on to what extent they allow an organization to address discontinuities in their setting. Advocates of the structural approach suggest structural differentiation, which proposes that OA approaches are motivated by their need to develop incremental versus radical innovations (Kauppila 2010, O'Reilly & Tushman 2013). This view supports the inter-organizational ambidexterity stream, which recommends that balancing exploration and exploitation inter-organizations is more productive than doing so within organizations (Lavie et al. 2010, Hess & Rothaermel, 2011) because organizational separation "buffers conflicting routines while maintaining operational consistency in each mode, thus avoiding potential tradeoffs" (Stettner & Lavie 2014, p.1908). In contrast, supporters of contextual ambidexterity recommend that contextual ambidexterity is "potentially a more sustainable model than structural separation because it facilitates the adaptation of an entire business unit, not just the separate units or functions responsible for new business development" (Gibson & Birkinshaw 2004, p.211). Importantly, there is some confirmation that radical ideas can emerge when exploration and exploitation are not separated. For instance, House and Price (2009) show that Hewlett-Packard's laser printing business resulted from exploration within established units. However, this rational has been countered by the advocates of balanced approach exploration and exploitation being more appropriate to be followed for organizational prosperity (Agostini et al., 2016; Junni et al., 2013; Fourné et al., 2019; O'Reilly & Tushman, 2013).

Third, literature has proposed that the relative focus on structural or contextual ambidexterity may depend on environmental factors, such as an organization's market or its technological stage in the innovation lifecycle (Raisch & Birkinshaw 2008). House and Price (2009) and Jansen et al. (2013), for example, demonstrated that organizations may switch between structural and contextual ambidexterity in concordance with the maturity of the technology. Similarly, O'Reilly and Tushman (2013) argued that the choice of approach selection for attaining OA could be dependent on the nature of the market in which these organizations operate. In this sense, the organization needs to align the ambidexterity approach in the course of time according to the business environment. For instance, whereas Jansen et al. (2013) demonstrated that the organization starts with a structural approach and later switch over to contextual approach as the technology attains wider acceptance in an organizational setup. Relatedly, House and Price (2009) in the case of Hewlett-Packard revealed that the company initially developed its laser-printing technology using the contextual approach of OA, and later switched to a structural approach by creating different sub-units. Also, as Ossenbrink et al., (2019) in their longitudinal study on four largest German electric utility companies found that new business prospects and possibilities in an organizations' environment require a fundamentally different entrepreneurial culture and competencies, hence primarily focus on the structural approach to achieve ambidexterity. On the other hand, if the range of future perspectives in a business environment is extensive, offers opportunities, and precarious, then contextual approach to ambidexterity seems to be a better option. However, this study argues that such an approach of switching between the organizational structure to the organizational context and vice versa seems to be more appropriate for conglomerate companies. Hence such transformation is not easy for every organization to accommodate and manage for organizational effectiveness.

5. Towards an Integrated Approach

Despite the contrary views about the two approaches, scholars advocated integrated approach by considering both structural and contextual pathways to ambidexterity (Fourné, et al., 2019; Hill & Birkinshaw, 2014; O'Reilly & Tushman 2013; Ossenbrink et al., 2019; Simsek, 2009 Zimmermann et al., 2017). For example, Birkinshaw and Gibson (2004) introduced the contextual ambidexterity and contended that it differs from structural differentiation approach in many aspects, but they acknowledged that the two approaches seem better to view as complementing mutually. A similar argument came from Raisch and Birkinshaw (2008) that the two approaches be viewed as complemented by integrative approaches for organizational effective outcomes. In other words, rather than using a single approach towards ambidexterity, in reality, organizations may combine structural and contextual approaches (Fang et al. 2010; Kauppila, 2010; Raisch & Birkinshaw 2008). Ossenbrink et al., (2019) added that argument about integrated approach is supported by the organizational change literature (Weick & Quinn 1999, Zimmermann et al. 2016), which insinuates that successful change emerges through combination of administratively prompted, top-down business planning (including structural separation for ambidexterity) and self-contained, bottom-up evolving situation (originating from individual efforts aimed in contextual approach to ambidexterity). Further, scholars (Levinthal & March 1993; Simsek et al., 2009; Stettner & Lavie, 2014) argument that absence of structural separation may reduce specialization benefits, and set in motion accelerating cycles of either exploration or exploitation. Which in turn triggers the role ambiguity and perplexing the managers in allocating attention to exploration and exploitation and forcing role transitions (Tempelaar & Rosenkranz, 2019).

Therefore, based on arguments by scholars (Fang et al. 2010, Kauppila, 2010; Raisch & Birkinshaw 2008; Tempelaar & Rosenkranz, 2019) organizations increasingly need to deal with tensions and paradoxes, which can be achieved by setting both organizational structure and context in synergy. By closely looking into interrelated terms such as organizational structural and context, organizational cultures, organizational climate have certain commonalities. For instance, structural context refers to the establishment of a management mechanism that promotes employees to establish corresponding behavior but focuses on relatively systematic systems and processes rather than intangible system characteristics such as systems that motivate employee's ability.

On the other hand, organizational culture addresses potential belief systems and values, rather than formal systems and processes. Organizational culture denotes the underlying values, beliefs, and principles that underlie the organization's management system and a set of management practices and behaviors. Similarly, the atmosphere is described as an environmental characteristic that affects employee behavior. Scholars then distinguish between the organizational and psychological atmosphere, including individual interpretation of the psychological atmosphere. Prominently, atmosphere scholars see the organizational climate as an objective high-level phenomenon. Organizational context mainly comprises these characteristics, which are the integration of structural context, cultures and atmospheres are a high-level attribute (Gibson & Birkinshaw, 2004). Gibson and Birkinshaw (2004) defined such high-performance context as mechanism into two behavioral framework attributes: performance management and social support. Performance management (a combination of stretch and discipline) indicates how the organization is motivating employees to voluntarily pursue more ambitious goals and structures. Social support (a combination of support and trust) means that employees build ambitious goals in a shared work environment that motivates employees to help and stand by each other. The interaction between performance management and social support creates a high-performance organizational state which helps in attaining OA.

Therefore, by putting the two approaches in perspective, it can be concluded that structural and contextual ambidexterity could mutually complement to each other, working both at a macro level through structural approach by creating separate organizational units for exploration and exploitation as well as at the micro-level by ensuring accountability for their results and creating a climate where managers support employees' development (Agostini et al., 2016, Fourné, et al., 2019; Hill & Birkinshaw, 2014; O'Reilly & Tushman 2013; Ossenbrink et al., 2019). Such collaborative action of all these elements reflects harmonization of structural and contextual ambidexterity; whereas considering these approaches in isolation deemed insufficient in attaining organization ambidexterity and shaping an ambidextrous organization for long term success.

6. Conclusion

This theoretical paper was aimed to explore how both contextual and structural approaches contribute to attaining organizational ambidexterity (OA). Our theoretical paper shield light on balancing both exploration and exploitation (i.e. balanced approach of organizational ambidexterity) is the most suitable pathway in attaining long term performance. Further, in contrast to what is amused as an independent solution, integration of contextual and structural approaches complement each other in achieving OA. Therefore, in order to be ambidextrous and excelling the ability to deal with tensions and paradoxes of exploration and exploitation concurrently could be ensured by setting both organizational structure and organizational context in interaction. Therefore, paying attention to formal divisions of tasks as well as to internal mechanisms and context is essential in order to develop OA. Therefore, based on an integrated approach proposed in this study, further empirical validations for attaining OA in different contexts and settings will be a valuable addition in enriching the theory and literature of organizational design and organizational ambidexterity.

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