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THE PRACTICE OF INFORMATION MONITORING AND STRATEGIC PROSPECTING BEHAVIOR: THE MEDIATING EFFECT OF KNOWLEDGE CREATION.

LA PRATIQUE DE VEILLE DE L'INFORMATION ET LE COMPORTEMENT STRATÉGIQUE DE PROSPECTEUR: L'EFFET MÉDIATEUR DE LA CRÉATION DES CONNAISSANCES.

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ABSTRACT

The relationship between information monitoring practice and prospecting behavior is still controversial despite the diversity of work that has been done on each of these concepts. In our research, we conduct a literature review specifically focused on the existence, nature, and meaning of this relationship. We then show that the concept of knowledge creation could have an important role in this relationship and we test it as a mediator of this relationship on a sample of 102 high-tech companies. Finally, we show, using the method of Preacher and Hayes (2008), that knowledge creation mediates the relationship between information monitoring and strategic prospecting behavior. Moreover, the practice of monitoring has a positive and significant effect on knowledge creation. This research has both theoretical and empirical implications. On the theoretical level, this research has developed a conceptual model explaining the relationship between information monitoring, knowledge creation, and strategic prospecting behavior. This model highlighted the mediating effect of knowledge creation. On the empirical level, our research allowed the adaptation of the scale of measurement of information monitoring, strategic prospecting behavior, and knowledge creation.

Keywords: information monitoring; knowledge creation; prospecting behavior.

RÉSUMÉ

La relation entre la pratique de veille de l'information et le comportement de prospecteur est encore controversé malgré la diversité de travaux ayant été réalisés sur chacun de ces concepts. Dans notre travail de recherche, nous réalisons une revue de la littérature spécialement axée sur l'existence, la nature et le sens de cette relation. Nous montrons ensuite que le concept de création des connaissances pourrait avoir un rôle important dans cette relation et nous testons ce dernier comme médiateur de cette relation sur un échantillon de 102 entreprises à haute technologie. Nous montrons enfin, grâce à la méthode de Preacher et Hayes (2008), que la création des connaissances médiatise la relation entre la veille de l'information et le comportement stratégique prospecteur. De surcroît, la pratique de veille a un effet positif et significatif sur la création des connaissances. La présente recherche comporte des implications théoriques et empiriques. Sur le plan théorique, cette recherche a permis d'élaborer un modèle conceptuel expliquant la relation entre la veille de l'information, la création des connaissances et le comportement stratégique de prospecteur. Ce modèle a mis en avant l'effet médiateur de la création des connaissances. Sur le plan empirique, notre recherche a permis l'adaptation de l'échelle de mesure de la veille de l'information, de comportement stratégique, du prospecteur et de la création des connaissances.

Mot clefs: Veille de l'information ; création des connaissances ; comportement de prospecteur.

1. INTRODUCTION

Today's global economy is characterized by globalization and complexity. We are witnessing profound changes in economic life (Berkani, 2019). In fact, the business environment is influenced by open markets and growing international competition. In this context, managers are striving to implement a number of practices and measures in their companies to cope with this situation. The literature on this subject highlights the role that strategic behavior can play in risk management, particularly in reducing uncertainty in decision-making situations (Daoust-Gauthier, 2023). Strategic behavior is a combination of the objectives an organization strives to achieve and the means by which it seeks to achieve them. In this respect, the strategic behavior of the prospector comes into its own. For high-tech companies, those of interest to us in this work, prospecting behavior will enable their managers to seek to locate and exploit new products and market opportunities (Fores, 2019). Hence the need to modify organizational structure in response to a changing environment. Similarly, Bizaguet (1991) argues that the administrative problem for these companies is how to coordinate multiple activities and encourage innovation. Companies can solve this problem by concretely using appropriate information-gathering and knowledge-creation techniques (Chereau & Meschi, 2019).

Furthermore, and as many researchers (Klinger et al, 2020; Siddique & Rasheed, 2023) remind us, in technological contexts, strategic prospecting behavior is generally a result of effective monitoring practice. Emerging in the 1980s, the practice of monitoring is an established field in academia and business management. Indeed, based on the principles of information monitoring, companies are developing their business processes, increasing their productivity and the quality of their services, and finding new solutions and products for their customers (Natou, 2020).

Although the importance and use of information monitoring for organizations is indisputable for strategic prospecting behavior, recent reports such as those by Silva et al. (2022) and Améziane et al. (2021) reveal low levels of manager satisfaction with both the use of this management tool and the results of its application. In general, the effectiveness and success of monitoring practice depend heavily on the adjustment of organizational processes (Rohrbeck, 2010; Wieder and Ossimitz, 2015). Consequently, according to the literature review, monitoring practice is linked to good human resource management practices (Chen and Huang, 2009; Lin, 2011). Similar to the establishment of a well-defined corporate culture (Don and Guadamillas, 2010; Nguyen &Mohamed, 2011), to the reorganization of organizational structures (Gold, Malhotra, and Segars, 2001; Singh and Kant, 2009). In addition, knowledge creation is another fundamental factor, since leaders have a significant impact on the direction and effectiveness of information monitoring practice within their organizations (Said, 2004; Bagnoli &V edovato, 2012; Sundiman, 2018).

Nevertheless, despite the great importance of knowledge creation, researchers have only recently begun to explore the role of knowledge creation in the relationship between monitoring practice and prospecting behavior. With this in mind, we have chosen to integrate the *knowledge creation* variable into the relationship between monitoring practice and strategic prospecting behavior, since it is likely to play a mediating role in the relationship between these two variables.

Thus, starting from an empirical observation that companies have to cope with a constantly changing environment, and from a theoretical observation that the literature review shows a lack of research on the relationship between the practice of monitoring and the strategic behavior of prospectors, we propose in this research to answer the following central question:

To what extent does monitoring influence the company's strategic prospecting behavior through knowledge creation?

Thus, this research is of both theoretical and empirical interest. Theoretical, insofar as it aims to gain a better understanding of the relationships between information monitoring practice, prospecting behavior,and knowledge creation. Empirical, in that our research has led to the adaptation of scales for measuring information monitoring, strategic prospecting behavior, and knowledge creation, as well as providing recommendations for companies wishing to adopt prospecting behavior.

To answer the question posed, we will structure this work as follows: after presenting the theoretical framework of the research, we will present the methodology and the main results of the statistical analysis. Finally, the paper ends with a discussion of the research results and the main conclusions.

2. THEORETICAL FRAMEWORK OF THE RESEARCH

We begin by analyzing the key variables in our research (2.1.), before discussing the nature of their relationships (2.2.).

2.1. Presentation of key research variables

First, it is important to recall the basic concepts underlying this research. Thus, we are interested in aspects related to prospecting behavior, knowledge creation, and monitoring practice.

2.1.1. PROSPECTING BEHAVIOR

An overview of the literature shows that a great deal of research has been carried out into types of strategic behavior. Such as Miles and Snow's typology (1978). This is the most popular typology, in this typology, Miles and Snow (1978) incorporated organizational strategies, structures, and process variables into a certain framework, resulting in a multifaceted typology.

Their view was that strategy can adjust the link between a company and its environment. They identified four types of strategic behavior: prospector, defender, analyst, and reactor.

Prospecting behavior is commonly used by technologically innovative organizations. For example, Croteau et al (2001, p8.) stated that "*organizations that adopt prospecting behavior usually want to access the largest possible market. They are characterized by repeated efforts to innovate and introduce new products and services*". Prospectors are companies that invest heavily in research and development and value teamwork (Gosselin, 2011).

Previous studies (Zahra and Pearce, 1990; Pupion, 2018) show that prospecting consists of seeking out and then visiting prospects in order to: assess their potential and define their needs, introduce them to the organization, and convert them, whenever possible, into active customers. In order to identify its prospects, an organization can act in a number of different ways. It can keep a watch on the constant evolution of its

environment, in order to achieve the desired competitive edge. Bescos et al (2004) demonstrate that the research carried out by Simon (1987) led to results a priori contradictory to those of Miles and Snow (1978). In fact, he observed that prospectors placed great importance on budget monitoring, accuracy, and variance analysis. Moreover, prospectors tend to set budget targets that are difficult to achieve.

2.1.2. MONITORING PRACTICE

In France, the monitoring activity emerged in the late 80s, based on Porter's work of 1980. "*It's an activity of constantly monitoring the company's environment, listening and proactively seeking out relevant information based on weak signals perceived in its environment*" (quoted by Begin, 2006, p.12). Besson and Poussin (1999, p.82) note that "*monitoring activities revive the notions of legality, repetition, and discontinuity in their practice. They can be carried out by one person, which does not exclude the collective dimension, and may or may not be accompanied by computer support*". The work of Ansoff (1975), Baumard (1991), and Chartrand (2003) introduced the notion of strategic monitoring. This notion is defined as an informational process by which the company listens to its environment in a forward-looking way, with the creative aim of opening up opportunities and reducing uncertainty. Furthermore, according to Jakobiak (1999), monitoring activities are used to support strategic decision-making, to evolve and monitor competitors, and to support **strategic** planning and implementation. However, when it comes to practical implementation within an organization, a number of researchers feel it is important to differentiate between the concepts of monitoring.

For his part, Frion (2002, p.23) argues that, for this work to be efficient, it is necessary to have a vast network of people capable of analyzing the company's context, and detecting all types of information from the market and stakeholders. Similarly, to analyze this information to detect illusions, and to structure this information in a standardized repository that is properly shared between the company's employees.

The practice of monitoring is not a passive act, limited to simple surveillance of the environment; it's a proactive act that the Anglo-Saxons call "*Environmental Scanning*" or "*Competitive Monitoring*" (Bournois, 2000). According to Hélène (2000, p.7), it encompasses "*all monitoring activities, and consists of an anticipatory process of observing and analyzing the environment, followed by the targeted dissemination of information useful for decision-making*". The strategic objective indicates that monitoring concerns decisions that affect the future and evolution of the organization in relation to changes in its environment.

On the other hand, whether reactive or anticipatory, the practice of monitoring is based on powerful ideas. It's the production of reliable, relevant information. All parts of the company are likely to create knowledge and can use it to take action.

2.1.3. KNOWLEDGE CREATION

As far as knowledge creation is concerned**,** recent work in economic and management literature is helping to develop a knowledge-based theory of the firm, which cites the reason for firms' existence as being knowledge creation (Grant, 1996; Kogut& Zander, 1992). The knowledge-based view has its roots in the resource-based view of the firm, which focuses on strategic assets as the main source of competitive advantage (Amit&Schoemaker, 1993). In contrast, in the *knowledge-based view,* knowledge is the main strategic resource, which, when properly managed, enables the company to create value from its production operations (De Carolis& Deeds, 1999; Zack, McKeen, & Singh, 2009). Consequently, the firm is the embodiment of a knowledge-bearing entity that manages its resources through its combinatorial-dynamic capabilities (Kogut& Zander, 1992).

Creative activities are generally internal initiatives that can create new knowledge through research and development activities. This can include the creation of new content or the replacement of old content in the organization's implicit and explicit pool (Le Bas, 2018). Some studies have identified knowledge creation as a prerequisite for innovation (Perez, 2018). This stage of the knowledge management process refers to the way

in which new knowledge is created. It includes the development of new content within the framework of tacit knowledge and explicit knowledge (Oubrich, 2005).

Accordingly, Nonaka and Takeuchi (1995) prove that knowledge creation lies in describing the process by which members of an organization create new understandings, innovations, and integrations of known things. When an organization innovates, it does not simply process external information to solve existing problems and adapt to a changing environment. In fact, they create new knowledge and information from within to redefine both problems and solutions.

With this in mind, knowledge creation can be understood as the dynamic process of collecting data, transforming it into information, and then transforming it into knowledge, through the different levels of learning.

2.2. Analysis of relationships between study variables

2.2.1. The effect of monitoring on prospecting behavior

Dess and Beard's Strategic Surveillance Theory by Dess and Beard (1984) explains that strategic monitoring enables companies to capture information about their environment, which is crucial for

to adjust their strategic behavior. From this perspective monitoring practice is seen as a mechanism enabling the organization to identify threats and opportunities, thus facilitating prospecting behavior that encourages innovation and responsiveness.

Previous studies show that Baumard et al (2000) studied the positive effect of the practice of intelligence monitoring on prospecting behavior. The results indicate that monitoring, as a lever for continuous surveillance, enables the organization to detect relevant information and monitor changes in the environment, which can generate threats to the realization of strategic prospecting behavior. Thus, the authors argue that continuous strategic adjustment is essential to ensure the company's sustainability and optimize its strategic behavior in response to environmental change.

In contrast, the study by Wieder and Ossimitz (2015) shows that the adoption of strategic prospecting behavior is not limited to the collection of raw data via the monitoring system. It is also influenced by mediating effects, such as information quality and knowledge creation. The deployment of this knowledge on a large scale can, they argue, lead to significant strategic advantages.

Surveys conducted by Kula and Naktiyok (2021) also confirm the positive effect of monitoring on prospecting behavior. Data collected from executives working in highly competitive automotive and communication industries show that strategically-minded managers need to use information monitoring to interpret competitive dynamics, determine their positioning and choose appropriate strategic behavior. Similarly, Bernard (2008) finds that companies monitor changes in their environment to detect potential threats as they implement their strategy. Thanks to a warning system, risks are detected in real time, enabling a rapid and appropriate response. These observations lead us to formulate the following hypothesis: **H1:** *The practice of monitoring has a positive effect on prospecting behavior.*

2.2.2. The effect of monitoring practices on knowledge creation

The literature review shows that organizational learning theory (Argyris and Schön, 1978) argues that information monitoring promotes learning by enabling the organization to integrate external knowledge and adapt it to its own environment. This learning is crucial to knowledge creation, as it enables the organization to better understand its internal processes and improve its responsiveness to market changes.

Said (2004) studied the relationship between monitoring practice and knowledge creation and found a positive effect of monitoring on knowledge creation. The results show that the aim of information monitoring is to provide operational players with the information they need to do their jobs properly and thus create the knowledge they need to improve the organization's performance and efficiency.

In this context, their results show Améziane et al (2021) investigated the impact of monitoring prospecting behavior from the foundations of action theory. Their results show that the actions of individuals, at the heart of organizational learning dynamics, can play a key role in the positive influence of monitoring on knowledge creation. However, Améziane et al (2021) found no direct effect of monitoring on knowledge creation.

Similarly, Bretonès et al (2007) conducted a study of American companies to analyze the effect of monitoring on knowledge creation. They confirmed that knowledge creation is not limited to information monitoring. In fact, an organization still needs an extensive network of personnel capable of analyzing the context, monitoring information from markets and stakeholders, and using this information in a structured way to create relevant knowledge. Nevertheless, the study by Cansell and Oubrich (2007) shows that monitoring has a positive influence on knowledge creation. On this basis, we propose the following hypothesis: **H2:** *The practice of monitoring has a positive effect on knowledge creation.*

2.2.3. Effect of knowledge creation on prospecting behavior

Regarding the relationship between knowledge creation and prospecting behavior, knowledge management theory (Nonaka and Takeuchi, 1995) suggests that knowledge creation, notably through the conversion of tacit knowledge into explicit knowledge, is a key factor in innovation and strategic adaptation. The creation of new knowledge thus enables organizations to adopt forward-looking strategic behaviors, relying on up-to-date information and new insights to anticipate market trends.

In their study on the effect of knowledge creation on prospecting behavior, Bagnoli and Vedovato (2012) conducted a quantitative analysis of 60 manufacturing SMEs in north-eastern Italy. The results reveal a significant positive correlation between knowledge creation and organizations' strategic configurations. SMEs with a prospector strategy alternately adopt an aggressive and conservative attitude to knowledge creation.

However, Wallez (2010) demonstrated an indirect effect of knowledge creation on strategic prospecting behavior. He confirmed that human resource management acts as a mediating variable between the variables. Wallez's (2010) results suggest that successful organizations need to consider employees as key players in the generation of useful information and knowledge. Furthermore, for knowledge creation to drive innovation and creativity, every member of the organization must be perceived as a researcher interacting with others, and every work activity must incorporate a research aspect.

Hun Kim et al (2014), having analyzed data from 141 companies, also showed a positive effect of knowledge creation on prospecting behavior. Their study shows that knowledge management enables companies to strengthen their ability to make strategic choices and achieve their goals. The results offer practical advice to managers on how best to use knowledge creation in a variety of organizational contexts. This line of reasoning leads us to formulate the following hypothesis: H3: Knowledge creation has a positive impact on prospecting behavior.

2.2.4. The mediating effect of knowledge creation in the relationship between monitoring practice and prospecting behavior

Wieder and Ossimitz (2015) investigated the direct and indirect effects of monitoring practice on strategic prospecting behavior, conducting a survey of senior IT managers in Australia. The design of this cross-sectional study, conducted among Australia's 500 largest companies in terms of market capitalization, revealed important mediating effects, such as information quality and knowledge creation. The results indicate that organizations with information and knowledge resources are better positioned to derive strategic advantage.

Sundiman (2018) illustrates the indirect effect of monitoring on strategic prospecting behavior. The results show that monitoring is often limited to internal process improvement operations, but companies could gain

more by harnessing knowledge. Knowledge creation channels monitoring activities, attributing them a strategic effect that strengthens corporate competitiveness.

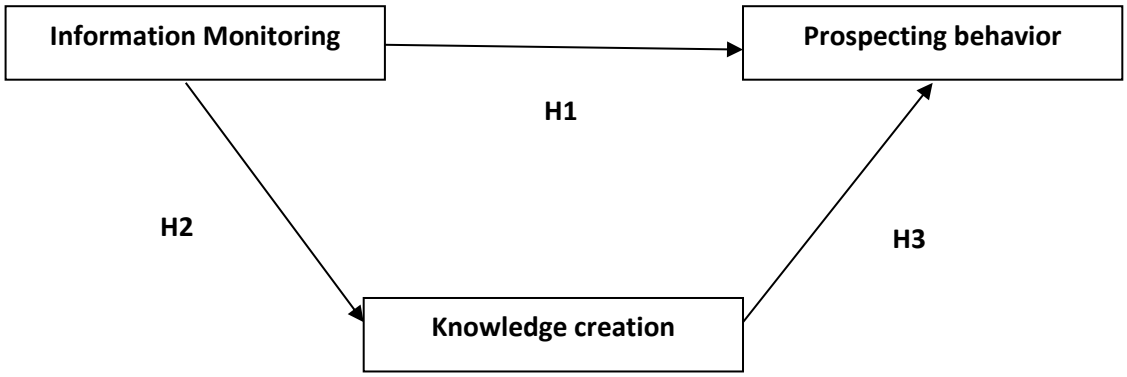
Chen and Huang's (2015) study examines the role of knowledge creation in the relationship between monitoring practice and prospecting behavior. The results of this study, based on a sample of 146 companies, show that monitoring practice is positively related to the ability to create knowledge, which has a positive effect on both company strategy and performance. Chen and Huang (2015) also highlight the importance of human resources practices, indicating that strategic human resources are positively related to knowledge management, which favorably influences the organization's strategic choices.

Finally, for Mat Noor et al (2021), who adopted a quantitative approach based on an online survey, the results indicate that effective knowledge management, through its creation, storage, transfer and application, significantly improves the strategy formulation process. Managers therefore need to adopt these approaches to maximize organizational strategy benefits.

This raises the question of the nature of the relationship between monitoring practice, knowledge creation and strategic prospecting behavior, which remains ambiguous in literature, with sometimes contradictory results. However, the above developments lead us to assume that there is a mediating relationship between these three elements. We therefore propose the following hypothesis: **H4:** *Knowledge creation plays a mediating role in the relationship between monitoring practice and strategic prospecting behavior.*

Thus, the relationships between the three variables lead us to propose the following conceptual model (Figure 1).

Figure 1: Conceptual research model



3. RESEARCH METHODOLOGY

We first present the sample selection and survey procedure (3.1.) and then the measurement of the variables (3.2.).

3.1. SAMPLE SELECTION AND SURVEY PROCEDURE

To assess the impact of information monitoring practices on the strategic behavior of prospectors, taking into account the mediating role of knowledge creation in high-tech companies, we developed a questionnaire which we then sent to a sample of 102 managers from Tunisian companies operating in this sector. In all, 220 questionnaires were distributed. We chose to use a convenience sampling method, i.e., we favored the voluntary collaboration and availability of respondents. Although this non-probability sampling method does not guarantee the representativeness of the sample, as would random sampling, it does have the advantage of simplicity and rapidity in the choice of sampling units (Johnston et al, 2010). As for sample size, this was determined according to the data analysis methods planned for this study. For data analysis, we opted for the structural equation method (SEM). This choice is particularly suited to our study for several reasons.

Firstly, SEM allows us to model complex relationships between latent and observed variables. In our context, this allows us to test not only direct relationships between information monitoring and prospectors' strategic behavior, but also the mediating effects of knowledge creation. SEM is therefore ideal for analyzing theoretical models involving several variables and their simultaneous interaction. Similarly, SEM offers us the opportunity to test and validate theoretical models, which is essential for understanding the strategic dynamics of high-tech companies. This methodological choice enables us to address our hypotheses with precision, and to draw valid conclusions about the impact of information monitoring on strategic behavior.

3.2. MEASURING VARIABLES

For the "*strategic prospecting behavior"* variable, we referred to the scale used by Avci et al (2011) in their study of Miles and Snow's (1978) strategic archetypes. The multi-item scale, to operationalize Miles and Snow's (1978) strategic prospector behavior is proposed and field-tested in various research works (Meye et al, 1990; Croteau, 2001, Madanoglu, 2011, Sabherwal et al,2015, Lecocq, 2004). This scale has demonstrated its robustness and applicability in both academic and managerial contexts. It is theoretically grounded, easily administered, and has diagnostic value for properly studying the strategic behavior of organizations (Bchini et al. 2021). As Batac et al (2019) reminds us, this approach is the most widely recognized and is also considered to be the most comprehensive conceptualization of organizational strategic behavior.

For the "*prospecting behavior"* measure, 12 items were selected on a Likertscale ranging from (strongly disagree to strongly agree). They were used in our research to judge the extent to which respondents agreed or disagreed with the proposed items, 9 items were selected, with a Cronbach's alpha of 0.911.

To measure the "*information monitoring"* variable, we referred to the scale used by Degan et al (2018). It refers to the work of researchers (Phanuel and Levy, 2003; Bournois and Romani, 2000; Levet, 2001) and practitioners (Jakobiak, 1998; Bloch, 1995; Hassid, Moinet, 1997; Martinet and Marti, 1995, etc.) specializing in monitoring. Degan et al (2018) used the 5-point Likert scale ranging from 1 "strongly disagree" to 5 "strongly agree". Three items were selected to measure the variable "The Monitoring" a Cronbach's alpha of 0.828.

For the "knowledge creation" variable, we used the scale applied by Donate et al, (2014). The variable is measured by a 7-point Likert scale, coded from (1 = strongly disagree; 7 = strongly agree). Three items were retained with a Cronbach's alpha of 0.721.

4. RESULTS

We will first present the results of the exploratory analysis (3.1.) and then the results of the confirmatory analysis (3.2.).

4.1. RESULTS OF EXPLORATORY ANALYSIS

We performed an exploratory factor analysis using SPSS 25.0 software. Table 1 summarizes the main results.

Table 1: Results of exploratory analyses

Dimensions	KMO and Bartlett Test	Selected items and QR		VP	α
Prospecting behavior	Bartlett test = 0.000 KMO = 0.914	Prosp1 =0.783		1.732	0,911
		Prosp2=0.730			
		Prosp3=0.737			
		Prosp4=0.762			
		Prosp5=0,840			
		Prosp7=0.745			
		Prosp8=0,840			
		Prosp9=0.772			
		Prosp11=0.730			
Monitoring	KMO = 0.715 Bartlett test = 0.000	Monitoring. 1	0,976	1.037	0,828
		Monitoring.2	0,838		
		Monitoring.3	0.876		
Knowledge creation	KMO = 0.681 Bartlett test = 0.000	creation.1	0,822	1.009	0,727
		creation.2	0.806		
		creation.4	0.786		

Note: RQ: Representation Quality, EV: Eigenvalues, α: Cronbach's Alpha

For all three study variables, all KMO values found show that the items are suitable for factor analysis (coefficients greater than 0.7). We also note that the data are factorizable. We also note that the quality of representation for the various items is above 0.5. The eigenvalues are all well above 1 (1.732 for prospecting behavior, 1.037 for watchfulness, and 1.009 for knowledge creation). In addition, Cronbach's alpha for each variable exceeds the critical threshold of 0.7 (0.911 for prospecting behavior, 0.828 for watchfulness, and 0.727 for knowledge creation). This result indicates a good internal consistency of the measurement scale obtained for the three study variables.

4.2. RESULTS OF CONFIRMATORY ANALYSIS

To carry out our confirmatory analysis, we used Smart PLS (Partial Least Squares) software. There are several reasons for this choice: firstly, PLS is a more robust method whose application does not require a large sample size and supports, at the same time, a low number of measurement scales and minimal residual distributions (Fernandes, 2012). Added to these advantages is the relevance of applying this method in the initial phase of theory development and verification (Roussel et al. 2002). Thus, using Smart PLS software, we carried out two stages of data analysis: First, we verified the empirical properties of the conceptual model. Tables 2 and 3, in the appendices, summarize the results of the convergent and discriminant reliability and validity tests. The test results suggest that all three versions of the model meet the conditions of unidimensionality, reliability, and validity (convergent and discriminant), and are ready for testing.

Regarding the relationship between information monitoring practice and prospecting behavior, the results obtained show that information monitoring has no positive and significant effect on prospecting behavior (reg =0.159; p=0.062). This allows us to reject the research hypothesis (H1) which states that the practice of information monitoring has a positive and significant effect on prospecting behavior.

As for the effect of information monitoring practice on knowledge creation, the results show that information monitoring has a positive and significant influence on the knowledge creation dimension (reg = 0.651; p=0.000). Thus, hypothesis H2, which states that information monitoring has a positive and significant effect on knowledge creation**,** is validated.

For the relationship between the knowledge creation dimension and prospecting behavior, the results prove that knowledge creation has a positive and significant influence on the prospecting behavior dimension (reg = 0.395; p=0.000). On the other hand, our hypothesis H.3, which states that knowledge creation has a positive

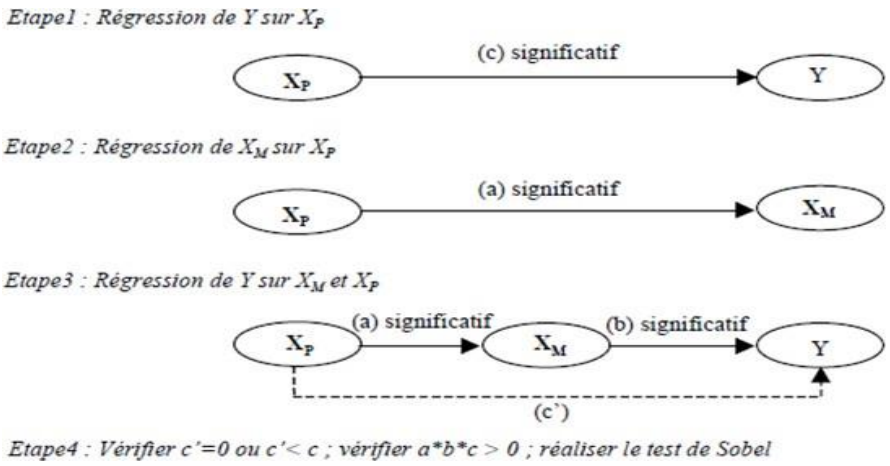
and significant effect on prospective behavior, is validated. On the other hand, our hypothesis H.3, which states that knowledge creation has a positive and significant effect on prospective behavior, is validated (see Table2).

Table2: Results of measurement model relationship analysis

Measurement model relationships	*Results*	*Hypothesis*
Information monitoring→Prospecting behavior	(reg =0.159; p=0.062)	Rejected
Information monitoring→ Knowledge creation	(reg = 0.651; p=0.000)	Validated
Knowledge creation→ Prospecting behavior	(reg = 0.395; p=0.000)	Validated

The mediating role of knowledge creation in the information monitoring - prospecting behavior relationship was tested using Preacher and Hayes' method, available via their SPSS macro. This mediation test is a technique developed in 2008. Its first uses in North American academic journals date back only to 2010 (Zhao, Lynch, and Chen, 2010). The test can be performed using SPSS software, after adding the "PROCESS" macro, which can be downloaded from the Preacher and Hayes website. This technique partially challenges Baron and Kenny's (1986) figure 2 model, since it suggests that the direct relationship (a) no longer needs to be tested. In addition, step 4 of Baron and Kenny's method, and in particular the Sobel test, are also no longer necessary. The process followed by this technique is as follows: regressions 1 and 3 of the Baron and Kenny model are run. Then a bootstrap test (n=5000) is performed to test the indirect effect. The significance criteria are listed in Table 3.

Figure 2: Baron and Kenny model



Source: Akremi A and Roussel P (2003). Analysis of moderator and mediator variables by structural equation methods: Application in HRM.Work Paper

Table3: Significance criteria for the Preacher and Hayes method

Coefficient	Method	Criteria sig.	Sig. effect if
A	Regression	P-value	p<0,05
B	Regression	P-value	p<0,05

Coefficient	Regression	P-value	p<0,05
a x b	Bootstrap	Confidence interval	IC<0>IC

The results of the bootstrap test confirmed a significant indirect effect of information monitoring on prospecting behavior via knowledge creation, supporting the latter's mediating role. Indeed, the indirect effect (a * b) is estimated at 0.08, with a 95% confidence interval excluding zero (from 0.08 to 0.39), confirming the mediation of knowledge creation between information monitoring and prospecting behavior. This shows that information monitoring indirectly influences prospecting behavior by promoting knowledge creation. However, although this indirect effect is statistically significant, it remains relatively small in terms of effect size. This modest effect size suggests that, although knowledge creation plays an important mediating role, other mediators or contextual factors could also have a significant impact on strategic prospecting behavior in this context. It is therefore essential not to overestimate the contribution of this mediator alone.

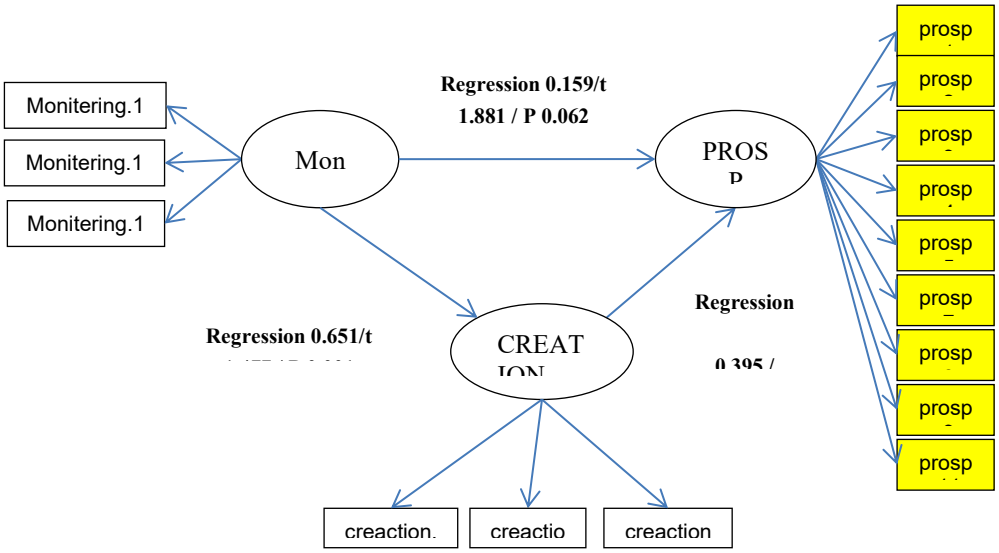
The results of the Preacher and Hayes test, as presented in the tables below, show that: Information monitoring (a) has a positive and significant effect on knowledge creation (a = 0.74; t = 14.83; p = 0.000). Knowledge creation (b) has a positive and significant effect on prospecting behavior (b = 0.40; t = 6.4; p = 0.000). The total effect of information monitoring on prospecting behavior (c) is also positive and significant (c = 0.34; t = 4.74; p = 0.000). Finally, the indirect effect of information monitoring on prospecting behavior via knowledge creation is also significant (a * b = 0.08), with a 95% confidence interval excluding 0 (from 0.08 to 0.39). This confirms the existence of complementary mediation, with indirect and direct effects pointing in the same direction (Zhao et al., 2010).

Table4: Preacher and Hayes test results

Output variable: knowledge creation				
	Coeff	**SE**	**T**	***P***
Constant	0.000	0,0499	0.0000	1.0000
Standby (a)	0,7425	0,0501	14.8320	0,0000
Output variable: prospecting behavior				
	Coeff	**SE**	**T**	***P***
Constant	0.000	0.486	0.000	1.0000
Standby (b)	0.4667	0.0727	6.4166	0.0000
Knowledge creation (c)	0.3462	0.0727	4.7605	0.0000
Direct effect on prospecting behavior				
	Effect	**SE**	**T**	**P**
	0.4667	0.0727	6.4166	**0.0000**
Indirect effect on prospecting behavior				
	Effect	**BootSE**	**BootLCI**	**BootULCI**
Knowledge creation	0.2571	0.0803	0.0834	0.3967

The results presented in these tables confirm mediation hypothesis H4, according to which knowledge creation plays a mediating role in the relationship between information monitoring and prospecting behavior. In summary, although the indirect effect is statistically significant, its modest size suggests that it would be pertinent to explore other mediators or contextual factors that could also influence the strategic behavior of high-tech companies.

Figure 3: Global model



5. Discussion

The aim of this research is to study the effect of monitoring practice on prospecting behavior, integrating knowledge creation as a mediating variable. This makes it possible to test the four hypotheses developed in this research work (H1, H2, H3, and H4). Indeed, the empirical non-validation of H1, which indicates that monitoring practice has a positive influence on prospecting behavior, does not corroborate the findings of (Baumard et al (2000) and the more recent results of (Kula and Naktiyok, 2021), obtained in other contexts. However, our results do converge with those obtained by Wieder and Ossimitz (2015). We can conclude that prospecting behavior is not limited to the adoption of a business monitoring practice. This can be explained by the existence of intermediate variables such as human resources management, leadership, organizational structure, and knowledge creation, which influence the relationship between information monitoring and prospecting behavior.

H2's validation that the practice of monitoring has a positive effect on knowledge creation reinforces the findings of (Said, 2004; Bretonès et al, 2007). The interpretation that can be made in this sense is that the company cannot create knowledge without the implementation of an appropriate information monitoring practice. Subsequently, the main objective of an organization's use of information monitoring is to become aware of its knowledge, both individually and collectively (Alavi and Leidner, 2001).
Hypothesis H3, which states that knowledge creation has a positive effect on prospecting behavior, is validated. This corroborates the findings of (Bagnoli and Vedovato, 2012; Hun Kim et al, 2014) which support the existence of a strong positive correlation between knowledge creation and prospective behavior. This is explained by the importance of knowledge creation and knowledge management in companies to move towards prospecting behavior.

Hypothesis H4, according to which knowledge creation has a mediating effect on the relationship between monitoring practice and prospecting behavior, is validated. This result leads us to assert that there is complementary mediation provided by knowledge creation. In fact, this result corroborates the results found

by many authors, including (Wieder and Ossimitz, 2015; Chen and Huang, 2015), Noor et al, 2021), who stipulate that monitoring practice does not directly affect prospecting behavior.
The frequency of the use of monitoring practices and the better creation of knowledge can be taken as indicators of strategic orientation towards strategic prospecting behavior.

These results should therefore be of great interest to the managers of Tunisian high-tech companies, as they provide levers for action that will enable them to adopt a strategic approach to prospecting.

6. CONCLUSION

Our research focuses on the prospective behavior of high-tech companies. It provides some answers that may help us to understand the relationship between business monitoring and prospecting behavior, via knowledge creation. In fact, the results show that high-tech companies are the most frequent users of monitoring and the most aware of the importance of knowledge creation.

This result is useful in several respects. It makes managers more aware of the importance of monitoring practices in ensuring the competitiveness of their companies. In addition, it enables managers to better organize their company's information management and knowledge creation processes, by putting in place the appropriate organizational, human, and technical measures to successfully carry out monitoring activities. In so doing, they will be able to improve their strategic orientation and the international development of their companies.

On the other hand, our research has several weaknesses that limit the overall scope of its conclusions. These include the fact that the sample used for quantitative processing cannot guarantee statistical representativeness, despite the careful attention paid to data collection methods. Our research also opens up some interesting avenues of investigation. Indeed, it would be interesting to consider supplementing our quantitative study of the mediating effect of knowledge creation in the relationship between monitoring practice and prospecting behavior, with qualitative research techniques such as interviews and/or observations. The use of these techniques will enable us to cover certain tacit aspects in our research. In addition, future research should explore the mediation of other variables such as knowledge storage, transfer, and application.

BIBLIOGRAPHIE

Améziane, F., & Steven, C. (2021). De l'intelligence économique à l'intelligence territoriale : L'information comme ressource stratégique pour le développement local au Sud comme au Nord. *Revue Tadamsa*, 1(1).

Avci, U., Madanoglu, M., & Okumus, F. (2011). Strategic orientation and performance of tourism firms: Evidence from a developing country. *Tourism Management*, 32(1), 147–157.

Bagnoli, C., & Vedovato, M. (2012). The impact of knowledge management and strategy configuration coherence on SME performance. *Journal of Management & Governance*, 18(2), 615–647.

Batac, J., & Maymo, V. (2019). Pouvoir et résistance dans le processus du renouvellement stratégique. *Management Avenir*, (2), 127–145.

Baumard, P. (1991). *Stratégie et surveillance des environnements concurrentiels*. Masson.

Baumard, P., & Dedijer, S. (2000). *Stratégie et surveillance des environnements concurrentiels* (p. 29). Masson.

Bchini, B., & Hikkerova, L. (2021). L'effet d'une stratégie de type prospecteur sur la performance commerciale dans le contexte tunisien. *Gestion 2000*, 38(6), 97–116.

Berkani, D. (2019). *Les technologies de l'information et de la communication et le changement organisationnel : Cas CASNOS Tizi-Ouzou* (Doctoral dissertation, Université Mouloud Mammeri).

Bernat, J. P. (2008). *L'intelligence économique : Co-construction et émergence d'une discipline via un réseau humain*. Hermès-Lavoisier.

Bretonès, D., & Saïd, A. (2007). La capacité d'absorption de l'information au service de la performance. Application au cas de l'intelligence économique (IE) et du management des connaissances (KM). *Universidad & Empresa*, 8(16), 11–44.

Bretonès, D., & Saïd, A. (2006, November). Intelligence économique (IE) et management des connaissances (KM) : Deux facettes complémentaires d'une même problématique. In *Colloque « En route vers Lisbonne »* (Vol. 10, pp. 7–10).

Bretonès, D., & Saïd, A. (2009). La capacité d'absorption de l'information au service de la performance. Application au cas de l'intelligence économique (IE) et du management des connaissances (KM). *Universidad & Empresa*, 8(16), 11–44.

Briciu, S., Vrîncianu, M., & Mihai, F. (2009). Towards a new approach of the economic intelligence process: Basic concepts, analysis methods and informational tools. *Theoretical and Applied Economics*, 4(4), 21.

Chen, I. M. A., Chu, K., Ratner, A., Palaniappan, K., Szeto, E., & Pati, A. (2015). IMG-ABC: A knowledge base to fuel discovery of biosynthetic gene clusters and novel secondary metabolites. *mBio*, 6(4), e00932-15.

Chereau, P., & Meschi, P. X. (2019). The performance implications of the strategy–business model fit. *Journal of Small Business and Enterprise Development*, 26(3), 441–463.

Croteau, A. M., & Bergeron, F. (2001). An information technology trilogy: Business strategy, technological deployment and organizational performance. *The Journal of Strategic Information Systems*, 10(2), 77–99.

Daoust-Gauthier, M. (2023). *Comment les mécanismes de rétablissement permettent-ils la réduction des risques dans les situations post-catastrophes dans les municipalités ?* (Doctoral dissertation, École nationale d'administration publique).

Davvetas, V., Diamantopoulos, A., Zaefarian, G., & Sichtmann, C. (2020). Ten basic questions about structural equation modeling you should know the answers to – But perhaps you don't. *Industrial Marketing Management*, 90, 252–263.

Degan, R., Alansato, A., Quenum, V., & Ahouandjinou, H. (2018). L'intelligence économique et la performance des entreprises au Bénin : Approche quantitative. *Équipe de Réalisation*, 173–209.

Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29(1), 52–73.

Donate, J. D., & Sánchez de Pablo, J. D. (2014). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 67(4), 763–774.

Durand, T. (2015). L'alchimie de la compétence. *Revue française de gestion*, 41(253), 267–295.

Durand, T., & Dameron, S. (2008). L'enseignement de la stratégie. In S. Dameron & T. Durand (Eds.), *Strategor : Toute la stratégie d'entreprise* (5e éd., pp. 623–648). Dunod.

El Louadi, M. (1998). The relationship among organization structure, information technology and information processing in small Canadian firms. *Canadian Journal of Administrative Sciences*, 15(2), 180–199.

Eloukhoufi, A., & Boukhanoufa, F. (2017). L'intelligence économique comme outil stratégique des entreprises. *La Revue Marocaine de la Recherche en Management et Marketing*, (14), 90–103.

Feiz, D., & Veyssière, L. (2007). Veille stratégique et performance de l'entreprise. *Revue Française de Gestion Industrielle*, 26(2), 61–78.

Gallais, A., & Meier, O. (2004). L'impact de la croissance externe sur la performance de l'entreprise : Une étude exploratoire des entreprises françaises. *La Revue des Sciences de Gestion*, 212(2), 85–92.

Germain, R., Claycomb, C., & Dröge, C. (2008). Supply chain variability, organizational structure, and performance: The moderating effect of demand unpredictability. *Journal of Operations Management*, 26(5), 557–570.

Gouillart, F., & Kelly, J. (1996). *Transforming the Organization*. McGraw-Hill.

Guechtouli, W. (2009). *Management des connaissances dans les communautés de pratiques : Etude de cas dans une entreprise de haute technologie*. Université Lumière-Lyon II.

Guetat, H., & Dakhlaoui, A. (2012). L'impact des TIC sur la performance des entreprises dans les pays du sud et de l'est de la Méditerranée : une approche par les fonctions de production. *Revue d'économie industrielle*, (140), 101–128.

Hadad, S. (2017). Knowledge economy: Characteristics and dimensions. *Management Dynamics in the Knowledge Economy*, 5(2), 203–225.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.

Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24(10), 997–1010.

Hou, J. J. (2008). Toward a research model of market orientation and dynamic capabilities. *Social Behavior and Personality: An International Journal*, 36(9), 1251–1268.

Huang, K. F., Lai, M. C., & Lo, H. C. (2011). Institutional development and the performance of technological innovation: Evidence from the innovation policy in Taiwan. *Research Policy*, 40(2), 308–316.

Inkinen, H. (2016). Review of empirical research on knowledge management practices and firm performance. *Journal of Knowledge Management*, 20(2), 230–257.

Ishengoma, E. K. (2021). Performance of indigenous manufacturing small and medium enterprises (SMEs) in Tanzania: Exploring the interactions of business and firm characteristics, entrepreneurship and institutions. *International Journal of Economics and Business Research*, 21(1), 23–42.

Jasimuddin, S. M., Connell, N., & Klein, J. H. (2005). Knowledge management strategy: An organizational change perspective. *Journal of Knowledge Management*, 9(2), 155–170.

Julien, P. A. (2007). *Les PME : Bilan et perspectives*. Economica.

Kandampully, J. (2002). Innovation as the core competency of a service organisation: The role of technology, knowledge and networks. *European Journal of Innovation Management*, 5(1), 18–26.

Klett, F., & Wang, Z. (2013). Supporting SMEs through university–industry collaboration: A case study of knowledge transfer in the Chinese automotive industry. *Industry and Higher Education*, 27(1), 61–67.

Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3), 383–397.

Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International.

Lall, S. (1992). Technological capabilities and industrialization. *World Development*, 20(2), 165–186.

Lannelongue, G., & Lominé, L. (2013). La performance globale des entreprises : Une question de mesure. *Revue Internationale PME*, 26(1), 65–92.

Lavén, R. A., & Hjalager, A. M. (2007). Innovation patterns in tourism destination development. *Tourism Economics*, 13(3), 569–580.

Le Moigne, J. L. (1995). *Les épistémologies constructivistes*. Presses Universitaires de France.

Leiponen, A. (2006). Managing knowledge for innovation: The case of business-to-business services. *Journal of Product Innovation Management*, 23(3), 238–258.

Levy, M., & Powell, P. (2000). Information systems strategy for small and medium sized enterprises: An organisational perspective. *The Journal of Strategic Information Systems*, 9(1), 63–84.

Liao, S. H., Fei, W. C., & Chen, C. C. (2007). Knowledge sharing, absorptive capacity, and innovation capability: An empirical study of Taiwan's knowledge-intensive industries. *Journal of Information Science*, 33(3), 340–359.

Liebowitz, J. (2000). The knowledge management handbook. *CRC Press*.

Lind, M., & Zmud, R. (1991). The influence of a convergence in understanding between technology providers and users on information technology innovativeness. *Organization Science*, 2(2), 195–217.

Liu, P. L., Chen, W. C., & Tsai, C. H. (2005). An empirical study on the correlation between the knowledge management method and new product development strategy on product performance in Taiwan's industries. *Technovation*, 25(6), 637–644.

Lopez-Nicolas, C., & Merono-Cerdan, A. L. (2011). Strategic knowledge management, innovation and performance. *International Journal of Information Management*, 31(6), 502–509.

Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22(6–7), 545–564.

Lowe, S., & Marriott, H. (2006). Enterprise and SMEs in the knowledge economy. In M. Khosrow-Pour (Ed.), *Encyclopedia of E-commerce, E-government and Mobile Commerce* (pp. 397–402). IGI Global.

Madhavan, R., & Grover, R. (1998). From embedded knowledge to embodied knowledge: New product development as knowledge management. *Journal of Marketing*, 62(4), 1–12.

Malhotra, Y. (2005). Integrating knowledge management technologies in organizational business processes: Getting real time enterprises to deliver real business performance. *Journal of Knowledge Management*, 9(1), 7–28.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71–87.

Marouf, L. (2016). The role of knowledge sharing culture in business performance. *VINE Journal of Information and Knowledge Management Systems*, 46(2), 154–174.

Massingham, P. (2014). An evaluation of knowledge management tools: Part 1 – managing knowledge resources. *Journal of Knowledge Management*, 18(6), 1075–1100.

Mavondo, F. T., Chimhanzi, J., & Stewart, J. (2005). Learning orientation and market orientation: Relationship with innovation, human resource practices and performance. *European Journal of Marketing*, 39(11/12), 1235–1263.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734.

McEvily, S. K., & Chakravarthy, B. (2002). The persistence of knowledge-based advantage: An empirical test for product performance and technological knowledge. *Strategic Management Journal*, 23(4), 285–305.

Miles, R. E., & Snow, C. C. (1978). *Organizational strategy, structure, and process*. McGraw-Hill.

Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1–25.

Mintzberg, H. (1987). The strategy concept I: Five Ps for strategy. *California Management Review*, 30(1), 11–24.

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press.

O'Dell, C., & Grayson, C. J. (1998). If only we knew what we know: Identification and transfer of internal best practices. *California Management Review*, 40(3), 154–174.

Penrose, E. T. (1959). *The theory of the growth of the firm*. Oxford University Press.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179–191.

Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79–91.

Probst, G., Raub, S., & Romhardt, K. (2000). *Managing knowledge: Building blocks for success*. John Wiley & Sons.

Ravasi, D., & Schultz, M. (2006). Responding to organizational identity threats: Exploring the role of organizational culture. *Academy of Management Journal*, 49(3), 433–458.

Ray, G., Barney, J. B., & Muhanna, W. A. (2004). Capabilities, business processes, and competitive advantage: Choosing the dependent variable in empirical tests of the resource-based view. *Strategic Management Journal*, 25(1), 23–37.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. Doubleday.

Spender, J. C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, 17(S2), 45–62.

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.

Tsoukas, H. (1996). The firm as a distributed knowledge system: A constructionist approach. *Strategic Management Journal*, 17(S2), 11–25.

Tywoniak, S. A., & Groupe HEC. (1998). Le modèle des ressources et des compétences : Un nouveau paradigme pour le management stratégique. In H. Laroche & J.-P. Nioche (Eds.), *Repenser la stratégie – Fondements et perspectives* (pp. 166–204). Vuibert.

Venzin, M., Von Krogh, G., & Roos, J. (1998). Future research into knowledge management. In G. Von Krogh, J. Roos, & D. Kleine (Eds.), *Knowing in firms: Understanding, managing and measuring knowledge* (pp. 26–66). SAGE Publications.

Wallez, N. (2010). Le knowledge management : Un partage de connaissances et d'expérience. *Cahiers de la documentation – Bladen voor documentatie*, 1.

Wieder, B., & Ossimitz, M. L. (2015). The impact of business intelligence on the quality of decision making – A mediation model. *Procedia Computer Science*, 64, 1163–1171.

Zahra, S. A., & Pearce, J. A. (1990). Research evidence on the Miles–Snow typology. *Journal of Management*, 16(4), 751–768.

Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206.