

From the Absorptive Capacity of Middle Managers and Their Employees to the Commitment in the Implementation of New Work Routines

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The objective of this proposal is to present a theoretical reflection on the concept of projects absorptive (absorption) capacity and the role of managers' and employees' commitment in the implementation of work routines. The general problem lies in a context of simultaneous project implementation, which can create additional pressure on employees with regard to available resources. The development of a theoretical framework, highlighting project implementation demands, absorptive capacity, routines and commitment, thus leads to the proposal of a three-stage conceptual framework. The first moment represents the project during its implementation. The second moment specifically concerns absorptive capacity as a resource and the final moment highlights the relationship between absorptive capacity and commitment. Ultimately, this theoretical approach attempts to demonstrate that examining the project's absorptive capacity reveals a significant theoretical originality, and that digging deeper into the concepts of commitment and work routines pushes the limits of project management research.

Keywords: project, absorptive capacity, commitment, routine, middle manager

INTRODUCTION

The buzz in the internationalization of the economy is pushing organizations towards achieving and maintaining high levels of performance by engaging in a rapid and continuous pace of change through the implementation of projects (Soparnot, 2013). It was in this context that the concept of absorptive capacity originated through the seminal article by Cohen and Levinthal (1990). Being widely used thereafter in research on knowledge and learning, this concept of absorptive brought a significant contribution to a better understanding of the adaptation of organizations, particularly in the context of project management. Similarly, research on commitment has been progressively enriched since the work of Kahn (1990), among others, for a better grasp of the contribution made by human resources to the success of projects (Matthews, Stanley and Davidson, 2018).

Since organizations' environments are highly competitive and rapidly changing, they are eagerly trying to secure a highly engaged workforce (Rayton, Yalabik and Rapti, 2019). However, despite these efforts, the success rate of project implementation still shows significant weaknesses (Project Management Institute, 2018); thereby leading business leaders to question more about the absorptive capacity of their middle managers, who are designated as the key actors of change in their organizations. Indeed, the latter

perform a dual function: they see to the smooth running of day-to-day operations while playing a strategic role in project implementation (Vas and Guilmot, 2017). This reconciliation remains a major challenge (Balogun, 2003) as middle managers increasingly work in contexts of multiple continuous projects. Thus, over the past decade, many organizations and researchers have sought to better understand how to step in, in order to foster engagement at work (Knight, Patterson and Dawson, 2019), this concept being generally positively correlated with task performance (Bailey, Madden, Alfes and Fletcher, 2017).

This article (paper) thus aims at presenting a theoretical reflection on the concept of individual knowledge absorptive capacity of middle managers and their employees and its impact on commitment, all in a context of project implementation.

PROBLEM STATEMENT

The constant quest for performance has led to the emergence of several organizational projects, which have transformed the internal environment to such an extent that change has become an integral part of how organizations operate (Autissier, Johnson and Metais-Wiersch, 2018).

To ensure the success of these projects, companies are striving to be more agile and to react more quickly. However, there doesn't seem to be a single approach for the successful materialization of projects. What's more, new technological advances, which are disrupting every sector, are driving changes in workers' functional roles and responsibilities, and as a result, new ways of working are constantly emerging and hence the emergence of new skill requirements (Project Management Institute, 2018). In this respect, the nature of the tasks for the middle manager, a key player in organizational change, has become much more complex (Husser, 2014).

The latter has had to maneuver very quickly in a context of implementing multiple projects simultaneously (Béliveau, 2013). In addition to ensuring the smooth running of day-to-day operations and playing a strategic role in the implementation of project (Vas and Guilmot, 2017), he or she must frequently deal with managing the "stability and change" paradox (Michaud, 2011). His or her tasks have become more intense and complex, and this has marked a growing interest in the research on the role of middle managers in organizations over the past fifteen years (Vas and Guilmot, 2017).

Despite efforts put in to improve performance, organizations, to date, still have very high failure rates and continue to waste astronomical sums when their projects fail (Project Management Institute, 2018). Faced with this observation, organizations are questioning the absorptive capacity of middle managers and their employees in the context of executing new work routines and its impact on commitment. Today's competitive and rapidly changing environment is prompting more and more organizations to want to have an engaged workforce (Rayton et al., 2019).

This desire is certainly not unrelated to the positive impact of commitment on organizational productivity and performance (Bakker and Demerouti, 2008). This is why commitment is now an important consideration for many organizations. The most recent studies on commitment sought at identifying the difficulties encountered when implementing organizational interventions (Knight et al., 2019). In this context, managers would benefit from offering employees more opportunities to reflect on their work processes and practices (Balwant, 2019).

On the practical side, this could translate into more leeway for them to determine on a day-to-day basis which tasks need to be accomplished and how (Bakker and Oerlemans, 2019). Whether in the context of project implementation or regular work, when employees have more autonomy, they can choose to spend more time on tasks they prefer or prioritize, leading to higher levels of work commitment (Bakker and Oerlemans, 2019). Also, given that a good change management helps in moving a project forward, some authors suggest that organizational management should demonstrate high-level support for their employees' needs for flexibility and efficiency, which would in turn help maintain or increase the level of commitment of the employees concerned in the project (Marble, 2003).

For its part, the concept of absorptive capacity has also been the subject of several publications since the seminal article by Cohen and Levinthal (1990), which appeared during the same period in which the concept of commitment took shape. The rapid interest in the concept of absorptive capacity led a few years

later to the proposal of the Zara and George's model (2002). This model defines absorptive capacity as a set of organizational routines and processes by which an organization acquires, assimilates, transforms and exploits knowledge in order to produce a dynamic organizational capability that offers a competitive advantage; and this, in response to a need for innovation ensuing from the changes in its environment. Moreover, when the changes required has to do with the improvement of work processes, routines invariably undergo modifications, and this has an impact on the stakeholders targeted by these changes. In this context, the middle manager must redouble his or her efforts to ensure that the team remains committed and succeeds in reconciling the needs of day-to-day work with those linked to the new work processes to be implemented.

It is interesting to note that many studies on commitment and absorptive capacity are aimed at improving the performance of individuals and organizations. However, few authors seem to be interested in the absorptive capacity of individuals and its impact on employee commitment to new routines. While some of these solutions are interesting and may have a positive influence on commitment and hence to the success rate of project implementation, the fact remains that achieving a high level of commitment during implementation remains a major challenge (Marble, 2003). The complex difficulties encountered by project management in the field are always present (Piliere, Gelize, Boigey and Merlo, 2018), which is why questioning the absorptive capacity of middle managers and their employees during the implementation of new work routines and its impact on commitment proves to be quite necessary.

In the light of this information, an interesting problem emerges from both a theoretical and practical perspective. Indeed, in a project implementation context, it is relevant to consider that the absorptive capacity of middle managers and their employees may have impacts on commitment. Thus, exploring the possible links between absorptive capacity, commitment and routines may lead to interesting avenues of reflection for practitioners in addition to contributing towards the advancement of knowledge on stakeholder commitment in projects.

THEORETICAL FRAMEWORK

Absorptive Capacity

In a seminal article, Cohen and Levinthal (1990) kick-started the research on absorptive capacity by defining it as a company's three-way ability to recognize the value of new information or knowledge, to assimilate it and to apply it for commercial exploitation in order to generate a competitive advantage in the market. A few years later, Zahra and George (2002) introduced the notion of organizational routines in the design of an absorptive capacity model, wherein they define absorptive capacity as the vision of a set of organizational routines and processes by which an organization can collect and exploit knowledge. To build their model, they identified four distinct dimensions, each playing a different and complementary role and having an impact on an organization's performance. First, they propose the acquisition dimension, defined as an organization's ability to locate, identify, value and acquire new knowledge that are deemed critical to its operations. Next, the assimilation dimension, which refers to an organization's capacity to absorb new knowledge; specifically pertaining to the organizational routines and processes for analyzing, processing, interpreting, understanding, internalizing and classifying new knowledge. Then comes the transformation dimension, which refers to an organization's ability to develop and refine internal routines that facilitate the transfer and combination of newly acquired or assimilated knowledge. Finally, the exploitation dimension is the organization's ability to integrate acquired, assimilated and transformed knowledge into its operations and routines, in order to create new operations, new skills, new routines and new organizational structures. This dimension is perhaps the most important, as it highlights the cumulative efforts involved in assimilating and transforming newly acquired knowledge.

In this paper, however, we wish to examine absorptive capacity not from an organizational, but from an individual point of view. To this end, we define absorptive capacity as an individual's ability to acquire external knowledge, assimilate it and use it to generate performance, through the implementation of new work routines. This definition is in line with that of Zahra and George (2002), as well as that of Tian and Soo (2018), who, like this paper, approached it from an individual point of view. Furthermore, as some

authors believed that the sum of individual absorptive capacities makes up the absorptive capacity of the organization (Foss, 2007; Ployhart and Moliterno, 2011), it became appropriate to approach absorptive capacity from this perspective. It is also important to point out that this approach remains little explored, as there are very few studies that have attempted to conceptualize individual absorptive capacity (Hart, Gilstrap and Bolino, 2016). This openness to research in the literature may seem surprising, as many researchers argue that it is absolutely necessary to identify employee's absorptive capacity in order to understand organizational absorptive capacity (Tian and Soo, 2018; Volberda, Foss and Lyles, 2010; Yao and Chang, 2017; Zahra and George, 2002).

The following section will be explaining what commitment is all about. As you will see, it is proposed that the links between absorptive capacity and commitment in a project implementation context lie at two levels. Firstly, at the level of the demands required by the project when the employees concerned need to implement it [the project]. For example, the physical or psychological effort required of employees and middle managers during project implementation. Then there are the resources required for commitment, such as support, role clarification, participation in decision-making and autonomy. Different demands and resources could thus emerge across the four dimensions of absorptive capacity.

Commitment

It was from Kahn's seminal article (1990), which conceptualized commitment to work, that this concept was defined as a sense of return on self-investment based on performance, in addition to a feeling of being able to show up and work without fear or negative consequences on self-image, status or career. From then on, interest in commitment exploded and translated into several definitions, theories and concepts, and various measurement instruments (Knight et al., 2019). Authors Schaufeli, Salanova, González-romá and Bakker (2002) pioneered the development of a three-dimensional measure of commitment. Firstly, vigor, which they defined as high energy, sustained effort, mental resilience at work, perseverance and motivation to invest oneself in work. Secondly, dedication, which refers to a high level of involvement at work with enthusiasm and a sense of pride and inspiration.

Thirdly, concentration, which they characterized by full intensity in work, such that time passes very quickly. They named this measure the Utrecht Work Engagement Scale (UWES). A few years later, Bakker, Hakanen, Demerouti and Xanthopoulou (2007) enhanced the UWES by developing the resource demand model, commonly known as the JD-R model. Their model, which is still relevant today (Borst, Kruijen and Lako, 2019), assumes that each occupation has its own specific work characteristics and that these are classified into two general categories; that is, work demands and employment resources. The central assumption of the JD-R model was that employment pressure develops when labor demands are high. In this context, if employment resources are limited, commitment decreases; conversely, if they are plentiful, commitment to work is possible (Bakker and Demerouti, 2007). The authors of the JD-R model also argued that job resources, such as autonomy, social support and professional feedback, stimulate motivation and lead to engagement and well-being, while personal resources, such as self-efficacy, resilience and optimism, enable individuals to overcome professional challenges, while remaining engaged. Research has shown that employees with high levels of optimism, self-efficacy, resilience and self-esteem are more capable of mobilizing and are generally more engaged in their work (Bakker et al., 2007). The JD-R model also highlights that the richer organizations are in terms of employment resources, the more intrinsically motivating they are, as they enable individuals to fulfil themselves and satisfy their work-related needs through a sense of choice, competence and belonging (Bakker and Demerouti, 2007). The same model shows that the negative effects of high work demands are mitigated when job and personal resources are stimulated (Bakker and Demerouti, 2007). These results show that this model is particularly interesting insofar as it can be applied in any type of environment. Going a step further, Bakker and Demerouti (2008) conceptualized a combination of the Utrecht Work Engagement Scale (UWES) and the JD-R model. Over time, this conceptualization gained in popularity and has today become one of the most studied and established (Bailey et al., 2017). This combination demonstrates that job resources and personal resources trigger a motivational process in the individual, which leads to commitment at work and better performance.

As previously stated, individual absorptive capacity is a process that integrates various capabilities (acquisition, assimilation, transformation, execution). As such, absorptive capacity can be seen as a necessary resource for the implementation projects. In addition, this process may, at one time or another, call on other resources such as autonomy, social support, professional feedback, self-efficacy, resilience and even optimism to overcome challenges and stay committed. Consequently, we may think that the more a company is able to make the resources needed for project implementation available to each employee, the more it is able to positively stimulate their respective absorptive capacity, which could boost their commitment and conclude with a smooth execution of the new work routines.

The next section will be talking about work routines. Remember that in a project context, it is not uncommon for work routines to change. For example, projects aimed at improving the effectiveness and efficiency of production processes inevitably have an impact on existing routines. If this is the case, throughout the implementation of the project, the individuals concerned must acquire the information, assimilate it to better understand it, and visualize the new work routines. Then comes the stage of gradually transforming their existing routines to achieve a fluid level of execution of their new work routines. This example illustrates how projects can have an impact on work routines, and how these same projects call upon the absorptive capacity of the individuals concerned.

Routine

Routine is defined as the ability to perform a repeated action within a learned context (Reynaud, 1998). Initially, routines were seen as temporal structures, and several authors agreed that a large proportion of work was done through routines (Feldman, 2000). Overall, routines serve to integrate knowledge (Grant, Spender and Grant, 1996).

There are three aspects to routines: the ostensive, performative and artifactual aspects (Wright, 2013). The ostensive aspect represents the structure of the routine, the performative aspect allows actors to improvise, innovate and adjust their actions over time, and the artifactual aspect represents the structural elements used during the implementation of routines ranging from written rules, procedures and forms to the physical environment (Wright, 2013). The literature also raises two types of individual routines. First, there are static or operational routines, marked by the ostensive aspect, which leads the individual to perform the same task without thinking (Cohen et al., 1996). This type of routine means that, once the worker has got into the swing of things, he or she no longer has to constantly mobilize his or her thinking faculties. The worker performs without any awareness of the effort involved. Then there are dynamic routines, marked by the performative aspect, which lead the individual to solve new problems (Reynaud, 1998). This type of routine enables the worker to seek innovation through a process of trial and error. Over time, studies on the concept of routines have attributed to them [routines] qualities of stability and change (Pentland, 1995), and have proposed that there is an internal dynamic associated with routines that favors continuous change (Feldman, 2000). Specifically, people's reactions to routines influence their implementation and create the potential for continuous change (Feldman, 2000).

Through routines, we observe a certain acquisition of knowledge and know-how (Gitchenko, Boudarel and Bary, 2014). In fact, routines are intimately linked to learning. Take, for example, a project requiring new work routines for the implementation of a new technology. Each individual involved will first have to acquire certain artifacts that will enable them to assimilate new knowledge in order to fully understand the project and its new work routines. Also, through learning, he/she will be able to gradually transform his/her work routines to achieve a fluid level of execution. This example highlights an interesting aspect of routines; which is that, an individual is continually capable of acquiring, assimilating, transforming and exploiting new knowledge, as illustrated in the absorptive capacity model by Zahra and George's (2002).

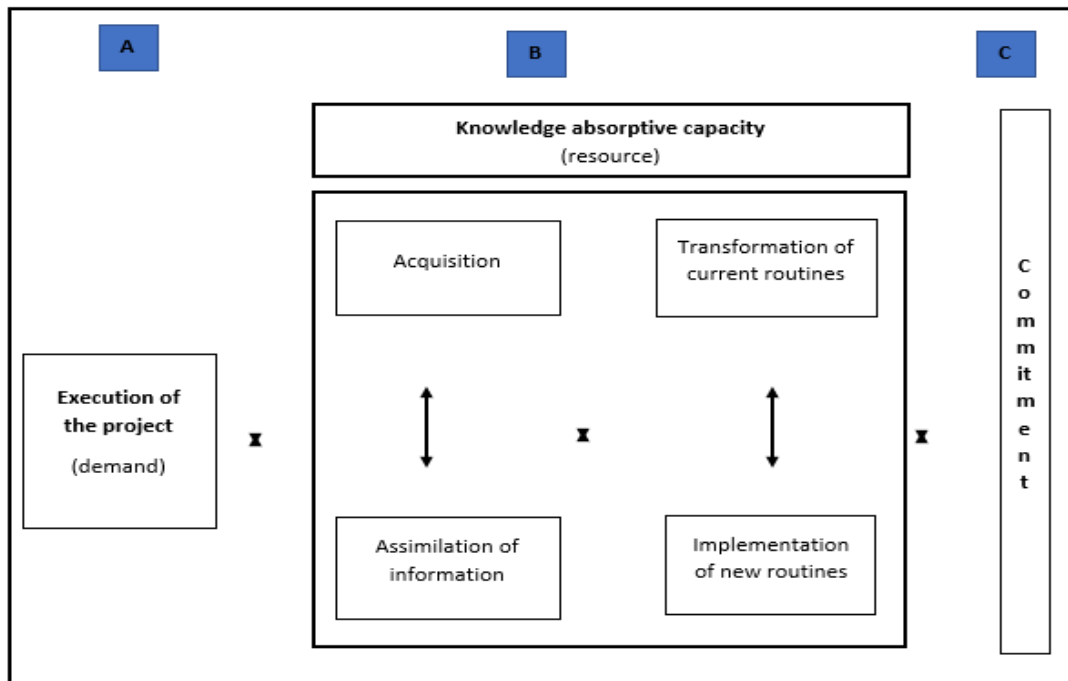
In short, this theoretical framework has enabled us to better understand the integration of routines to absorptive capacity, and then the links between absorptive capacity and commitment.

CONCEPTUAL FRAMEWORK

To design the conceptual framework (see Figure 1), we were inspired by the absorptive capacity model by Zahra and George's (2002), which is made up of four dimensions: knowledge acquisition, assimilation, transformation and exploitation. The absorptive capacity represented in this conceptual framework represents a process that enables the transition from one dimension to another. First, we see the acquisition dimension, wherein information relating to a project is gathered. In this dimension, we find all the artifacts required for the implementation of the project, including the tools needed to set up new work routines. Then there is the assimilation dimension, which allows for the understanding of the previously received artifacts. In this phase, the middle manager and his employees must analyze, process, interpret and understand the information received. Through this assimilation of information, it will be possible to visualize new work routines. Then comes the transformation dimension, which enables the progressive implementation of the new work routines. The final stage is the execution dimension, wherein each individual is able to execute his or her new work routines seamlessly.

This conception of knowledge absorptive capacity within the implementation of projects then pushes us to identify absorptive capacity as a resource, as described in the JD-R model. Moreover, we believe that throughout the process, workers can call on various resources to improve their absorptive capacity. For example, they may make interpersonal and social requests for support from colleagues in order to acquire or better assimilate information, or demand a constructive team climate which favors the transformation of existing routines. They may also require work organization resources to clarify roles or participate in decision-making in order to facilitate the implementation of new routines. According to this model, absorptive capacity as a resource influences individual commitment, which in turn impacts the absorptive capacity and implementation of stable or dynamic routines, depending on project requirements.

FIGURE 1
ABSORPTIVE CAPACITY MODEL IN A SOURCE PROJECT IMPLEMENTATION CONTEXT



Authors. Inspired by Zahra and George (2002)

This conceptual framework proposes a three-stage model. The first moment (A) enables us to visualize the demand for the implementation of the project. This moment imposes a number of requirements on

middle management and employees. In many cases, it requires physical or psychological effort of a cognitive or emotional nature (Bakker et al., 2007; Halbesleben and Buckley, 2004). In addition, project implementation generally takes place in a context where day-to-day operations have to run in parallel with the changes, which can lead to work overload and additional pressure on the middle manager and his or her employees.

During this period, they may perceive that they lack resources, for example, a limited control over their work (Bakker et al., 2007; Wassenhove, 2014). The second moment (B) represents the concept of absorptive capacity of the middle manager and his/her employees. This is the process of absorptive capacity that has been defined above. At this point, we see absorptive capacity as a resource enabling the individual to meet the (project) demand. The third moment (C) of the conceptual framework highlights the impact of absorptive capacity on *commitment*. The two-way arrows here attest to the dynamic nature of the proposed model.

It is on the basis of this conceptual framework that certain proposals could be considered. For example, **during the implementation of the project**, it is possible that:

- When work demands (requirements) are low and available resources are also low, there is little demand on absorptive capacity and commitment could then be little affected or not affected at all;
- When work demands are high and available resources are low, absorptive capacity is insufficient and this could contribute to a deterioration in commitment;
- When work demands are low and available resources are high, absorptive capacity is underutilized and could lead to stagnation or a decline in commitment;
- When work demands are high and available resources are also high, absorptive capacity is stimulated and could ensure that commitment is maintained or increases.

Depending on the scenario being considered, the implementation of new work routines, whether stable or dynamic, may be more or less successful depending on the level of commitment of middle managers and employees involved in the implementation of the project.

CONCLUSION

The aim of this article was to present a theoretical reflection on the concept of absorptive capacity of middle managers and their employees in the context of project implementation, and its link with commitment. Having focused on the general problem of absorptive capacity in the context of project implementation, in addition to regular operations, a theoretical framework on absorptive capacity, commitment and routine was developed, leading to the proposal of a three-stage conceptual framework.

This theoretical proposal made it possible to demonstrate that the exploration of the project in its implementation phase portrays a certain originality and importance for the study of the absorptive capacity of individuals in the context of a project. What's more, exploring the effects of the absorptive capacity of middle managers and their employees on commitment and the implementation of routines addresses a problem that is currently being faced by many organizations in different sectors. The richness and complexity of absorptive capacity lead us to considering this concept on two levels. Firstly, as an explanatory factor for routine performance, since it is recognized as a knowledge management model linked to the success rate of projects. Secondly, as a resource that can influence the commitment of the workers involved and, hence, the success of the projects.

Considering the limitations associated with the predominance of quantitative studies on the concept of absorptive capacity, as well as the theoretical nature of the model presented, it would be desirable for future research to adopt a qualitative approach allowing the exploration of the conditions under which projects coincide with the regular activities of the middle manager and his employees. A qualitative approach could also enable us to delve deeper into the relationships between absorptive capacity, commitment and routines. It would also be interesting to examine the dynamic nature of absorptive capacity in a real-life context. A final limitation of this study lies in the individual nature of routines. It would be relevant to explore the

collective coordination (Becker, 2004) that may emerge from work routines during project implementation, its influence on individual and organizational absorptive capacities, and its impact on individual and collective commitment.

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