

# ABSORPTIVE CAPACITY: THE ROLE OF EXTERNAL KNOWLEDGE IN ORGANIZATIONAL STRATEGY

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## THE ABSORPTIVE CAPACITY AS A STRATEGIC THEME

The economic globalization and increased competitive pressures for most firms demand innovative, efficient and effective management strategies to comply with such dynamics, increasingly technological, and highly uncertain environments. Faced with this scenario, companies need to deploy

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critical strategies to survive and flourish in the long term, breaching challenges and seizing opportunities to hold a competitive position.

However, vital strategies require more than just focusing on the internal environment; those must also involve a continuous search on the external environment to integrate and coordinate the resources and actions that support competitive advantages and superior performance. In this sense, the concept of absorptive capacity (ACAP) has been a subject of special attention to understand various organizational phenomena, especially those related to knowledge management processes, learning, innovation and performance (Cohen & Levinthal, 1990; Zahra & George, 2002; Lane, Koka, & Pathak, 2006; Jones, 2006; Vega-Jurado, Gutiérrez-Gracia, & Fernández-De-Lucio, 2008; Camisón & Forés, 2010; Flatten, Engelen, Zahra, & Brettel, 2011; Burcharth, Lettl, & Ulhøi, 2015).

The concept of ACAP is originated in the area of macroeconomics (Tu, Vonderembse, Ragu-Nathan, & Sharkeyet, 2006; Murovec & Prodan, 2009), initially discussed in the context of economic development and foreign investment, with emphasis on how countries development absorbs external resources. Thus, in this scenario, ACAP is understood as the ability of a country to use and absorb external resources and investments (Adler, 1965).

With the studies of Cohen and Levinthal (1990), in an article published in the *Economic Journal*, ACAP started to be applied to the context of organizations, i.e., to the level of organizational analysis. From a conceptual point of view, Cohen and Levinthal (1990) understand it as the ability of a firm to recognize the value of new external information, assimilate and apply it for commercial purposes. Other studies have contributed to the evolution of the construct, highlighting here the work of Zahra and George (2002). In this article, the authors consider that the concept of ACAP was magnified, considering it as “a group of organizational routines and processes by which companies acquire, assimilate, transform and exploit knowledge to produce a dynamic organizational capability” (Zahra & George, 2002, p. 186).

In the past 28 years, ACAP has played, and continues to play, a major role in the innovation literature, and also to areas such as organizational learning (Liao, Chen, Hu, Chung, & Yang, 2017), marketing (Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016), corporate entrepreneurship (García-Sánchez, García-Morales, & Martín-Rojas, 2018), international business (Garrido, Parente, Gonçalves, & Vasconcellos, 2017), family firms (Ferreira & Ferreira, 2017), and regional development (Qian & Jung, 2017). Thus, we believe that increasing the number of articles applying, measuring, operationalizing,

and re-conceptualizing ACAP, reflects the richness of this construct in research fields.

## THE DISCUSSION OF THIS ISSUE

This special issue was proposed to obtain contributions from researchers who could bring advances in understanding both the process of building ACAP and its effect on other organizational practices and performance, which is measured in various ways (innovation, sales, flexibility, process, among others).

Forty-three articles were received for the issue, which went through at least two review rounds by independent anonymous reviewers. Of these, six articles were selected to compose this special issue: absorbing capacity: the role of external knowledge in organizational strategy.

The first article, entitled “Absorptive capacity: components and organizational mechanisms for its development”, by Gabriela Cappellari, Clarice V. N. Welter, Lisiane C. R. Hermes, and Jorge O. Sausen, sought to understand how the process of developing ACAP of a group of companies operates in the metal mechanics sector, based in the southern region of Brazil, through the analysis of their behaviors and skills, the routines and processes and the mechanisms of learning and knowledge governance. The relevance consists in the operationalization of component elements and in the development of organizational mechanisms of dynamic capacity (Meirelles & Camargo, 2014), as a means of ACAP development (Wang & Ahmed, 2007) in organizations belonging to the metal mechanics sector. As a methodological design, it is characterized as an empirical research of qualitative approach, exploratory and descriptive nature, conducted through multiple case studies, seeking to investigate in detail three organizations of the metal mechanics sector, through the analysis of procedures, resources, mechanisms, and systems that allow them to develop ACAP. With the presented results, it could be inferred that the investigated companies develop the ACAP through behaviors and skills such as relationship capacity, learning capacity, and people’s training capacity, as well as through routines and processes, highlighting information search routines, market monitoring routines, and risk management, and also through learning mechanisms and knowledge governance such as research, information exchange between customers, suppliers, and other companies.

The second article, by Clair W. Puffal, Daniel P. Puffal, and Yeda S. Souza, entitled “Absorptive capacity of industrial companies in traditional sectors

in the state of Rio Grande do Sul, Brazil”, aims to analyze processes related to the dimensions of ACAP in traditional sector companies of Rio Grande do Sul state that develop innovations. These companies can differentiate themselves in the market by the level of applied knowledge acquired and the use of organizational mechanisms that present elements in their micro-processes, considered intangible for the development of ACAP, still little recognized among the companies as an important capacity for the development of innovations. The study suggests that traditional sector companies with innovative characteristics can be evaluated in their innovation microprocessors from the perspective of ACAP. The study was conducted through two cases, with data collected through interviews in traditional sector companies, with innovation processes proven in the report of the Nagirs Project (Rio Grande do Sul Innovation Management Support Center), from data from the IEL/RS (Euvaldo Lodi Institute of RS). The result shows that CA stimulates the development of innovations, sustains an organizational dynamic with search mechanisms for knowledge renewal, and involves managers and skilled employees in the search and assimilation of external information from the company’s strategic challenges. The elaborate analysis instrument proves in practice how CA develops in traditional sector companies from their micro processes, regardless of size or age.

The third article, entitled “Absorptive capacity of signals captured from environment for innovation”, by Shirley A. Souza, Débora E. P. Silva, and Aline F. Abreu, aims to describe the ACAP of Sergipe industrial companies in the textile manufacturing segment, for signals captured from the environment that indicate a need for innovation in response to market changes. In order to perform this research, a qualitative collection instrument was built and applied to seven companies with innovative characteristics compared to local competitors. The companies are micro to medium-sized and develop process and marketing innovations. The result shows that the analyzed industries seek renewal of existing knowledge and assimilate external information to adapt and transform their organizational strategies. The exploration of knowledge occurs from the relationships with customers and suppliers, prior knowledge of the leaders, and the existing structure in the organization. The companies with the best ACAP were the ones that faced direct competition because its presence created stimuli for the search for information to differentiate and become competitive.

The fourth article is entitled “Managers’ influence on company capabilities”, by Juliana C. N. Costa, Shirlei M. Camargo, Ana M. M. Toaldo, and Simone R. Didonet. This study aims to verify the moderating role of

managers' characteristics, age, and tenure (time in the sector, post, company) in the relationship between the realized absorptive capacity (RACAP) and architectural marketing capability (AMC). Its relevance is to consider the human element as a factor that affects the relationships among the company's capacities. The study contributes theoretically to understand what can influence the formulation and implementation of marketing strategies and strengthen the role of the human element. This study empirically tested the hypotheses based on a sample of 343 marketing managers from Brazilian manufacturing industries. Data were collected through a survey. The data were processed using the modeling of structural equation in AMOS software. The main results achieved highlight that the characteristics of managers (age and tenure) moderate the relationship between a part of RACAP (knowledge transformation) and AMC (architectural marketing capacity). More experienced managers in this sector should be valued because they make a difference when it comes to transforming knowledge and using it in their strategies.

In turn, the fifth article is entitled "Innovation in emerging markets: the role of absorptive capacity and of the insertion in the local and global value chains", by Cristina L. L. Calegario, Nádia C. P. Bruhn, Mariane Figueira, and Juciara N. Alcântara. The study aims to identify the effects of insertion in global or local value chains as a determinant of firm innovation in emerging countries, as well as the relationship between ACAP and insertion into value chains. The article combines contributions from different streams of literature to develop a more comprehensive framework for innovation analysis in emerging country firms. The study considers relationships between partners in the local and global value chain, as well as the influence of internal resources as crucial for access to external knowledge. The methodological design used econometric analysis using Generalized Linear Models. The analysis period covers the years 1998 to 2011. Research hypotheses were tested using different models to relate companies' innovation capacity to insertion in local, global value chains and the ownership of internal and external resources. The results of this study indicate that the relationship with all partners in the global value chain contributes to increasing the innovation levels of the surveyed companies. In turn, internal resources had a positive influence on the innovation capacity of companies, suggesting their importance in accessing external knowledge, which means that the capacity to make use of this knowledge depends, fundamentally, on their ACAP. The article also states that ACAP reinforces the innovation effects of the firm's participation in international value chains. Finally, the paper identifies that

cooperative relationships have positive effects on innovation, but also that these effects are accentuated when the company has a high ACAP.

Finally, the sixth article, entitled “Influence of absorptive capacity on innovation: a systematic literature review”, by Andrei Mikhailov and Fernanda M. Reichert, presents a systematic literature review based on Tranfield, Denyer, and Smart’s (2003) method, which aims to reveal how the empirical study articles address the direct impact of ACAP on innovation. To identify the articles that aimed to investigate the direct influence of CA on innovation, 37 empirical studies were selected from the initial sample of 231. The results show that intra-company factors can be just as important as environmental factors to transform companies’ CA into innovation. Also, current scientific literature on the influence of CA on innovation tends to measure CA in terms of capabilities, rather than proxy measures. This result suggests that CA’s dynamic approach may become dominant in the CA innovation literature. Still, the validated measurement models proposed by many CA scholars are underused in most studies. Many empirical investigations tend to adapt existing measurement models to suit idiosyncratic research needs. The article also contributes to the CA theory by proposing a new model of CA influence on innovation.

Thus, analyzing the works presented above, it is clear that they focus on the tracks: inter-organizational learning and ACAP, intra-organizational learning and ACAP, the dynamic capacity of ACAP, the microfoundations of ACAP, knowledge transfer and ACAP, the internationalization process and ACAP, innovation ecosystems and ACAP or innovation and ACAP, organizational routines and ACAP, environmental dynamism and ACAP, and organizational drivers (culture/leadership/structure, mental models) and ACAP.

It is important the distribution of articles in various tracks proposed in this special issue, which aligns with the current production that indicates future research in the tracks mentioned below. In the track inter-organizational learning and ACAP, with the works of Caligiuri (2014), Fang, Wade, Delios, and Beamish (2013), Garriga, von Krogh, and Spaeth (2013), Love, Roper, and Vahter (2014), Minbaeva, Pedersen, Björkman, Fey, and Park (2014), Schleimer and Pedersen (2014). In the track, intra-organizational learning and ACAP, with the works of Björkman, Stahl, and Vaara (2007), Capaldo (2007), Ferreras-Méndez, Fernández-Mesa, and Alegre (2016), Freeman, Hutchings, Lazaris, and Zyngier (2010), Tempel and Walgenbach (2007), and Zhou and Li (2012).

In the track the dynamic capacity of ACAP, with works by Björkman et al. (2007), Noorderhaven and Harzing (2009), Sánchez-Sellero, Rosell-



-Martinez, and García-Vázquez (2014), Shin et al. (2016). In the tracks the micro foundations of ACAP, organizational routines and ACAP and organizational drivers (culture/leadership/structure, mental models) and ACAP, with the works of Björkman et al. (2007), Caligiuri (2014), Crossan, Maurer, and White (2011), Flatten, Adams, and Brettel (2015), Gao, Xu, and Yang (2008), and Park and Harris (2014).

In the track knowledge transfer and ACAP, with the works of Kotabe, Jiang, and Murray (2011), Nair, Demirbag, and Mellahi (2016), Ritala, Olander, Michailova, and Husted (2015), Schleimer and Pedersen (2014), and Song (2014). In the track the internationalization process and ACAP, with the works of Björkman et al. (2007), Coviello, Kano, and Liesch (2017), Li, Li, and Wang (2016), and Teece (2014). And finally, in the track innovation ecosystems and ACAP or innovation and ACAP, with the works of Chiang and Hung (2010), Enkel and Heil (2014), and Zhou and Li (2012).

In conclusion, we are grateful to all the researchers who offered their manuscripts for this special call. We would also like to thank the RAM editors, firstly, Professor Silvio Popadiuk, who promptly welcomed our proposal, and later, Professors Janette Brunstein and Silvia Marcia Russi de Domênico, for their collaboration and diligent support in achieving our goals. We extend our thanks to the entire editorial staff of RAM, especially Vitória Batista Santos Silva, and Mackenzie Publishing. We hope to have contributed to the evolution of the theme.

We wish you all a good reading!

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