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Managing risk and knowledge in the internationalisation process

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Abstract:

The internationalisation process in a company embodies a series of projects that are performed in different geographical regions. In some cases, especially in SMEs, companies are not capable of predicting the risks that will be faced during the process and they do not have suitable tools to manage the knowledge acquired in previous internationalisation experiences. Therefore, they fail to turn internationalisation into a sustainable competitive advantage. This paper reports the conclusions of a study based on both a bibliographic research and a comprehensive study of a group of industrial companies. This study includes the analysis of 37 internal reports about internationalisation experiences and the carrying out of semi-structured interviews with managers responsible for international operations. We have identified the main factors (risks) that prevent successful internationalisation processes and we have proposed a taxonomy of them. Furthermore, we have proposed a general framework (model) which provides a common perspective for all internationalisation projects, bringing coherence, and also a certain level of systematisation, to the decisions made in regards to different internationalisation projects. The model provides a systemic vision of the whole internationalisation process and we believe that companies can develop efficient learning systems based on this framework. It would give them differentiation and, therefore, help them to turn internationalisation into a sustainable competitive advantage.

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JEL Codes: G32, M10

1. Introduction

Nowadays, the market pushes organisations in different ways to take part in internationalisation. The scope of these efforts can be diverse; sometimes companies choose to internationalise part of their production, or certain services, or one or several processes such as supply or sales. Choosing the process or service to be internationalised is very important as it determines if an internationalisation project succeeds or fails. Several authors, such as Gottfredeson et. al. (2005) and Aron and Singh (2005), have studied different ways to carry out internationalisation processes and have given suggestions as how to best make this decision. In spite of established recommendations, the process of internationalisation is long and difficult. In addition, many experts share the opinion that costs are high and expectations about schedules and costs often go unfulfilled. Companies most impacted by these cost increases are small and medium-sized enterprises (SMEs). An SME is defined as a company which employs less than 500 people (Deresky, 2000).

With the aim of bringing to light the difficulties that it implies, many specialists have analysed cases of internationalisation, proposed methodologies to approach these kinds of projects and suggested the appropriate organisational structure that companies should have. Aron and Singh (2005) offer guidelines that can serve as a reference. Nevertheless, a study aimed to construct the taxonomy of risks in internationalisation projects such as the ones available for projects in the fields of purchasing (Leopoulos & Kirytopoulos, 2004), software development (Boehm, 1991) and product development (Keizer et. al., 2005) has yet to be developed.

The taxonomy of risks provides a consistent framework for planning and exposing diverse issues inherent in projects. This study proposes a taxonomy of risks in internationalisation projects and, furthermore, it proposes a general framework (model) which permits a systemic vision of the whole internationalisation process.

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The paper is structured as follows: Section 2 presents the theoretical background that has supported this research. The methodology followed and the results obtained are explained in Sections 3 and 4, respectively. Next, Section 5 describes the model proposed in this paper to support internationalisation projects. A discussion of this model and some implications for practice are presented in Section 6. Finally, conclusions from the study are presented in Section 7.

2. Theoretical background

Since the 80's, American, European and Japanese companies have internationalised their operations in different ways. During the 80's and the 90's, these companies accomplished this process by exporting their production to countries with cheap labour.

According to a survey conducted by Bain of SMEs, 82% of companies located in Europe, Asia and North America maintain outsourcing contracts of some kind, and 51% have suppliers abroad. However, about almost one-half of the outsourcing projects do not fulfil their expectations: only 10% are pleased with cost savings and just 6% are highly satisfied with the outsourcing contracts signed abroad (Gottfredson et. al., 2005).

Why do companies internationalise?

The following factors, when interconnected, have led to globalisation in economics: intensification of international business relations, growth of multinational corporations, internationalisation of markets, introduction of new technologies and an increase in the mobility of people (Barnes, 2008).

Companies decide to start internationalisation processes due to different internal reasons, such as:

- to access new markets, following vital clients or compensating for crisis in internal markets,
- to reduce risk through diversification in different countries,
- to balance temporary losses in some regions with earnings in others,

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- to reduce costs in activities such as production, R&D and distribution and purchasing, as a result of economies of scale,
- to obtain greater profitability of huge investments,
- to compensate for shorter product life cycles by exporting products at a higher scale, taking advantage of the relative homogenisation of markets,
- to acquire prestige and to continue growing worldwide and gaining competitiveness,
- to increase sales in markets with tough barriers of entry
- and certainly, to reduce the costs of production by moving selected operations to countries where labour is cheaper (Thompson, et. al. 2005; Deresky, 2000; Yip, 2003, Barlet, 2002)

Is internationalisation always a sustainable competitive advantage for SMEs?

The majority of companies worldwide (98%) are SMEs. These companies play an essential role in their national economy by generating employment, developing new services and products, and taking part in international transactions, such as exportation. These organisations are immersed in globalisation processes, as they must deal with competitive foreign products. Therefore, they must find accessible ways to approach internationalisation projects. In general, due to limited resources, SMEs start internationalisation projects without suitable tools that allow them to properly manage these kinds of projects. They are rarely capable of predicting the risks that will be faced during the process and they do not have suitable tools to manage the knowledge acquired from previous internationalisation experiences.

Different methods of internationalisation can result in savings of up to 70% on production costs (Farell, 2004). However, this percentage is not always reached as many problems tend to arise throughout internationalisation processes. Furthermore, if these processes are mismanaged, they could considerably increase the cost of the project and even lead to its failure. Systematic risk management could reduce project costs (Project Management Institute PMI, 2001). Furthermore,

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risk management in an individual internationalisation project constitutes a valuable source of knowledge that can be used, not only in future phases of that internationalisation process, but also in other internationalisation projects within the company.

It is clear that when a company successfully carries out internationalisation projects, this experience can be turned into a competitive advantage against competitors, an advantage that would be difficult to duplicate or imitate by other companies and might last long enough to establish a favourable position in the market (Porter, 1985).

The internationalisation process in a company embodies a series of projects that are performed in different geographical regions. The main resource that an organisation has to turn internationalisation into a sustainable competitive advantage is the efficient creation of knowledge (Drucker, 1993; Nonaka, 1991) - as consequence of an effective organisational learning system developed within the company.

This knowledge can be generated by processing the information and experiences acquired in previous projects (Huber, 1996). Nevertheless, it is not enough to create guidelines about how to best acquire knowledge related to internationalisation or procedures to analyse experiences from previous projects, it is also necessary to make all this information useful.

Organisations have structures and formal and informal processes to acquire, distribute, and apply knowledge. However, we should not forget that values and habits are the key factors that determine when and how the learning process happens (Nonaka, 1994). For this reason, in order to ensure that the information is useful, it is necessary to generate models and standards of behaviour, to make tacit organisational knowledge explicit and to facilitate the access to this information for all of its members (Grant 1991). In addition, it is essential to develop a set of values such as commitment to learning, being open-minded and having a shared vision of the company (Sinkula et al., 1997; Baker & Sinkula, 1999). If an organisation exhibits these values, one can be sure that those within it will strive to identify the causes and effects of specific actions and to question long-term paradigms such as current mental models, routines, and beliefs that have been held for a long period. It also implies that there is a shared vision of

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objectives and priorities, as well as a high level of commitment towards them. All the values that are mentioned above are vital for fostering the learning process in companies.

According to the results obtained by Hutchinson & Quintas (2008), SMEs have informal knowledge management processes, the concepts and vocabulary of which are starting to filter into small companies. However, SMEs simply manage what they know. When it comes to internationalisation, however, this is not enough because the whole company must be acquiring new knowledge constantly.

An effective learning system constitutes a critical resource. It is generated within the organisation and is closely related to the organisational culture. In consequence, it cannot be easily identified or copied, and, at the same time, it is accessible to all the people immersed in the organisational culture. All these characteristics are essential to obtaining a sustainable competitive advantage (Wernerfelt, 1998; Grant, 1991).

Tools for making internationalisation a sustainable competitive advantage

Considering the scenario described above, in this paper we propose two elements which can help SMES to make internationalisation a competitive advantage:

- We have elaborated a taxonomy of risks in order to facilitate the identification of risks that could delay or increase the cost of the project in order to develop contingency plans. To the best of our knowledge, a study has yet to be developed which aims to construct a taxonomy of risks in internationalisation projects such as the ones available for projects in the fields of purchasing (Leopoulos & Kirytopoulos,2004), software development (Boehm, 1991) and product development (Keizer et. al., 2005). Based on this taxonomy, tools could be constructed in order to manage and control the risks in an internationalisation project, mitigating some of them or diminishing their effect.

- A general framework (model) within which decisions regarding internationalisation can be made, giving coherence and homogeneity to the decisions made throughout the whole internationalisation process (including all current and future projects)

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Risk management tools are necessary in an internationalisation process in order to predict and manage the problems that can emerge during the project. These tools are very useful to make decisions that reduce the effect of such risks. Nevertheless, it would be desirable for a company to make these decisions (or some of them) from a common perspective for all of their internationalisation projects, and that those decisions were to be applied to all the current and future internationalisation projects. This way, the company could establish common policies and practices for all its internationalisation projects, giving homogeneity to the whole internationalisation strategy.

As an example, we could consider the problem which arises when employees of the parent company working abroad try to come back to the parent company after a long period of time. Sometimes it is difficult for the company to find a suitable place for them, causing the rejection of other critical employees for the internationalisation project. This is a risk that can be predicted and managed in an individual project. Nevertheless, it would be desirable for the company to design a common repatriation policy applicable to all the current and future internationalisation projects of the company.

Most of the times, this implies an organisational change. The first step toward an organisational change is to set a common language and a clear and consistent definition of the key elements. A useful tool for achieving this goal is a model. In a process of cultural organisational change, models serve as support for setting the basic concepts on which to work. Therefore, models must contain the key factors with which the strategy must be developed to achieve an objective.

The model proposed in this paper (Section 5) constitutes a general framework which provides a common perspective and language for all internationalisation projects. This way, the company could establish standardised practices and common policies oriented to face the problems arising in any internationalisation project within the company. In addition, significant effort would be saved, since thinking about how to face the same problem (risk) for different projects would be avoided.

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3. Research method

In order to construct a taxonomy of risks, three sources were consulted and risks were classified. Based on the taxonomy, a model to improve the internationalisation of operations was developed.

The consulted sources were: a) a bibliographic search of different articles related to internationalisation, b) 37 internal reports of companies reporting their experiences from internationalisation projects c) a thorough study of people in charge of international operations at 8 companies.

a) In order to develop theoretical background and to identify risk factors, the ISI web of knowledge and some books that address issues of internationalisation were consulted.

   The Project Management Institute PMI (2004) defines risk as: "an uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives". According to that definition, in the present study risk factors were considered to be all factors that have caused project delays or have made it more expensive. Therefore, the research question that drove the research was: "What are the main factors that make internationalisation projects longer and more expensive?"

   As a result of the research, some aspects that appeared as a recurrent problem in internationalisation cases were identified.

b) During this step the study focused on the process followed by companies in its internationalisation projects and the support that people involved in the internationalisation projects received in order to face difficulties.

   In order to perform the analysis, the research team had access to 37 internal reports of companies in which they were briefed about their experiences in internationalisation. These reports were conducted by companies in the past with the aim of collecting knowledge to improve their internationalisation projects.

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The main characteristics of the analysed cases can be seen in Table 1. It can be observed that the companies belong to different sectors and that their headquarters are located in different countries around the world.

Industry sector	Location of headquarters	Quantity of cases analysed
Automotive	Europe	2
	Rest of the world	1
Food	Europe	4
	Latin America	1
	North America	1
Domestic appliances	Europe	3
Weapons	Europe	1
Equipment and electrical assemblies	Europe	1
Rubber and plastic	Europe	2
Electronics	Europe	2
Industrial equipment	Europe	1
Forging	Europe	1
Construction	Europe	1
Mechanics and machinery	Europe	1
Textile production	Europe	1
Distribution of consumer products	Europe	3
	North America	1
Banking & Finance	Europe	1
Non-ferrous metals	Latin America	1
Export of consumer products	Latin America	1
Telecommunications	North America	2
Services	North America	1
Electronic devices and components	North America	2
Chemical industry	Rest of the world	1
Furniture industry	Europe	1

Table 1. Business cases analysed.

As a result of this analysis, some other (or some new) risks that severely impact the internationalisation process were identified.

c) The list of risks obtained in a) and b) was compiled and enhanced by a group of work composed of people responsible for internationalisation projects in 8 companies. These companies were chosen from a group of 150 industrial companies located in the Spanish Basque Country.

The criteria for choosing the companies was to select those with experience in at least two internationalisation projects and those that were interested in participating in the study. The characteristics of the companies that participated in this phase of the study are shown in Table 2.

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Industry sector	**Country of destination of the analysed experience**	**Internationalised operation**
Automotive	South America	Production
Automotive	Eastern Europe and South America	Production
Domestic appliances	Eastern Europe and North America	Production
Domestic appliances	North of Africa and South America	Production and commercial delegation
Electronic devices and components	Asia	Production
Electronic devices and components	Europe	Commercial representation, technical assistance and production
Electronic devices and components	Europe	Production
Automotive	South America	Production

Table 2. Characteristics of the companies that participated in the study.

Individual interviews were conducted with people in charge of internationalisation. The research team chose to use semi-structured interviews, instead of a questionnaire framework, in order to expand upon interesting aspects that arise during the interview. Each interviewer had a script that contained general topics to be discussed during the interview. The general aspects of the script were:

1. Description of the company.
2. Reasons for internationalisation.
3. Description of the process followed in internationalisation projects.
4. Description of the problems faced (planned and unplanned) and the way they were solved.
5. Support that the internationalisation team received.

During the development of the interviews some additional topics arose. These topics included: the team profile, the relationship between the company and its partners and differences between the company's internationalisation projects, among others.

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The interviews were taped and later transcribed; the next step was to merge the list of risks obtained before and the risks that were mentioned during the interviews.

As result of a), b) and c), a list of 243 risks was obtained. This list was reduced in a working group session with the same people interviewed in c).

In this session, the list was cross-checked and the risks were classified. The list was carefully examined by the working group and it was pointed out that it was possible, in many cases, to list factors under the same name. As a result, the list of risks was reduced to 73 factors. In the second part of the session the risks were classified in 9 categories according to their nature. The categories and the number of risks that contains each category can be seen in Table 3 and the itemized categories by factors are shown in the annex.

In this session, the need for a general framework within which to make decisions (related to risk management) in a homogeneous way for all the projects arose.

Category	Nr. Factors
Organisational strategy	14
Leadership and organisational culture	6
Logistics infrastructure	6
Project management	10
Relationship system	4
Socioeconomic and political situation of the destination	6
Legal factors at the destination	10
Market	13
Culture of the destination	4

Table 3. Number of factors in each category and cluster.

Finally, a second working group session was conducted. The aim of that session was to develop a model which could serve as a support tool in the internationalisation process in order to manage risks in a homogeneous way for all the internationalisation projects of the company. In this session, the group analysed the model proposed by Koen et al. (2001) in the field of innovation; the aim was to decide if this model could serve as a basis for creating an internationalisation model. This model was found to be suitable and the group worked on the development of the internationalisation model. Finally, the practical implications of the developed model were discussed. The resulting model and its implications are presented in Sections 5 and 6, respectively.

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4. Results

In the first step, risk factors were identified through the analysis of the bibliographic resources. In the second step, semi-structured interviews were conducted. The final step was to organise group dynamics with people in charge of internationalisation to confirm the results and make conclusions.

In this section we will present the taxonomy of risks obtained in the study and explain the main issues related to the internationalisation risks that appeared during the semi-structured interviews and working group sessions.

The interviews were structured in three parts. In the first one, the interviewees were asked about the strategic aspects related to the internationalisation processes followed by their companies. In the second part of the interview, aspects related to tactical decisions were analysed and, finally, environmental aspects (those which are beyond the control of the company) were addressed.

Strategic aspects

At the beginning of the interview, strategic decisions were evaluated. The strategic goals of the companies were identified and then the internationalisation goals were evaluated based on the global goals of the companies. This step was noteworthy, as contradictory and equally desirable aims were found in several cases. The most frequently mentioned aspect was the interest to reduce the costs of internationalisation operations and the desire to develop internationalisation projects in less time. Several situations were detected in which cost reduction brought, as a consequence, a delay in the unfolding of internationalisation activities. These situations appeared with more frequency when the alignment of the strategic aims and the aims of internationalisation was not clear.

In some cases, the internationalisation aims appeared to be clearly aligned with other strategic aims. However, the interviewees were frequently unable to explain how the strategy of internationalisation was articulated. In general, the interviewees could explain each of the separate internationalisation projects very well. However, they could not define a unique frame for all the projects. Consequently, interviewees recognised that the process followed to make some strategic decisions was not clear and had to be redefined.

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Regarding the policies and structure of the company, it was found, in some cases, that the structure of the company scarcely changed once the company had chosen internationalisation as a strategic aim. This fact made the management of human resources and knowledge more difficult.

The relationship with suppliers and the difficulty in obtaining reliable suppliers in the destination country was a commonly occurring aspect. The interviewees explained that this problem appeared at different levels of the supply chain. Furthermore, and more surprising for the interviewees, it had been a difficult task to find reliable suppliers of simple pieces. Respondents agreed with the study developed by Cambra-Fierro and Polo-Redondo (2008) in which the authors emphasised the importance of the long-term orientation of the supply function in the SME context.

Another strategic issue considered was the response to unforeseen events. This was the most surprising aspect for the research team. In general, there is a lack of guidelines to follow when dealing with unforeseen events because so few companies carry out any analysis of possible contingencies before starting the project. However, the interviewees acknowledged that many of those unforeseen aspects could have been predicted, and a contingency plan could have been developed in order to deal with them in the case that these aspects arose. This way, the impact of those unforeseen events on the overall development of the project could have been lessened.

The final issues related to strategic decisions were leadership and organisational culture. In all cases, a lack of a shared vision of internationalisation was detected. Respondents clearly explained how there is no clear agreement among all employees in the organisation about the importance of the internationalisation process, or how to carry out this process. It was also perceived that, in some cases, workers of subsidiaries knew neither about the activity of the company nor about the type of organisation the parent company is.

Moreover, the difficulty of finding suitable staff within the company to lead internationalisation projects was a constant aspect mentioned by the interviewees. As a result, in some cases, the people in charge of international operations were recruited from outside the company, and they did not necessarily share the culture of the organisation.

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The factors (risks) related to strategic decisions of the companies were divided in two categories: a) organisational strategy and b) leadership and organisational culture. Identified factors are shown in Table 4.

Organisational strategy	
	Reliable forecasting of project funding
	Method to estimate project costs
	Definition of internationalisation goals
	Setting terms of internationalisation strategy
	Designing indicators associated with internationalisation strategy
	Defined procedure to check strategy
	Adaptation of the organisational architecture to carry out strategy
	Level of decentralisation
	Policies to increase and transfer knowledge from the source to the target
	Contingency plans to react against probable events
	Integral strategy of supply
	Development of personnel management policies at the destination (contracting, payments, dismissals)
	Organisational model alignment with internationalisation policy
	Definition of spaces of collaboration between different company locations
Leadership and organizational culture	
	Development of an organizational culture that motivates employee mobility (remuneration, return policies)
	Training plan for people at the origin, in order to take key positions at the destination
	Development of strong commitment of those involved in projects
	Development of a culture which challenges people to take high levels of risk
	Sensitivity to the cultural changes of those involved in projects
	Level of management implication

Table 4. Factors associated with strategy decisions

Tactical aspects

In the second part of the interviews, aspects related to tactical decisions were dealt with. Three issues were addressed: the first one was related to logistical problems, the second one was the procedure followed to carry out the projects and, finally, aspects regarding relationships needed in the country of destination.

Two main logistical problems were detected: first, companies had faced difficulties when coordinating with providers and, second, transportation of raw materials and finished goods had also been a frequent problem for them.

The difficulty of coordinating with suppliers was sometimes caused by the existence of incompatibilities between the production plan of the provider and the production plan of the company. In other cases, the reason for these coordination problems stemmed from the considerable distance between the client and the suppliers. Obviously, in all cases, these coordination difficulties caused an increase in the cost of raw material.

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Regarding the transportation problems, respondents argued that the structure of the logistical market was different in each country and, in all cases, it was difficult, if not impossible, to establish stable relationships with logistics providers.

The second tactical topic analysed was the procedure followed to carry out each internationalisation project (Project Management). All respondents agreed that more standardised practices were needed, and that improvements made in this area would have an important and positive impact on internationalisation projects. Two other tactical issues raised in the interviews were the poor development of suitable information technology tools (IT) and the difficulty of finding the right people to transfer responsibilities in the country of destination.

Interviewees acknowledge that they had reconstructed the decision-making process several times in different projects. They believed that some level of standardisation was necessary in order to shorten the planning task of new projects, the results of which would be more aligned with reality. Moreover, they considered that standardisation should come from the collection of all the knowledge acquired by the company in previous projects. After collecting the information, templates that contain the key aspects of planning should be defined.

Respondents agreed that many problems related to costs, definition of the project and responsibilities in every project could be minimised by relying on a predefined process.

When interviewees spoke about coordination problems which they had to cope with, their opinion was that IT-based supports must be evaluated and adapted to internationalisation projects in order to share data and facilitate coordination between the affiliates and headquarters, and between affiliates themselves.

The third tactical aspect addressed in the interviews was the relationship system. Interviewees considered that, before starting an internationalisation project, the leaders should establish a basic network of relationships. This network should contain strategic contacts in three fields: a) customers and suppliers, b) potential allies and c) organisations and offices which support foreign investment in the country of destination.

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The factors associated with tactical decisions were divided into three categories: a) logistic infrastructure, b) project management and c) the relationship system. Identified factors are shown in Table 5.

Logistics infrastructure
Knowledge of the supplier's market (quantity, capacity, quality and stability)
Costs of raw materials
Costs of transport of raw materials
Costs of transport of finished product
Knowledge of distribution channels of products
Costs of coordination and control of material flow
Project management
Definition of level of standardisation in the execution of projects
Capability of the organisation to simultaneously take on several projects
Mechanisms to make the knowledge acquired in every project known
Relevance of Information and Communication Technologies to the process of internationalisation
Planning the transfer of responsibility to people at the destination
Costs of coordination and project control
Definition of functions and responsibilities in every project
Clear and detailed definition of projects
Planning of projects
Development of channels of communication
Relationship system
Relations with partners
Effective alliances with suppliers at the destination
Research of organisations and offices which support foreign investment in the country of destination
Commercial, technical, legal and political contacts in the markets of destination

Table 5. Factors associated with tactical decisions

Environmental aspects

The last part of the interviews focused on those environmental aspects (i.e. those that were beyond the control of the company) that affected internationalisation projects. Environmental aspects were divided into four groups: socioeconomic and political situation, legal aspects, market and culture in the country of destination.

It was recognised by respondents that organisations were not provided with the suitable monitoring tools to systematically foresee complications in a specific destination. In fact, in many cases companies did not have critical information about the country of destination, even when the company had already chosen a specific one. It was possible to see that problems associated with external factors were recurrent. However, the general opinion was that the impact might be diminished by means of properly forecasting difficulties.

Regarding the socioeconomic and political situation of the country of destination, some respondents commented that, in some cases, although the management of

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the internationalisation project had been adequate, the project had generated losses due to currency devaluation. Some difficulties, such as the taxes imposed and changes in the political or economical structure in the country were detected.

Two other socioeconomic/political risk factors were identified by the respondents: on the one hand, in many cases, negotiations with unions had caused project delays; on the other hand, the recruitment of employees with appropriate training (for both managerial and operational positions) turned out to be much more difficult than expected.

The last socioeconomic/political aspect mentioned by respondents was the problems related to the conditions of the infrastructure. Some interviewees mentioned that they found difficulties when transporting materials by land, sea and air due to the deficient conditions of roads, ports and airports.

During the interviews and group dynamics it was pointed out that, while the difficulties associated with the legal aspects arose in the planning of the project, others generally occurred once the project had already started. Legal aspects were addressed from three perspectives: the movement of money and goods, the legal aspects that affected the product and those legal aspects related to the market.

Respondents argued that problems related to the movement of materials and money were due to the existence of different laws inside the country (depending on the region) and between countries. Other monetary aspects mentioned by the interviewees were those related to foreign investment legislation and legal requirements to constitute companies at the destination. Some interviewees explained how they had to establish a joint venture in some destination countries.

In some cases, the design and manufacture of the product was affected by the level of local materials required to be included in the products. Another worry for the interviewees was the lack of intellectual property protection. Finally, problems related to customs legislation or sanitary regulations emerged as additional examples of difficulties which delayed project development.

When market issues were analysed, respondents recognised that many of the problems that they had to face during the development would have been predicted by a market study. In many cases, the project was carried out without conducting a market study.

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Cultural aspects were the last topic covered in the interviews. In this section, many stories emerged related to cultural differences. The problems that emerged from these stories were grouped as follows: difficulties with the language of communication, cultural differences and social behaviour, daily habits and schedules and labour habits at the destination.

Socioeconomic and political situation of the destination
Union positions on internationalisation
Currency devaluation
Tax policy for foreign companies at the destination
Infrastructure availability and conditions
Political and economic stability of the country
Availability of professionals at the destination
Legal aspects at the destination
Commercial, legal and cultural characteristics which differentiate geographical zones
Difficulty of transporting materials between countries
Customs legislation of the country
Foreign investment legislation
Legal requirements to constitute companies at the destination
Benefits repatriation legislation
Level of local content required in the products
Legislation on importation of capital goods and technology
Regulations about market shares and sanitation that are consequence of the political configuration of countries and continents
Protection of intellectual property
Market
Identification of commercial opportunities
Difficulties of accessing new markets with an individual brand
Consumer perception of the product or service at the destination
Knowledge of the competition of the target market
Inadequate training in marketing and foreign trade
Market maturity
Adequacy of the product / service to the local market
Knowledge of the expectations of clients
Variability of the target market
Local legislation that affects foreign companies
Knowledge of variables that determine changes in market demand at destination
Knowledge of the launch period in every country
Identification of critical variables that affect the sale of the product
Culture at the destination
Language
Culture
Daily habits
Schedules and labour habits at the destination

Table 6. Factors associated with the environment

As a result of this last point, the respondents recommended that people involved in internationalisation projects should be trained in diversity management.

The identified environmental risks are shown in Table 6. They are listed under the four mentioned categories.

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5. Model

In previous sections, we have presented a taxonomy of risks which can help companies to identify, in advance, potential factors that can delay the execution of an internationalisation project or can increase its cost. This way, certain measures might be adopted in order to prevent the appearance of those factors or to reduce their effect.

Nevertheless, during the development of the interviews and working group sessions, participants agreed that many of the risk factors that could affect an individual internationalisation project were symptoms of deficiencies existing within the company. For example, companies sometimes lacked common procedures or policies (applicable to all internationalisation projects) which gave homogeneity to the decisions made by the leaders of all the individual internationalisation projects. Furthermore, project leaders often found themselves in a particular situation by ignoring successful measures adopted in order to manage the same situation in other projects.

Some participants mentioned, as an example of good practices, that their companies had defined common guidelines to facilitate decision-making when managing human resources in foreign countries. They explained how these guidelines had reduced the impact of the risks related to leadership and organisational culture (see Table 4). Other companies had developed guidelines to define the quality control system or to define the legal structure their business should have in the destination countries.

Participants also frequently argued that not everybody in the company understood the implications of the strategy existing behind the internationalisation process, or that they interpreted this strategy differently. This revealed that there was a lack of a shared vision of the internationalisation process within the company.

As a result of the information yielded, it was decided to develop a general framework to provide a systemic vision of the internationalisation process and to bring coherence and unity to decision-making in the different internationalisation projects.

We would like to note that the decisions we are referring to in this paper are not those tackled in articles such as Gottfredson et al. (2005) and Aron and Singh

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(2005). In these papers, authors explain how managers might decide the processes to offshore by means of creating a value hierarchy of processes, or how to choose the right location and organisational form in an offshoring context by evaluating structural and operational risks. In this paper we assume that these decisions have been already made for a specific internationalisation project and that there are other decisions which must be made by the manager in charge of the project (such as those related to the quality control system to implement or the human resources policy to use). These decisions should be made within a common framework for all internationalisation projects. This way, the results of the former decisions about location, processes to offshore, etc., could be enhanced.

The framework had to consider strategic, tactical and operative aspects. However, it should especially provide an integrating perspective for all the internationalisation projects in the company. With the aim of developing this global framework, and as we explained in section 3, it was decided to create a model adapted from the one proposed by Koen et al. (2001) in the field of product and process innovation.

The developed model is shown in Figure 1. It assumes that the strategy of the company leads the internationalisation process in an organisation and that this process is performed in different geographical areas or industrial environments, through consecutive internationalisation projects.

The outer ring of the model represents the external factors that affect the internationalisation process of the organisation. At the same time, they are not controllable, and therefore, the organisation must coexist with them at the destination. Legal, socioeconomic and cultural factors are examples of these kinds of factors. Due to these factors, there are high levels of risk implicit in internationalisation projects.

The centre of the model, which is called *System*, consists of controllable activities that are directly related to the manner in which organisations implement projects. These activities help organisations to transmit and make good use of both information and experiences that companies acquire while successive projects are executed. During this stage, it is very important to take advantage of diverse mechanisms designed to help organisations to go through the different phases of a project. The phases defined by the Project Management Institute (PMI, 2004) are

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the following: identification and formulation of goals, planning and programming, implementation, monitoring and controlling. It is also important to keep in mind that those mechanisms should be specifically adapted to the characteristics of organisations.

It is necessary to design formats for the System in order to synthesise the planning process in projects. These formats standardise the way in which projects are performed and they help to improve the planning process and to reduce the time required to carry it out. While the formats are used, the members of the working team should be able to improve them according to the characteristics and limitations that they find in the context. Among the set of formats that support the implementation of projects, some are quite relevant, given that internationalisation projects have a high degree of uncertainty. They are those related to risk management, risk that must be managed correctly. To carry out proper risk management, it is necessary to work on procedures of identification, analysis and risk control. It is also necessary to develop policies of risk management.

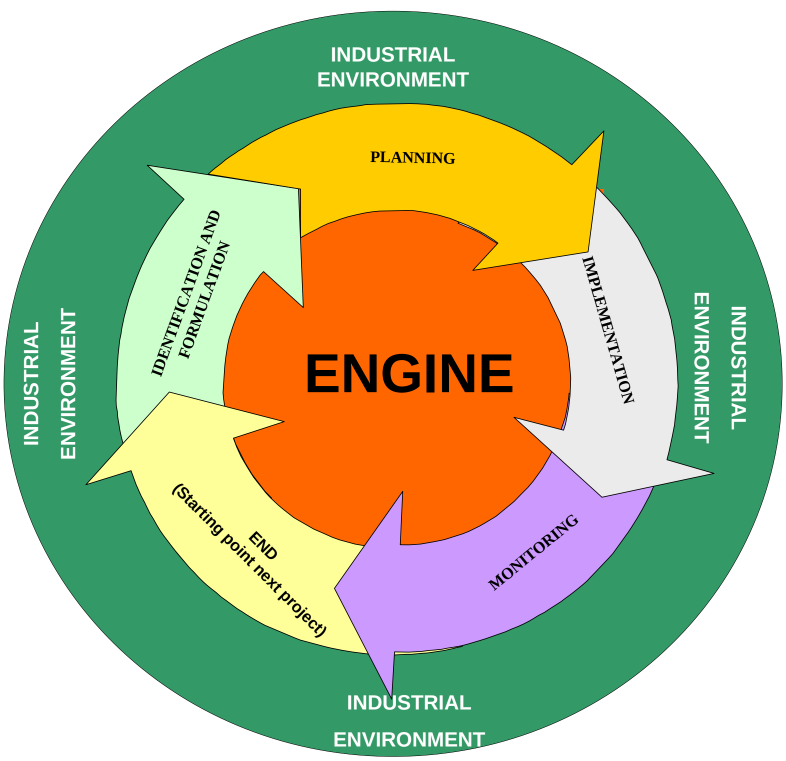

Figure 1 Internationalisation model.

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At last, bearing in mind that the systematisation of projects is not enough to reach a sustainable competitive advantage, the core of the model (the *Engine)* describes the strategic characteristics of the organisation which are essential to reach that advantage. The *Engine* is located in the centre of the model and is composed of factors such as leadership, organisational culture, capacities and organisational values. All of these factors contribute to the creation of an open culture favourable to assume changeable situations. These factors are considered to be controllable by the organisation. The *Engine* should animate the whole process and those in charge of associated activities must provide the means required to develop the proper organisational culture that is vital to stimulate the internationalisation process. During this stage, it is indispensable to identify capacities and resources that are necessary to achieve an open culture favourable to changes and to be continuously learning. Given that the capacities of an organisation are the result of individual capacities, training and learning processes to develop these capacities must be fostered.

6. Discussion of the model and implications for practice

In previous sections we have identified the risks that a company might face during an internationalisation project. Nevertheless, some of those risks would not appear (or its effect would be reduced) if the company constructed a set of guidelines, policies, procedures, methodologies for decision-analysis, etc. to be used in all the internationalisation projects of the company, giving homogeneity to the decisions made when a project is being carried out, and saving the effort of thinking about the same question several times. It is therefore necessary to avoid any mechanistic approach in which the internationalisation process is carried out through successive and independent projects.

As we have previously mentioned, our model was divided into three parts: engine, system and environment. We have classified the risk factors identified in previous sections and described the part of the model they are related to (see annexe). Companies should develop mechanisms, such us policies, guidelines, procedures, etc., for each part of the framework in such a way that using and applying them might avoid the appearance (or might reduce the effect) of the risks associated with the corresponding part of the framework. Furthermore, these mechanisms

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should help the company to turn internationalisation into a sustainable competitive advantage.

The development of the ***Engine*** corresponds mainly to managers. It should contain mechanisms (policies, guidelines, etc.) that contribute to the creation of an open culture favourable to:

- assume changeable situations
- continuous learning

Changes are normally present in any company involved in an internationalisation process. Blomstermo et al. (2004) found that it is harder for a company with significant domestic experience to change mental models and processes in the internationalisation process (Blomstermo et al., 2004)

Generally, changes are more successfully managed if the organisation has previously strived for creating a shared vision of the objectives existing behind the change (Grant, 1991). The use of practices such as those involved in interactive strategising might contribute to the creation of this shared vision when changes within the organisation are required. These are interpretative practices that enable top managers to argue for their own interpretations of strategy as well as to negotiate these interpretations with others in the organisation; it involves face-to-face interactions between senior managers and other organisational actors in order to influence the development and the implementation of the strategy in organisations (Hendry et al., 2010).

Mechanisms inside the engine should be oriented to learning processes, enhancing attitudes to promote constructive criticism of traditional ways of doing things. This condition entails a dynamic of permanent transformation that involves, in many cases, getting rid of previous knowledge to learn new ways of doing things.

The ***System*** is closely related to the manner in which organisations undertake projects. Therefore, it is closely related to the manner in which organisations go through the different phases of a project (i.e., through the four phases mentioned in Section 5). The system, then, should have mechanisms that introduce a certain degree of systematisation or standardisation in the different phases of projects. These mechanisms should take advantage of the organisation's previous

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internationalisation experiences and should transform the tacit knowledge within the organisation into explicit knowledge, which is a necessary feature to achieve higher learning levels in the company (Wernerfelt, 1998; Grant, 1991). Risk management tools and procedural strategising practices would be examples of such mechanisms.

Risk management tools should permit the company to identify potential risks in internationalisation projects, to assess the probability of those risks appearing and its impact on the project, to prioritize among those risks and to establish preventive actions and contingency plans. These tools should also introduce some degree of objectivity and systematisation to this process. The first step in this direction is to create a taxonomy of risks such as the one we have proposed in previous sections. More research is needed in order to construct a more comprehensive risk management tool based on this or other taxonomies.

Jarzabkowski (2005) defines Procedural Strategising as that which relies on formal administrative activities or events to influence the development and execution of strategy in organisations. Procedural Strategising also relies on hierarchies and formalised roles and responsibilities in carrying out these administrative activities. A preference for Procedural Strategising is associated with collective agreement on the legitimacy of this practice by the organisational actors involved, such that it is perceived as a credible and relevant approach to strategising. Jarzabkowski (2005) describes this legitimacy as ‘‘structural’’, a term that reflects its formal, administrative and hierarchical origins. She argues that Procedural Strategising confers structural legitimacy on collectively-chosen strategy, the effect of which is to embed this strategy within the organisation’s routine activities and hierarchy and to enable its persistence without active managerial attention. In this way, Procedural Strategising may be thought of as a form of ‘‘strategising auto-pilot’’ that is well recognised and accepted by those involved and that provides administrative controls over strategy without significant top management intervention.

Practices such as procedural strategising would be useful for the system because it serves primarily to maintain existing strategies and is also important in embedding new strategies, enabling them to gain a foothold in the organisation (Hendry et al., 2010). However, care must be taken because procedural strategising may lead towards inertia. In this situation, the focus of strategising becomes the

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administrative activities themselves rather than the strategic goals or direction of the organisation.

Nevertheless, we would like to point out that systematisation is not enough to turn the operations of internationalisation into a sustainable competitive advantage. The development of this advantage also demands constant willingness to learn, an open mentality and a shared vision within the organisation (Wernerfelt, 1998; Grant, 1991), characteristics that are achieved by means of the Engine. In this sense we could say that the Engine drives the System.

Given the high level of uncertainty associated with internationalisation projects, the ***Environment*** of the framework should contain mechanisms oriented to permanently monitor the *industrial environment.* This way, the data coming from the monitoring process could be efficiently transformed into useful information or knowledge (Huber, 1996).

The industrial environment is formed by four factors: customers, competitors, suppliers and substitutes (Frishammar & Hörte, 2005). To gather information on that environment, you can use formal techniques such as market research, enabling the planning and control of such activities by the company (Ashton & Stacey, 1995; Flint, 2002; Karkkainen, Piippo & Tuominen, 2001). Another option is to rely on more informal means such as gatekeepers (Reid & de Brentani, 2004). Gatekeepers are people who have the ability to gather and understand external information and the ability to move and make it meaningful to the organisation.

It should be noted that, in order to transform this data into useful information or knowledge, two conditions should exist within the organisation: first, an open attitude and second, a willingness and mindset that are orientated to learning processes (Sinkula et al., 1997; Baker & Sinkula, 1999). Once again, mechanisms inside the *Engine* should be oriented to creating these two characteristics within organisations. Also, data cannot be transformed into useful information if the System lacks mechanisms such as the risk management tools previously mentioned.

In this sense, it could be said that the three parts of the model should not be considered independently. As we explained in Section 5, a systemic vision of the whole internationalisation process is required.

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Behavioural internationalisation process models, such as those proposed by Johanson and Vahlne (1977), emphasize the importance of knowledge and learning in the internationalisation of companies. They claim that learning about internationalisation is a cumulative process in which each step abroad adds to the company's knowledge. An implication of this learning process is that the knowledge accumulated in the past forms the trajectory for future internationalisation behaviour of companies (Eriksson et al., 2000). The internationalisation process is perceived as the outcome of a series of incremental decisions taken to adjust to the changing conditions of the company and its environment (Camuffo et al., 2007).

Several articles within this vein of research (Blomstermo et al., 2004; Eriksson et al., 2000; Eriksson et al., 1997) indentify three interrelated components of knowledge which are critical in the internationalisation process of a company: internationalisation knowledge, foreign business knowledge and foreign institutional knowledge. The first one is company-specific and is embedded in company routines and structure; it concerns the company's resources and capability of engaging in international operations. Foreign business knowledge refers to knowledge of customers, competitors and market conditions in a specific foreign market. Foreign institutional knowledge is the knowledge about government and institutional framework, rules, guidelines and values in the particular foreign market.

We suggest that these three critical components of knowledge could be properly and efficiently managed within a general framework such as the one we have presented in this paper. Furthermore, we suggest that this framework would permit the company to develop an effective organisational learning system, bringing about differentiation and turning internationalisation into a sustainable competitive advantage for the company (Drucker, 1993; Nonaka, 1991). Organisations, especially SMEs, should strive for excellence in internationalisation projects since internationalisation is a source of cost reduction (Farell, 2004) and it establishes a favourable position in the market (Porter, 1985). Appropriate risk and knowledge management would contribute to the achievement of that excellence.

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7. Concluding remarks and future research

The internationalisation process in a company embodies a series of projects that are performed in different geographical regions. In some cases, especially in SMEs, companies are not capable of predicting the risks that will be faced during the process and they do not have suitable tools to manage the knowledge acquired in previous internationalisation experiences. Therefore, they fail to turn internationalisation into a sustainable competitive advantage.

This paper reports the conclusions of a study based on both a bibliographic search and a comprehensive study of a group of industrial companies. This study includes the analysis of 37 internal reports about internationalisation experiences and the carrying out of semi-structured interviews with managers in charge of international operations. We have identified the main factors (risks) that prevent successful internationalisation processes and we have proposed a taxonomy of them. This taxonomy is the first step toward the construction of a more comprehensive tool to manage and control the risk in internationalisation processes. We believe that techniques such as AHP (Analytic Hierarchy Process) could be useful to construct this risk management tool. This is an issue that we leave for future research.

Furthermore, we have proposed a general framework (model) which provides a common perspective for all internationalisation projects, avoiding any mechanistic approach in which the internationalisation process is carried out through successive and independent projects. This framework would bring coherence, and also a certain level of systematisation, to the decisions made in different internationalisation projects.

The model, which provides a systemic vision of the internationalisation process, is formed by three interrelated parts: the Engine, the System and the Environment. The Engine should include mechanisms (policies, guidelines, etc.) that contribute to create an open culture favourable to assume changeable situations and continuous learning. These two characteristics of the organisation should drive the internationalisation process. The System is related to the manner in which organisations go through the different phases of an internationalisation project; its mechanisms should be oriented to introduce standardisation and systematisation in the activities associated with the different phases of the project. The Environment should have mechanisms oriented to permanently monitor the industrial

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environment, in order to transform the data coming from the monitoring process into useful information.

We believe that companies can develop efficient learning systems based on this framework. It would give them differentiation and, therefore, help them to turn internationalisation into a sustainable competitive advantage.

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Annexe: Key factors to control during the execution of an internationalisation process

General outline of the key factors		
Engine	**System**	**Environment**
Organizational strategy	Logistics infrastructure	Socioeconomic and political situation of the destination
Leadership and organizational culture	Project management	Legal aspects in the destination
	Relationship system	Market
		Culture in the destination

Table 7. General outline of the key factors

Engine		
Organizational strategy		**Leadership and organizational culture**
Reliability on forecast of projects funding	Level of decentralization	Development of an organisational culture that motivates the persons mobility (remuneration, return policies)
Method to estimate costs of projects	Policies to increase and transfer knowledge from the source to the target	Training plan for people in the origin, in order to take key positions in the destination
Definition of goals internationalisation	Contingency plans to react against probable eventualities	Development of a high compromise of people involved in projects
Setting terms of the strategy of internationalisation	Integral strategy of supply	Development of a culture which challenges people to take high levels of risk
Designing indicators associated to the strategy of internationalisation	Development of policies of personnel management in the destination (contracting, payments, dismissals)	Sensibility to the cultural changes of people involved in projects
Definition of the procedure to check the strategy	Organisational model alignment with the internationalisation policy	Level of management implication
Adaptation of the organisational architecture to carry out the strategy	Definition of spaces of collaboration between different locations of the company	

Table 8. Factors associated with the Engine

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System		
Logistics infrastructure	**Project management**	**Relationship system**
Knowledge of the suppliers' market (quantity, capacity, quality and stability)	Definition of level of standardization in the execution of projects	Relations with partners
Costs of raw material	Capability of the organisation to assume simultaneously several projects	Effective alliances with suppliers at the destination
Costs of transport of raw material	Mechanisms to make known the knowledge acquired in every project	Research of organisations and offices which support the foreign investment in the country of destination
Costs of transport of finished product	Relevance of Information and Communication Technologies to the process of internationalisation	Commercial, technical, legal and political contacts on the markets of destination
Knowledge of distribution channels of products	Planning the responsibility transference to people at the destination	
Costs of coordination and control of materials' flow	Costs of coordination and control of the projects	
	Definition of functions and responsibilities in every project	
	Clear and detailed definition of the projects	
	Planning of projects	
	Development of channels of communication	

Table 9. Factors associated with the System

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Environment			
Socioeconomic and political situation of the destination	**Legal aspects in the destination**	**Market**	**Culture in the destination**
Unions position on internationalisation	Commercial, legal and cultural characteristics which differentiate the geographical zones	Identification of commercial opportunities	Language
Devaluation of the currency	Difficulty to transport materials between countries	Difficulties to access to new markets with an own brand	Culture
Taxes policy for foreign companies at the destination	Customs legislation of the country	Perception of the consumers of the product or service at the destination	Daily habits
Infrastructure availability and conditions of them	Foreign investment legislation	Knowledge of the competition on the target market	Schedules and labour habits at the destination
Political and economic stability of the country	Legal requirements to constitute companies at the destination	Inadequate training in marketing and foreign trade	
Professionals' availability in the destination	Benefits repatriation legislation	Market maturity	
	Level of local content required in the products	Adequacy of the product / service to the local market	
	In force legislation on importation of capital goods and technology	Knowledge of the expectations of the clients	
	Regulations about market shares and sanitary regulations that are consequence of the political configuration of countries and continents	Variability of the target market	
	Protection to the intellectual property	Local legislation that affects foreign companies	
		Knowledge of variables that determine the changes in the demand on the market of destination	
		Knowledge of the period of launch in every country	
		Identification of critical variables that affect the sale of the product	

Table 10. Factors associated with the Environment