The contribution of business intelligence to risk management in exporting SMEs: a literature review

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Abstract— The objective of this article is to provide answers to the contribution of business intelligence to risk management in exporting SMEs. In this context, we seek, on the basis of a review of the literature, to conceptualize a theoretical model highlighting the active role of strategic intelligence in export risk management and the dimensions of its success in exporting SMEs. Methodologically, we are based on our benchmark of perceived risks in the context of exporting SMEs, dating from 2001 to 2017, to delineate our conceptual framework by identifying dimensions that can measure our constructs for the purpose of optimizing the management of these risks.

The results of this research allowed us to conceptualize a hypothetical model by highlighting the measurement dimensions of each variable likely to determine the contributions of the strategic watch to risk management. These dimensions are grouped into six poles: export risks (perceived risk, proven risk, potential risk and uncertainty), the attributes of the business intelligence (the standby frequency and the standby mode), Information skills (information selection skills and interpersonal skills), the wealth of sources of information (reliability, quality and quantity), the wealth of information (utility, quality and selectivity) and risk management.

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Index Terms— Informational behaviors, Exporting SME, Risks to the export, Strategic watch.

1 INTRODUCTION

The export activity is one of the means favored by the SME during its international expansion since it involves less risk and requires fewer resources [1]. It is one of the most important development paths for SMEs and is an opportunity for them to face the narrowness of their local market and expand their activities into new markets, but also a way to optimize the allocation of their often limited resources.

However, opening to other markets is not immune to risks [2], especially in the commitment of resources [3]. As a result, many exporting companies fail in their international commitment, and many of them will completely abandon their export activities.

The perception of export risks is one of the main factors influencing the decision to start, maintain and increase the export commitment [4]. The inhibitory impact of these risks is even more felt in smaller companies. Risk management is one of the top priorities for SMEs operating in a turbulent environment and in particular on the international scene, this is why the study of SMEs is of particular importance [5].

To protect itself, in this new international context, against the inherent risks, the SME must develop tools allowing it access to anticipatory information. Thus, the action of monitoring its environment has become essential for the leaders.

From this context follows the following problematic: how can business intelligence contribute to risk management in exporting SMEs?

To answer this problem, we will delimit in the first section our conceptual framework constituting the background of our frame of reference; the second section will be devoted to the formulation of the working hypotheses which will constitute an architectural model of our empirical observation.

2 CONCEPTUAL FRAME

2.1 Risk: Dimensions and Classification in the context of exporting SMEs

Risk is a well-identified hazard associated with the occurrence of an event or series of events that is perfectly descriptible, we do not know if they will occur but we know they are likely to occur [6]. It is a situation whose occurrence is uncertain and whose realization affects the objectives of the company that is undergoing it. [7].

Several approaches are used in the literature to delineate the concept of risk. An approach distinguishes « proven risk » from « potential risk » [8]. The proven risk is that for which solid statistical distributions are available to predict the probability of occurrence of an event and therefore to assess its cost. [9]. Conversely, the potential risk is inherently more difficult to identify [10], [11]. In this potential risk, the agent can not define the list of possible consequences of an event, it is the risk qualified as hypothetical that insurers are generally reluctant to take charge of. Strategic risks are part of this category [12].

Another approach dissociates risks according to whether they are « objective » or « perceived ». The notion of perceived risk refers to a « subjective » approach that is that of individuals. They build their own idea of the risk of the position occupied in society and their role in creating hazards and exposure to risks [9].

Taking into account the subjective dimension of the risk makes its evaluation rather complicated but it is particularly interesting insofar as it makes it possible to highlight the role of the cognitive biases and the representations in the apprehension and the assessment of the dangers by the economical actors. In this context, the existence or not of the risk is a ques-

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tion of perception.

Risk perception is therefore linked to individual distinctives, especially to one's prejudices and to the sensation of loss or potential gain in a situation [13], [14].

Y. Pesqueux [15] is based on the implicit and yet debatable postulate of the inevitably harmful consequences of the occurrence of risk. According to the author, there is also a substitution of the concept of risk for uncertainty. The latter is defined as « *a risk situation in which we do not know and can not reasonably estimate the probability of occurrence of the events, results and consequences* » [16], p. [158].

It appeared that the border between risk and uncertainty was much less clear cut [17]. According to the author, the difficulties relating to the characterization of environmental conditions led to the conclusion that uncertain situations were much more the rule than the situations of risk. [18], [3] far from that, they consider that the risks are related to uncertainty.

Several studies in information management use indifferently the notion of risk and uncertainty, and that the same mechanism could manage them both [19]. The risk appetite of business executives may be only a reflection of a better ability to manage them by setting up certain specific mechanisms [19].

The notion of risk is delimited by four essential dimensions that are explicitly or implicitly found in the majority of definitions: perceived risk, proven risk, potential risk and uncertainty.

The risk classification used in the academic literature is that proposed by Mssassi S. and Assabane I. [20] that distinguish 11 risks perceived by exporting SMEs in different contexts when they engage internationally. This study, which seems to us exhaustive, covers thirteen studies, ranging from 2001 to 2017. Studies by these authors show that 24 constraints are significant, of which 11 are significantly related to lack of information for SME exporters. Other risks are risks due to lack of resources, means and manageable risks such as currency risks.

After analysis and diagnosis, the authors came to the conclusion that these risks are linked to the lack of information on several environmental sectors. This is a lack of information on the market, customers, competitors and politico-regulatory and cultural.

These eleven identified risks, grouping together several sub-dimensions, are linked to the lack of information on the market, customers, competitors, politico-regulatory and cultural. The following points will highlight the contribution of business intelligence to the management of these risks.

2.2 Strategic Watch Concept

The risks and uncertainty of constant change in the environment is one of the reasons environmental awareness is a prerequisite for the protection and development of companies, especially in an international environment. Indeed, the proponents of the information approach advocate the need to listen to the environment by targeting the sources of change, sources of information, designed as a source of risk to hold strategic information that could reduce risks and uncertainty.

Strategic watch meets these objectives. It is conceived as « *a*

collective, proactive and ongoing process by which a group of individuals track and use relevant information about their external environment and changes that may occur in order to reduce risks and uncertainty in general. » [21]

TABLE 1 SUMMARY OF RISKS RELATED TO LACK OF INFORMATION IN EXPORTING SMES

The risks	The dimensions
Risks related to	Insufficient information to locate / ana-
lack of market	lyze Markets
information	Lack of information on product oppor-
	tunities in external markets
Risks related to	Risk of losing money selling abroad
lack of customer	
information	
Risks related to	Strong competition in foreign markets
lack of information	Difficulty to reach prices of competitors
on competitors	abroad
	Difficulty obtaining adequate represen-
	tation abroad
Risks related to the	Political risk in target countries
lack of politico-	Bureaucratic requirement of the country
regulatory infor-	of origin
mation	Restrictive foreign regulations
Risks related to	Cultural differences with the countries
lack of cultural	targeted by the export
information	Differences in the usage habits of the
	product by foreign customers

Source : Mssassi S. et Assabane I., [20]

Different definitions are suggested by the authors by which several purposes are highlighted, mainly: reduce uncertainty in decision-making [22]; [23], [24]; reduce the risks associated with uncertainty [25].

However, there is unanimity regarding the organizational model for measuring the effectiveness of the organization of business intelligence within the company, mainly because of the informal nature of the business intelligence process within the company [26]. In the face of these difficulties of measurement, several authors have advocated and adopted scales of measurement according to the contexts and objects of the studies.

Daft, Sormunen and Parks [27] and Beal [28] advocated measuring the use of business intelligence using the « the frequency of watch ». Ramangalahy [29], on the other hand, used the indicator of « sources of information used ». Anis SLIM [30] used indicators such as « Watch frequency », « sources of information used », « the types of watch » practiced, « the number of people involved in the watch ».

In a recent study, Hamoudane and Derkaoui [31] adopted indicators such as « the mode of watch » (sources of information), « Watch frequency », « the interest of watch » and « the number of hours spent watching ». The indicator « mode of watch » adopted by [31] refer to sources of information (formal or informal) that seem similar to the indicator used by [30] and Ramangalahy (sources of information used).

In the context of SME exporters, several studies confirm the convergence of these measurement indicators with the success of the company internationally. SLIM [30] has come to the conclusion that the frequency of business intelligence practices in exporting SMEs influences their export performance. Ramangalahy [29] and Julien P.-A.and Ramangalahy [32] have confirmed significant causal relationships between the use of information sources and the competitiveness of SME exporters.

It has thus emerged that «Watch frequency » and « the mode of watch » are decisive indicators for the success of the international SME exporting as part of the implementation of a system of business intelligence. Watch frequency refers to the frequency with which decision makers monitor their environment, while « the mode of watch » refers to formal and informal sources and the reliability of each of these sources is conditioned by its wealth of information on the perceived risks and uncertainty in the various environmental actors (customers, competitors, government, ...). The exporting SME must thus target the actors (sources) carrying risks and focus on selective information about the risks to be managed.

2.3 Informational Behaviors

The study of access to information devices poses a terminological and conceptual problem [33]. Researchers interested in these objects of study use a terminology that is both diverse and polysemous. We thus note that terms such as « use », « research », « need », « practice » are used in reference to different theoretical frameworks and correspond to various realities.

Different models of informational « behaviors » integrates both the work on information retrieval strategies and tactics [34].

We will then talk about information behaviors to describe how the set of sources, tools, cognitive skills are actually mobilized in the different situations of production, research, information processing.

A great deal of work has thus been developed since the 1980s to clarify access to information practices, which encompasses both the need and the use of information. This current research aims to better define the processes of access to formal sources [35], the affective dimension of access to information [36], the professional context [37], [38] the description of the situations [39] and finally the use of information [40], [41].

These works often neglect to analyze the impact of the information sought. Nevertheless, [40] proposed a model to identify the different categories of information use. In particular, he suggests that the context of the use of information is a determining factor in understanding the diversity of information behavior. It therefore proposes a model called *Information Use Environment* which defines this environment as a set of elements that influence the flow of information between individuals or groups of individuals and, as a result, are criteria for judging the value of information in a specific context. Taylor [40] identifies three main types of information use environments: the geographical environment (the country), the organizational environment (the company) and finally the social / intellectual / cultural environment.

2.3.1 The concept of wealth of information sources

The literature dealing with the characteristics of an information

source has identified three information source dimensions: reliability, quantity, and quality. [42], [43], [44], [31].

Zmud [42] identified the following three dimensions: the quantity that is measured by the « sufficient and complete » attributes, the reliability that is measured by the degree of precision and accuracy characterizing an information, and the quality of its presentation form measured by readability and clarity.

Reliability is defined as: « *the confidence a user has over consistency, the quality performance of a system, and its results over time* » [43], p [94]. The author suggests the notion of « reliability » as one of the main dimensions that give value to a source.

Reliable sources of information must be able to maintain an acceptable level of accuracy over time [45], [43]. The credibility criterion is also proposed to judge the reliability of a source, depending on the quality and accuracy of the information it provides [46]. Reliability is thus a determining dimension of information sources and relies on the consistency of information over time.

However, the criterion of richness of the sources of information refers to the capacity of these sources to transmit a maximum of information to understand the situation or the problem to be solved [47]. The richest sources of information are those of the highest quality and are the informal sources; they would be, in decreasing order, personal communications, telephone communications and written communications of a personal nature; in other words, human and personal sources. However, the less rich sources of information are of less quality and are the formal sources, they would be the formal written communications, therefore documentary and impersonal.

However, the level of perception of the quality of information sources may be increased by their accessibility, although opinions are divided on this subject. Some argue that the accessibility of sources outweighs their quality because a more accessible source of information will tend to be used even if its quality is not high; others argue that quality is more important than accessibility; still others see that the accessibility of the sources could be an element not to be neglected, especially in relation with their credibility, their reliability and their objectivity [46], [48]. Fidel & Green [49] go a long way in finding that the concept of accessibility encompasses both the dimensions of availability and usability of information.

Alex Fernando, Caron-Fasan and Humbert LESCA [44] also use the criterion of « quantity » and « reliability » of information source to avoid information overload.

According to a recent study conducted by [31], which sought to study the evaluation criteria of an information source, they identified reliability as a quality dimension of a source of information.

In the context of exporting SMEs, various studies point out that exporting SMEs are looking for information related to their needs. It turns out that the range of information perceived as the most important relates primarily to adaptation constraints (risks), even seeking to anticipate the changes that occur. The quality of this information is related to the reliability of the sources from which they are removed.

In a study of the business intelligence practices of Canadi-

an SME exporters, [50] tested the hypothesis that the exporting SME uses all the more sources of information that its manager is sensitive to information. The results obtained indicate that the exporting SMEs observed use an average of nine of the thirteen sources of information retained. The criterion of "quantity" of the sources is thus privileged.

In another study conducted in Colombia, as part of a business intelligence activity, [44] noted that, too often, managers mobilize on the Internet only information from press sites or business sites. The authors question this practice as this intelligence is inherently unreliable. In order to mitigate this weakness, the authors recommend the mobilization of known and informal sources as collaborators in the field. It follows that reliability and relevance are criteria for choosing a source of information.

The above contributions allow us to deduce that the success of the strategic watch is conditioned by the accessibility to sources of quantity and quality information. The wealth of business export information sources varies by source type.

For our part, we hold the three dimensions cited by the authors: reliability, quantity and quality. The wealth of information could retain both dimensions (quantity and quality). So, our variable is *«Wealth in reliable sources of information »*

2.3.2 The concept of wealth of information:

The information companies need is subject to different attributes in the literature. The authors qualify them indifferently either the quality, the wealth, the value or the usefulness of the information. A user will tend to consider information to be valuable (or useful) in that it conveys relevant clues (signals or messages) related to the problems of its environment [51].

Different criteria for quality of information are found in management and information science writings. The criterion of relevance, in the first place, is determined by the usefulness of the information when solving a problem, its accuracy, its conformity to the facts and its actuality [52].

Information activity is an element of organizational rituals ensuring the sustainability of attitudes considered effective and socially adequate in decision-making [51]. In this context, the possession and control of information and its sources is the foundation of the competence and trust.

Nonaka [53] argues that semantic design is concerned with the quality of information because it brings a new understanding; this new understanding, specific to the context of each organization, provides a new basis for interpreting risks, thus making perceptible (understandable) facts that were previously unperceived (not understood). It is to this semantic conception that what [54] calls information of anticipation, and [55] rich information.

In our conceptualization, we relate the use of the notion of information to the semantic design for the rest of this work because of its relevance to the problematic. Also, for an information to be a signal, it must consist of a structured set of data on a specific risk.

To know a risk and to be able to anticipate it need to be armed with information and sources of information because the information contributes to the improvement of the knowledge as the proponents of the information approach of the organizational learning support it [56], [53]; it follows that knowledge derives from a certain transformation of information.

Thus, a knowledge of a specific risk comes from selective information since not all information is generating a signal to this risk, and therefore allow to be considered anticipatory information, as called by Lesca.

The selection of information by the strategic watch is perceived as an important step but difficult [57], [58], [59]. This requires, at first sight, reliability and credibility of sources. Lesca [58] states that the reliability or credibility of information depends on the reliability of the source.

The term selective information retrieval is sometimes used to refer to the processing of information sets in a parallel way, with disjoint sources [59]. Information selectivity techniques are used to present more favorable information. Companies that engage in information selection are better able to make their information unclear to ensure credibility [60].

For fear of being drowned with information making it difficult to identify the subject (risk), [61] were able to show, through a series of four experiments, that the subject was much more selective when subjected to restrictions on the amount of selectable information.

In this context, according to [62], the effects of computerization can not be seriously addressed without being reconceptualized, in its relational and symbolic dimensions, the power related to information. In fact, a specificity of information systems consists precisely in their capacity to induce powerknowledge relations and to intervene on the subjectivity of users by constituting it through selective information.

For our part, knowing several risks threatening exporting SMEs during their international engagement and being able to anticipate them requires « Rich selective information ». This selectivity is the attribute of the strategic watch.

We will therefore use the notion of *«Richness in selective in-formation »* whose dimensions are *«* quality *», «* quantity *»* and *«* selectivity *», to signify a structured set of data providing indications of the nature or evolution of a fact, of a given phenomenon likely to be considered as a risk for the exporting SME.*

2.3.3 Informational skills

Definitions of competence by researchers can be categorized into two broad groups: one focusing on the cognitive dimension, the other on the social dimension. In these definitions, an important place is given to the notion of performance or positive result of the competence. [64] defines informational competence as the set of skills required to recognize its information needs and to be able to locate, evaluate and use this information effectively.

The literature on international management, dealing with the internationalization of companies, is the subject of indepth analysis and information processing [64]. The ability of business leaders to gather and analyze useful information on target countries is considered one of the decisive factors of success [65]. Etienne J. Rumo, [64] speaks of the competence needed for the informational development of target markets. Companies can not control all sources and have all the information needed for strategic decision-making. The network gives the company the ability to mobilize its relational capital to find relevant information [66]. The relationship is defined as the ability of social relations to convey information to reduce uncertainty and promote trust between actors. Strong links bring a lot of information. Relational skills shorten the geographical distance to sources of information and facilitate access to these sources of information made available. This is confirmed by a study of Tunisian SME exporters, conducted by [30]; according to the author, the leaders prefer the geographical proximity of their sources of information.

In a study of a sample of 129 firms, [67] confirmed that the ability to possess information is a contingency factor of the impact of trust-based governance relationships.

2.4 The concept of risk management

The risk management of the company is defined as « *a process implemented by all employees of the organization. It is taken into account in the development of the strategy as well as in all the activities of the organization. It is designed to identify potential events that may affect the organization and manage risks within the limits of its risk appetite. It aims to provide reasonable assurance as to the achievement of the objectives of the organization » [68], p. [5].*

In the context of the general theory of risk, [69] recalls that risk is a difficult notion to define. Clinging to a general theory of risk should allow the company to bring methodology to the study of risks and better manage everyday problems difficult to solve: it is necessary that the managers undertake intellectual investments on the known and unknown risks by setting up a system of observation and decryption of the signals to understand the genesis of these risks that can emerge, and to allow their anticipation. Each business line must be able to observe, evaluate and analyze risk sets to account for their effects.

In this context, [70] determines the risk management process in three phases: identification, estimation and control of risks. Y. Pesqueux [71] is the same as [70]; According to the author, risk management is a process that is applied throughout a program and includes identification, estimation and risk management activities.

It is therefore a rigorous approach to the assessment and identification of all risks that threaten the achievement of an organization's strategic objectives [72]. It allows « *identify and address potential risks and opportunities that may affect the creation or preservation of value. Risk management is therefore at the heart of the strategic decision process* » [73], p. [118]. Risk management helps to assess the risks that a company may face and deal with them. This process is based on an anticipatory stance.

Holding a sufficient measurement and anticipation system will enable the company to rely on it for comprehensive risk management.

The value added expected by companies comes first from the flow of information generated by the risk management system: it is crucial information for the smooth running of the company and the management of the performance.

In sum, of these definitions, follows the acuity of the management of the risks of the company; it helps decision-making by identifying areas with major risks and suggesting action plans to address them. Thus, the process of risk management starts with the identification and classification of risks. Next, risk management would be the ultimate phase of elimination, mitigation or risk reduction.

At the end of this section which presents the different concepts and key variables of our theoretical construct, we present this summary table exposing the different dimensions that have been mobilized to operationalize our variables in

TABLE 2		
S YNTHÈSIS C	OF THE DIMENSIONS (OF CONCEPTS
Comercia	Dimensions	Arthonyo

Concepts	Dimensions	Authors
	The poten-	[10] , [12]
The risks in	tial risk of a	
exporting	market	
SMEs	Perceived	[9], [13], [14]
	risk of a market	
	Perceived	[16], [17]
	uncertainty of a	
	market	
	Watch fre-	[30], [47],
	quency	[28], [31]
Watch stra-	Accessibility	[30], [27],
tegic	of information	[31], [29]
	sources	
	Social skills	[66], [30],
Informatio-		[67]
nal skills	Information	[65], [64]
	processing	
	skills	
	Reliability of	[43], [44],
	information	[31], [42], [51],
	sources	[46], [48]
The wealth	The quantity	[42], [44]
of information	of information	
sources	sources	
	The quality	[42], [43],
	of information	[31]
	sources	
	The	[51], [52]
	usefulness of	
The wealth	information	
of information	Quality of	[53]
	information	
	Selectivity of	[60], [61],
	information	[62]

previous empirical studies.

3 RESEARCH HYPOTHESES

In the international context, several studies have emphasized the need for an externally reliable system of strategic intelligence. Business, competitive and technological watches are generally a major factor in the success of international companies.

They identify international opportunities and threats that constitute the initial step in formulating an internationaliza-

TABLE 3
SYNTHÈSIS CORRELATION BETWEEN EXPORT RISKS AND STRA-
TEGIC WATCH

Authors	Contributions
[74], p.[44]	« In the face of unpredictable risks, vigi-
	lance and anticipation are necessary ».
[75]	Business intelligence is export-
	friendly because it provides access
	and circulation of the information
	needed for efficient production, to
	reduce the risks associated with dis-
	tance and cultural differences.
[76], p.[245]	Strategic Watch identifies potential
	locations and potential international
	activities .
[50], [77]	Some studies show the significant
	and positive effect between the in-
	tensity of business intelligence activi-
	ties and the success of exporting to
	the riskiest areas.
1	

tion strategy.

3.1 Risks in exporting SMEs and business intelligence

The authors affirm a significant relationship between the risks perceived by the exporting SME and the strategic watch.

H1: The risks perceived by the exporting SME, in all foreign markets, correlate positively with the implementation of the strategic watch.

3.2 Strategic watch and information behaviors

The notions of « richness of information » and « the wealth of information sources » are developed by [47] in the theory on the wealth of information and sources of information.

In business intelligence activities, three dimensions emerge repeatedly from different research [78]; [79], [50]: sources of information, areas of information sought and the frequency of retrieval of information.

In this perspective, the information behavior of exporting SMEs is generally focused on finding information (empirically measured by the relative importance of different types of information), the use of information sources (measured by the frequency of use of different sources) and the extent of export skills [80].

3.2.1 Strategic Watch and the wealth of reliable sources of information

The thesis supported by the authors suggests that an organiza-

TABLE 4 SYNTHESIS THE CORRELATION BETWEEN STRATEGIC WATCH AND WEALTH IN RELIABLE SOURCES OF INFORMATION

Authors	Contributions
[81], [82],	The proponents of the entrepreneuri-
[83],	al theory states that an organization is
	all the better informed that it shows a
	state of awakening with regard to the
	changes in its environment.
[84]	A study of the authors reports that
	entrepreneurs, to ensure their environ-
	ment, carry out nonverbal methods of
	information retrieval. They engage in
	extensive reading, introspection exercis-
	es, and use non-traditional sources of
	information (patent banks, meetings
	during trips abroad).
[85]	These sources correspond to weak
	networks, which allow access to rich
	signals .

tion is all the better informed that it practices a systematic and targeted monitoring of the sources of change.

The authors affirm a significant relationship between stra-TABLE 5

SYNTHESIS THE CORRELATION BETWEEN THE STRATEGIC WATCH AND THE WEALTH IN SELECTIVE INFORMATION

Authors	Contributions
	In the framework of the theory of un-
[86]	certainty, the thesis supported by the
	author suggests that an organization is
	better informed if it has the amount of
	information it needs.
[87],	The contributions of the theory of
[88],	contingency make it possible to say that
[89]	an organization that monitors its envi-
	ronment is all the better informed inso-
	far as it has information of sufficient
	quality or that is essential for its envi-
	ronment. The wealth of information
	anchors a wealth of quantity and quali-
	ty.
[90],	The authors whose contributions re-
[91],	late to the information process have in
[92]	common that they generally raise the
	importance of strategic intelligence
	(scanning) and the organizational
	mechanisms necessary for its effective-
	ness: mode, frequency, continuity

tegic intelligence and the wealth of sources of information.

3.2.2 Strategic Intelligence and the wealth of selective information

The position advocated by these authors suggests that an organization is well informed that it has or has access to rich information about its environment.

The authors affirm a significant relationship between business intelligence and the wealth of information.

The above work suggests that an organization is better informed that it is proactively monitoring its environment.

In sum, the contributions of the theory of contingency make it possible to say that an organization that monitors its environment is all the better informed insofar as it has information

TABLE 6 SUMMURY OF THE MODERATE ROLE OF INFORMATION SKILLS

Authors	Contributions
[93]	The capacity of a company to ab- sorb information in a given field is all the greater because it possesses rich skills related to this field.
[47], [93]	The cognitive and managerial per- spective revealed by the authors' work makes it possible to say that a well-informed organization has the capacity to identify, process and ex- ploit new information of value.

of sufficient quality or that is essential for its environment. The wealth of information anchors a wealth of quantity and quality.

3.2.3 The moderating role of informational skills

All in all, based on the analysis of these authors' work, we stipulate that an organization has access to rich information and sources of information in a given area insofar as it effectively practices business intelligence. The effectiveness of this practice is conditioned by the rich skills of decision-makers.

Hypothesis 2: The exporting SME is rich in reliable sources of information that it practices the strategic watch, provided to be equipped with informational skills.

Hypothesis 3: The exporting SME is rich in selective information that it practices the strategic watch, provided to be endowed with informational skills.

3.3 The wealth of selective information and risk management

Referring to our literature review, we can see that several contributions have been retained to highlight the information provided to the exporting SME by setting up a system of strategic intelligence. In this sense, we can predict that the information used by business intelligence can reduce risks in exporting SMEs by meeting the information needs of different environmental dimensions. The authors thus affirm a significant relationship between the wealth of information and risk management.

In relation to the wealth of information and its dimensions

TABLE 7 SYNTHÈSIS CORRELATION BETWEEN INFORMATION WEALTH AND RISK MANAGEMENT

Authors	Contributions
[94], [95] [96], [97]	Proponents of the entrepre- neurial approach give the entre- preneur the direction of risk tak- ing. An Exploratory Study of In- formation Behavior in Exporting SMEs suggests that the entrepre- neur has a tendency to take risks as he has information about the
[72], [99], [99]	international environment. Enterprise Risk Management Policy Requires Company to Have Relevant Information. The infor- mation provided by business intel- ligence tailored to the needs of the organization allows it to identify, assess and respond to risks. Risk, action or decision evaluation re- quires the production of a wealth of information.
[100], [101], [102], [74], [103]	The wealth of information stimulates the accumulation of knowledge in foreign markets. This wealth leads to manage the political, economic or financial risk and thus to cover the socio- cultural particularity while im- proving the position with regard to the competitors and by making it possible to detect opportunities for other business activities.

that converge with the risks identified in exporting SMEs, we put forward the following hypothesis:

Hypothesis 4: The exporting SME is less exposed to the risks it has (or has access to) rich information.

4 CONCLUSION

Theoretical exploration allowed us to highlight the importance of the information behaviors, resulting from the strategic watch, in exporting SMEs. Indeed, setting up a business intelligence unit for exporting SMEs appears to be an effective support for development in foreign markets. It is thus recommended by its aims, noted in the literature, for any company that is dynamic in a turbulent environment to minimize perceived uncertainties and anticipate the risks that arise from it. This allows it to arm itself with rich strategic information and sources of relevant information on risk factors.

However, the success of SME export business intelligence is conditioned by its ability to absorb information. This capacity brings together several dimensions, the most important of which are relational skills, those related to information processing and international skills (languages and business practices).

The next steps in our research will be to operationalize this variable in the Moroccan context, using a hybrid exploratory qualitative approach.

SCIENTIFIC COMMITTEE

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