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# **A Perspective of the International Collaborative Context and Decision-making Approaches of Technology-based Multinational Enterprises.**

## **Bridging Theory and Practice of Corporate Interrelations.**

Master's Thesis in the Master's Programme International Project Management

**NICOLÁS FASHHO MUSALLAM**

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Department of Civil and Environmental Engineering  
*Division of Construction Management*

CHALMERS UNIVERSITY OF TECHNOLOGY  
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## ABSTRACT

A globalized world demands globalized companies. Hence, the study tries to picture, from the international perspective, the interaction between firms and their business collaborators. The purposes of the study are to analyse, from the perspective of the research participants and by contrasting theory and practice, how the addressed organisations manage their network collaborators to consolidate their international business market position and what is the overview of their internal practices to make decisions in terms of their cooperation strategy with other firms. The theory of this research is built upon three main pillars: networking, internationalization, and decision-making processes (DMPs). The literature of networking serves as a frame to introduce collaboration and DMPs as subjects of research. Besides, three of the strategy paradoxes are used as a rationale to build the frame of internationalization and decision-making processes. Thus, these three elements constitute the focus of interest of this study. The research counts on a deductive approach in which theory was being put into practice. The investigation was based on the study performed to 8 different multinational enterprises (MNEs) with 10 research participants in sectors related to Engineering and Technology businesses. The tool to gather the data was a survey composed by a multiple-choice questionnaire and a set of open questions. Furthermore, two semi-structured interviews were carried out to complement the surveys. The studied companies cooperate with other organisations on a functional basis, that is, those collaborators that satisfy their needs are the ones selected. Also their geographical location does not oppose a significant barrier to partner. The studied MNEs count on defined procedures and formalities to make decisions for choosing and working with these collaborators. However, the information gates feeding these processes are based on an individual or group level. Hence, the addressed individuals may apply informal methods to obtain such data. Furthermore, every business area and hierarchical level can have their own specialized network of partner collaborators. This fact also impacts the decision level in terms of cooperating. Thus, collaborators are an essential support for the addressed MNEs to ensure their business continuity in the international market.

Key words: Networking, Collaboration, Partnering, Internationalization, Network Strategy, and Decision-Making Process.

Ett perspektiv på internationellt samarbete och beslutsfattning hos multinationella teknikföretag.

En koppling mellan teori och praktik av företagsrelationer.

Examensarbete inom masterprogrammet International Project Management

NICOLÁS FASHHO MUSALLAM

Institutionen för bygg- och miljöteknik

Avdelningen för Construction Management

Chalmers tekniska högskola

## SAMMANFATTNING

En globaliserad värld kräver globaliserade företag. Därför försöker studien presentera, från ett internationellt perspektiv, interaktionen mellan företag och deras affärsmedarbetare. Syftet med studien är att analysera, från forskningsdeltagarnas perspektiv, kontrastera teori och praktik, hur de deltagande organisationerna hanterar sina nätverk av medarbetare och befäster sin internationella marknadsposition och vad som är överblicken interna rutiner för att fatta ett beslut gällande samarbetsstrategier med andra företag. Teorin bygger på tre huvudpelare: nätverk, internationalisering och beslutsprocesser (BP). Litteraturen om nätverk fungerar som en ram för att införa samarbeten och beslutsprocesser som föremål för forskning. Dessutom har tre strategiparadoxer använts som motivering för att bygga ramen för internationalisering och beslutsprocesser. Således är dessa tre de element som utgör fokus för denna studie. Forskningen har tagit en deduktiv ansats och antar att teorin kan omvandlas till praktik. Undersökningen baserades på en studie av åtta multinationella företag med tio försökspersoner, inom sektorn Ingenjörskonst och Teknologi. För att samla in data användes ett frågeformulär bestående ett antal flervalfrågor och flera öppna frågor. Vidare har två semi-strukturerade intervjuer gjorts för komplettera frågeformulären. De studerade företagen samarbetar med andra organisationer på ett funktionellt sätt, det vill säga de organisationer som uppfyller deras behov är de som väljs. Geografisk placering utgör inte någon barriär för att hindra samarbetet. De studerade multinationella företagen räknar med definierade rutiner för att ta beslut gällande val av samarbetspartner. Men informationen till dessa processer kommer från individ eller gruppnivå. Därför kan dessa individer ta till informella metoder för att få fram den informationen. Dessutom kan varje affärsområde och hierarkisknivå ha sina egna specialiserade nätverk av samarbetspartners. Detta faktum påverkar också beslutsnivån när det gäller samarbete. Samarbetspartners är ett viktigt stöd för deltagande multinationella företagen för att säkerställa deras affärsverksamhet på den internationella marknaden.

Nyckelord: *nätverk, samarbete, partnerskap, internationalisering, nätverksstrategi och beslutsprocesser.*



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# Preface

This master thesis is written under the support and supervision of Chalmers University of Technology in Gothenburg (Sweden) and Northumbria University in Newcastle upon Tyne (United Kingdom). This research is enclosed under the Dual Award from both universities for a M.Sc. in International Project Management and a M.Sc. in Project Management, respectively.

The study was motivated by the need of understanding how multinational enterprises make use of their collaborators to support their business activities abroad. Thus, the aim of the study is to obtain a perspective of the current way of working of Multinational Enterprises towards cooperating with other firms existing within their networks, also addressing how such selection and decision-making processes are carried out in compliance with their collaboration strategy criteria. Hence, the investigation aims at revealing internal procedures and practices for collaborating with organisations present in the given network range of the studied firms. In order to better picture these mechanisms, the current research provides a discussion bridging the current theory with the described practice.

This study is based on a deductive approach in which the theory served to design the research tool to gather the empirical data for the analysis. The research tool was a survey composed by a multiple-choice questionnaire and a set of open questions. Furthermore, two semi-structured interviews were carried out to complement the surveys. The study is sustained by the findings obtained from the perspective provided by ten research participants situated in eight different countries and in three different world regions. The addressed multinational enterprises perform their business activities within the sectors of Engineering and Technology.

Göteborg, June 2016.

Nicolás Fashho Musallam



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To all of you,  
Thank you.

Nicolás Fashho Musallam.  
Gothenburg – Sweden, June 2016.

*“We have no eternal allies and we have no perpetual enemies. Our interests are eternal and perpetual, and those interests it is our duty to follow.”*

Lord Palmerston (Henry John Temple) (1784-1865); British prime minister.

Retrieved from: P.146 - De Wit, B., & Meyer, R. (2014). *Strategy synthesis: Managing strategy paradoxes to create competitive advantage*. (4th ed.): Cengage Learning EMEA

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# Glossary

- **Alien firm:** Enterprise different from that being referred to or studied.
- **Alliance:** Term used to refer to any type of relationship between firms<sup>1</sup>.
- **Bounded rationality:** Circumstance in which a decision-maker is limited by the available information, time, cognitive skills and problem traceability.
- **Decision-maker:** Individual or group of individuals with the competence to make decisions.
- **Discrete probabilistic choice model:** Mathematical tool used in a wide variety of applications in order to predict the probability of choice between a set of discrete alternatives.
- **Focal firm:** Enterprise subjected to study or particular reference.
- **Foreign direct investment:** Financial mechanism used by an enterprise to control another in a different country.
- **Joint Venture:** A partnership between two or more firms, often resulting in the creation of a new business entity<sup>1</sup>.
- **Liability of foreignness:** The need of a foreign firm to have a specific advantage to offset its entrance in a new foreign market.
- **Licensing:** A contractual arrangement whereby an organisation or an individual obtains the rights to use the property of another organisation or individual<sup>1</sup>.
- **Multinational enterprise:** A company based in two or more different countries. The size of these organisations in terms of number of employees often vary from medium to large.
- **Network cluster:** Group of nodes that conform the direct ties with the focal organisation.
- **Network node:** Connection point (i.e. entity) within a given network.
- **Network structural hole:** The existing gap in a network between two sets of nodes that do not necessarily interact<sup>2</sup>.
- **Network tie:** Local link between two nodes.

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<sup>1</sup> Schilling, M. A. (2005). *Strategic management of technological innovation*: Tata McGraw-Hill Education.

<sup>2</sup> Zaheer, A., & Bell, G. G. (2005). Benefiting from network position: firm capabilities, structural holes, and performance. *Strategic management journal*, 26(9), 809-825



- **Outsourcing:** Externalize by subcontracting to other firms those business processes that the company itself may not desire to complete internally. This is done in order to satisfy all stages of its value-chain.
- **Partnering:** Specific type of collaborative relationship between firms. These share a common understanding towards achieving the same goals. For this reason, they work together on a cooperative fashion with specific functions and tasks.
- **Partner Company:** Organisation that possesses some particular and defined collaborative link with the focal firm.
- **Psychic distance:** Set of factors hindering the flow of information due to language dissimilarities, cultural differences, and constraining economic and political regulations.
- **Structural holes:** Discontinuities in the network ties.
- **Size of the company:** This feature refers to the number of employees in the firm.
- **Uppsala Model:** Model developed by Jan Johanson and Jan-Erik Vahlne and published in 1977. It explains the internationalization process of organisation through the basis of exportation. In 2009, the authors revisited their model and adapted it to the market characteristics of nowadays.
- **Value Curve:** The value curve is a diagram used to compare the offered products or services over a range of key success factors.

## List of Abbreviations

- **DPCM:** Discrete probabilistic choice model.
- **DM:** Decision-maker.
- **DMP:** Decision-making process.
- **ERP:** Enterprise resource plan.
- **FDI:** Foreign direct investment.
- **IMS:** Integrated management system.
- **MNE:** Multinational enterprise.
- **M&P:** Manufacturing and production.
- **QMS:** Quality management system.
- **R&D:** Research and development.
- **SMEs:** Small and medium enterprises.

# 1 Introduction

## 1.1 Research Rationale

The irreversible tendency towards a more globalized world is creating new business opportunities. In order to follow such business possibilities, enterprises are endowing themselves with a set of characteristics that allows them to expand and proliferate in other countries different from their homeland (Johanson & Vahlne, 2009). Such international expansion demands, among many others elements, a high international market adaptability, a meditated corporate strategy, and both an internal and an external organisational practice support (Buckley & Ghauri, 2015). The present research addresses the above mentioned demands from the perspective of the role of organisational business networks, and particularly, from the role of collaborators and partner firms.

Networking and its unfolding collaboration strategies are understood as essential mechanisms for strengthening the survival of businesses abroad. There is no corporation isolated in the market (Håkansson & Snehota, 1989). They all interact directly or indirectly with each other. The departure point of the research is not to study how companies internationalize from scratch, but how multinational enterprises (MNEs), which have already internationalized, consolidate their position in cross-border markets and how they intend to keep expanding further along with their network collaborators. For this reason, this study targets to reveal the connection between internationalization and collaboration modes of, particularly, Technology-based MNEs. As a result, the research delves in the internal practices of the studied MNEs by analysing their procedures to make decisions in terms of international collaboration. In other words, the investigation focuses on the concept of network management framed under an international context. Moreover, the nature of the investigation is oriented to cover the link between the theory about these topics and the actual practice exerted by the different interviewed players within the studied organisations. For this purpose, the theory has to align the topics of networking and collaboration, together with internationalization and decision-making processes.

## 1.2 Research Goals

Networking, understood as the different degrees of possible business linkages, constitutes an important asset for organisations willing to enlarge their business and consolidate their position in the market (Goerzen & Beamish, 2005). Hence, the research aims to provide a better understanding of the mechanisms that firms, in this case, Technology-based MNEs possess in order to use their network collaborators for developing their businesses, consolidating their international position and establishing relationships with their partners. Special emphasis is put on their internal practices and their decision-making modes. After the analysis of the empirical data and its discussion with the theory, the investigation contributes with implications for managers and suggests a tentative road map for business internal interaction. The latter can be understood as a scheme positioning internationalization, collaboration and decision-making practices linked with the business performance and the generation of added value for companies.

In order to cover the proposed objectives, it is required to define a path to walk. Thus, the scheme of milestones of the research is defined as follows:

- Investigate the theory about collaboration, internationalization and decision-making processes.
- Establish a theoretical link between the previous points.
- Collect empirical data for analysis.
- Reveal and discuss the connection between the theory and the practice of the studied MNEs.
- Extend the study to a larger number of companies in the same sectors (future research).

As a summary, the research questions are:

- a. From the point of view of the research participants, how do their MNEs manage their network partners to consolidate their international business market position?
- b. From their perspective, what is the overview of their internal practices in order to make decisions based on their collaboration strategy?
- c. To which extent does their practice comply with theory?

### 1.3 Research Scope and Limitations

Business comprises an infinite amount of activities and services. Furthermore, factors such as size of the company, degree of internationalization, cultural variety of the employees, product or service portfolio, market diversification, and a long etcetera generate a wide spectrum of possible elements to study. As a result, and based on the theory of internationalization and networking, the scope of the research was delimited by the following features:

- Multinational Enterprises (organisation size in terms of employees).
- International context (geographical spread).
- Collaborating and partnering (business interrelations).

As described in the Research Rationale section, a more globalized world demands an international adaptability supported by elements such as collaborating with other firms. Furthermore, these two concepts, are also seen to impact the economic performance of an organisation as depicted in Figure 1. According to Goerzen and Beamish (2005), aspects such as network size, international experience and alliance network diversity are found to be direct pillars in sustaining the economic performance of a given organisation.

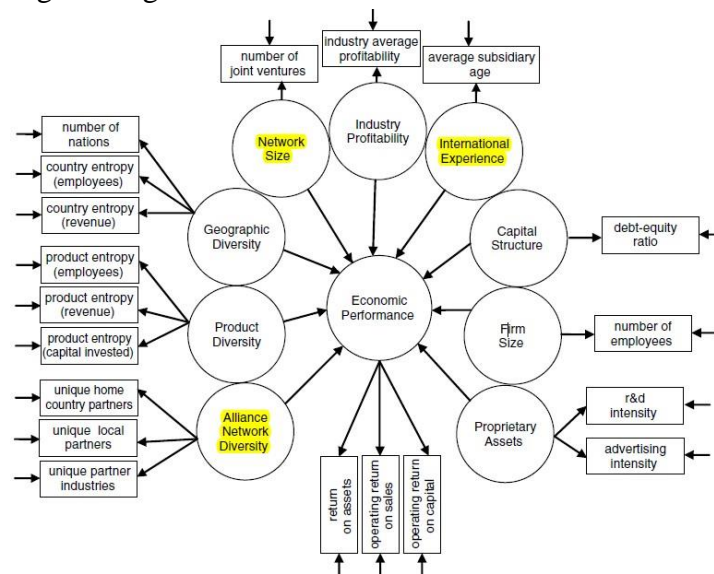


Figure 1 Conceptual model of a MNE in terms of economic performance.

Source: Goerzen and Beamish (2005).

For this reason, the analysis performed in this research focuses on the interrelations between organisations. Moreover, the scope is further limited to MNEs focused on the sectors of Engineering and Technology. The results cannot be generalized or extrapolated to other sectors and/or markets without any deviation. The limitations and applicability of them depend upon other factors that are not contemplated in the research such as internal and external communication procedures of the studied companies, cultural background of their employees, knowledge and learning practices, accounting and financial aspects, internal organisation structure...

## 1.4 Research Method

The theory presented in this document is built upon three core ideas. The first element is networking, used as a global frame to introduce collaboration and, furthermore, partnering. As described in Figure 1, they all impact the economic performance of the organisation. The second is internationalization which is used to describe some mechanisms for the international expansion of enterprises. This topic was introduced for two reasons: first, the research focuses on companies working in an international environment, and second, international experience also affects the economic performance of the enterprise as described in Figure 1. The third contribution is related to decision-making processes and the learning of the decision-makers. In most cases, the literature addresses the research about internationalization and collaboration between organisations from the point of view of the firm as a whole. However, this study tries to bring light to the particular role that the individuals or group of individuals sitting inside these firms have in terms of partnering and collaborating with other entities positioned as well in an international context. For this reason, the decision-making processes, and in turn, their related internal procedures were included as a third pillar of the study. Hence, the current research also provides to a certain extent the human perspective for understanding and analysing these three topics.

The thesis is based on a deductive method in which theory was being put into practice. The research tool combines both qualitative and quantitative methods. Nevertheless, the qualitative part represents the greater contribution to the study. The qualitative part allowed to gain a deeper understanding of the research questions, hence, revealing particular practices of the studied enterprises. Conversely, the contribution of the quantitative part serves as an overview of the characteristics of the addressed firms. It permits to have a basic numerical analysis with plots and graphs generating quick comparison of the data that captures the shape and characteristics of the researched firms. The tool used to gather the empirical data was a survey. The document was designed according to the features that generated the scope of the research. The survey was divided in two blocks: a multiple-choice questionnaire followed by a set of open questions. Furthermore, two semi-structured interviews were carried out to complement these surveys. The questionnaire aimed to show the main characteristics of every assessed company and research participant. The latter could select the option that best fits their case. Alternatively, the open questions were composed by five thematic blocks with a varying number of essay-free-answer questions in every section. Please, refer to Appendix B for a sample of the document. This part served to describe the internal practices of the studied firms from the perspective of the ten respondents. Taking into account the ethical considerations, the information about the names of the company, employees, or other sensitive data have been treated with strict policies to preserve the anonymity. Nevertheless, the study addressed a total of eight companies whose main activities are oriented towards manufacturing and production as well as research and development of products and services.

## 1.5 Document Structure

This thesis is divided in six main chapters. The structure responds to that having an introduction, theory presentation, empirical findings, discussion, and conclusion. Every chapter is further divided in several sections and subsections that cover the primary information of interest to guide the reader throughout the evolution of the topic and development of the final conclusions.

- The introduction addresses the background, rationale, scope and method of the thesis research. It gives the reader a general overview of the document and the narrative contained in the following chapters.
- The literature review (theoretical background) contains a description of the published material. This helps understanding the current state of the knowledge surrounding the topic of research and builds the basis for the discussion part.
- The chapter about research methods illustrates how the problem is to be investigated, the tools used during the study, the justification of these methods, the introduction to the research sample and the employed method for data collection.
- The chapter of empirical results presents such data in connection with the theory.
- In the chapter of the discussion, the interpretation of the empirical results is addressed by contrasting them with the previously presented literature. It is also in this chapter where the contributions of the investigation are explained in more detail.
- The conclusions collect the key points addressed throughout the document and settle the basis for further research.

All these matters are accompanied by figures, tables and plots that enhance the depiction of the topic. There is an iterative-loop process when writing the document as the theoretical background and the empirical results are intimately related between themselves together with the empirical data acquisition process and the discussion.

## **2 Theoretical Background**

*This chapter is structured in three main sections which describe the topics of: network collaboration, internationalization and decision-making processes. This is done in accordance to the descriptions provided in Chapter 1.*

### **2.1 Network: a form of contact between entities**

#### **2.1.1 Introduction**

A network can be defined as an ensemble of a finite number of elements that interact with each other generating a pattern of relationships (Castells, 2011; N. E. Coviello, 2006; Ghoshal & Bartlett, 1990). In the particular case of business, the characteristic to define a network of firms is the association formed by two or more individual organisations that are linked by common interests, can share certain objectives, and may provide mutual information and support.

A network leads to inter-organisational relationships based on collaboration strategies. It requires mutual attention and interest. However, it is the degree of commitment the element defining the level of collaboration, and thus, the type of relationship between the entities. Such commitment is shown as a result of the amount of investment and the degree of flexibility of the entity (Johanson & Vahlne, 2009). These inter-organisational relationships pursue the achievement of common goals, provide reciprocal assistance, consolidate their interrelation position, and strengthen the survival of the firms. Hence, the network of contacts supposes a precious asset for organisations (Håkansson & Snehota, 1989). The need of networking and collaborating truly exists between firms, since there is not any organisation found to be completely isolated in any business market (De Wit & Meyer, 2014). Organisations can partner with other entities, to outsource dispensable functions, to hire suppliers for indirect services, or to perform other activities that are not essential to their main business operations.

There is a wide variety of interactions between organisations. These can range from a simple sporadic first contact up to a full merge between the entities. Every step in this scale is found to be conditioned by variety of internal and external factors that depend on the strategy basis on which the decisions are taken. Hence, a network offers opportunities but also challenges (Gadde et al., 2010). Analogously, the internationalization of a network broadens the offer of these opportunities and challenges that an entity can face. In the particular case of multinational enterprises (MNEs), these can be understood as an inter-organisational network consisting of a set of units dispersed over several countries, which may even have disparate objectives (Ghoshal & Bartlett, 1990). This characteristic opens a new group of elements to be considered when networking, since the MNE can be conceptualized as an embedded entity in a broader external network. Every unit can interact with different organisations within their own network, and such network does not have to



be necessarily the same in every country and for every unit. This uniqueness factor converts every local network in a valuable resource. In other words, “*a firm’s alliance network can be thought as an inimitable and non-substitutable resource as well as a means to access unique capabilities*” (Goerzen & Beamish, 2005, p. 333). Therefore, a correct management of the network as well as a proper internal coordination within the MNE can potentiate to a great extent the value of such resource, thus, facilitating the access to new opportunities and the mitigation of probable adverse challenges.

## 2.1.2 The Conceptual Framework of Networks

Networks are born as a result of the demand of an organisation to satisfy its needs in certain business and intellectual areas. Easley and Kleinberg (2010) provide in their book a detailed study about the theory of networks and networking. They explain the relationship between networks and information transfer, the role of these in the market, and they introduce game theory and graph theory as modelling tools of network performance and forecast. Figure 2 provides a simplified view of a network structure.

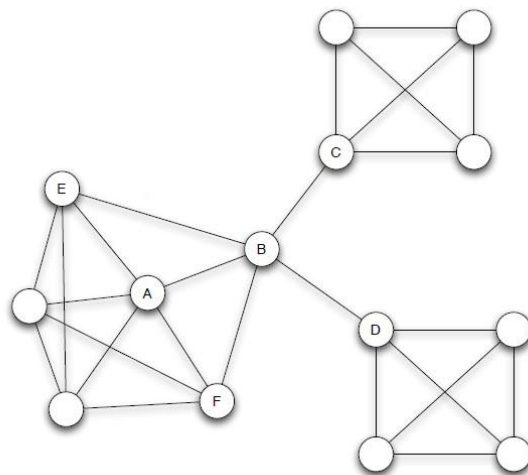


Figure 2 Local network cluster.

Source: Easley and Kleinberg (2010).

Point A represents the focal point or node. This is to say the organisation (firm) of reference. Point A is linked to its direct ties or first-level relationship, points B, E, and F, and also to its indirect ties or second level relationships, points C and D. The region that generate the direct ties of point A is called network cluster. It is the interaction between clusters the one determining the effectiveness of a network (Easley & Kleinberg, 2010). The selection of either direct or indirect tie depends on the pursued benefits (Zaheer & Bell, 2005). Ahuja (2000) describes that direct ties enable the access not only to benefits, like economies of scale, larger project scope, funds, etc. but also to resources and knowledge, whereas indirect bonds, like suppliers of suppliers, permit the access to a limited amount of resources. This classification helps in the design of an efficient network. In relation to networking theory, N. E. Coviello

(2006) claims that a complete network analysis would include the study of the dimensions related to the structure and interaction of such network on a time-based manner. The structural dimension is related to the size, density, interconnections between business ties and the situation distance of the entities (i.e. spread) with respect to the focal firm. Conversely, the interactional dimension addresses who is in the network, the type of relationship, and the strength of the link. The latter is highly influenced by the level of commitment and trust between the entities, which, in turn, is a time-based process (Goerzen & Beamish, 2005; Johanson & Vahlne, 2009). As a result, it is vital to study the evolution of the networks over time (Håkansson & Snehota, 1989; Hohenthal et al., 2014; Li Sun, 2009). Their evolution depends upon factors such as: corporate strategy, market type, internationalization degree, network position and power, innovation mechanisms of organisations, and so on.

De Wit and Meyer (2014) explain that the inter-organisational relationships develop through four relational factors. The first is legitimacy. It is related to the negotiation and signature of ‘the rules of engagement’ between organisations, that is, the approval of an understanding agreement. The second is the urgency; whether the parties are under time pressure to interact to satisfy their needs. The third factor is the frequency of interaction, which is related to the level of engagement, and the fourth is the power relationship, which can be derived from the accumulation of specific resources, knowledge, and practices. These four factors determine the interactional dimensions of networks. Conversely, Ahuja (2000) expresses that the structure of the network is likely to be determined by the number of direct and indirect ties that the firm maintains, and the extent to which these partners interact with each other. Furthermore, De Wit and Meyer (2014) present power as a source on dependency between entities. For this reason, the hierarchical appearance of the network depends on the power position of the firms (see Figure 3). This is to say that power is consistent with the network pattern that conforms the relationships (Easley & Kleinberg, 2010).

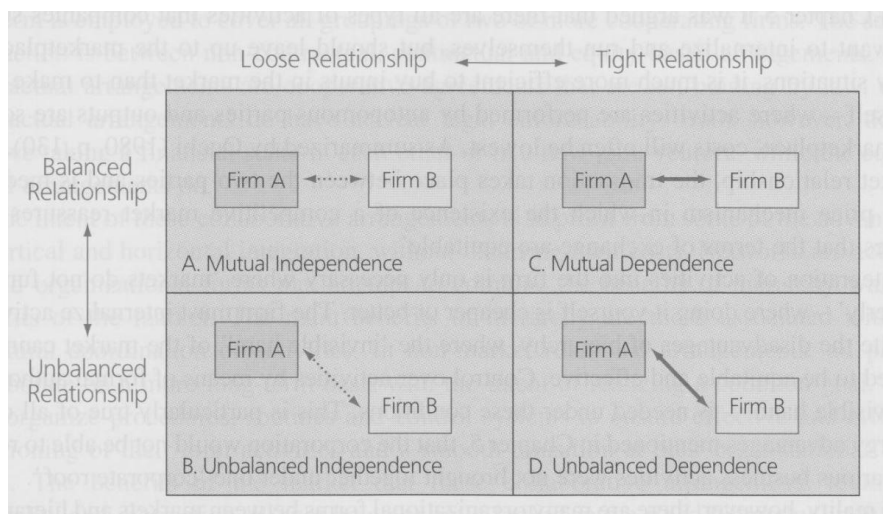


Figure 3 A classification of the power position in the network.

Source: De Wit and Meyer (2014).

Collaborative linkages depict a system of relationships among customers, suppliers, and competitors that in turn conform a market (N. E. Coviello & Munro, 1995). As previously mentioned, an interaction is based on a dynamic process, hence its time dependence. For this reason, networks evolve in an ever-changing market (Gadde et al., 2010). Collaborative relationships are built on interactional activities that contain a great opportunity to share information. Whenever a firm is able to add an extra node to its network, this can be seen as a mechanism for processing, absorbing and classifying information (Ahuja, 2000). According to Burt (2009), structural discontinuities will enable organisations to access novel information from remote nodes within the network, and thus, exploit their advantages (Zaheer & Bell, 2005). Actors can achieve such relationships by joining disconnected clusters of entities and use the information as an advantage to control the others (Ronald, 1992). Hohenthal et al. (2014) explain that a network node, in this case an organisation, can serve as an information hub or a gate keeper. This means that every node has the power to influence the direction and volume of the information flow. Thus, it can create contingencies in the network interaction and structure.

Information can lead to a precious asset for corporations: knowledge. According to Zaheer and Bell (2005), superior networks are those that exploit better the internal capabilities and knowledge of an organisation by accessing resources of other entities. The higher the access to resources the better the performance and effectiveness of the enterprise. Innovation also plays an important role in bridging information and knowledge with network and market dynamics. However, the greater the number of structural holes in the network the more difficult becomes the information transfer (Ahuja, 2000). Thus, the knowledge to innovate becomes more intricate to obtain, and so, the adaptation to the market may be more rigid. Therefore, filling structural holes, for instance by linking network clusters, can help innovation.

Another feature to consider in the networking strategy is the degree of heterogeneity of the network cluster. Goerzen and Beamish (2005) present in their work the advantages of heterogeneity: wider knowledge spectrum, a higher variety in market and technology access, improved better orientation, and a more diversified risk sharing. However, such characteristic can also be counterproductive in terms of information exchange due to differences in objectives or approaches, more difficult communication, and higher likelihood of conflicts. The internationalization level of the network is also an aspect of heterogeneity that needs to be taken into consideration when establishing links with other entities (Ghoshal & Bartlett, 1990). To overcome networking difficulties, firms need to define their strategy in a clear manner, so that they can be autonomous when managing their network.

### **2.1.3 The frame of the Strategy Paradoxes**

This section addresses the three characteristic strategic paradoxes encountered in the networking process. This theory serves as a bridge between the concept of network strategy, internationalization of firms (i.e. MNEs), and the decision-making processes (DMPs) that ultimately redefine the strategy, the network, and the geographical and market spread of the enterprise.

#### **2.1.3.1 Competition & Collaboration**

Competition can be explained as the relation between organisations that work for mutually exclusive goals, thus, their actions can collide generating rivalry (De Wit & Meyer, 2014). Competition results in having a richer market. In this context, companies try to give their best in order to keep customer satisfaction and loyalty. Moreover, competitiveness also requires to keep the power position of the firm over its competitors and suppliers (Porter, 1985). This can be performed by using mechanisms such as negotiation and bargain (Gadde et al., 2010). The effectiveness of an organisation, which is the capacity to acquire resources, is directly related to its bargain position. The latter can be defined as the ability of the entity to exploit its environment for the acquisition of those resources (Håkansson & Snehota, 1989). Porter (2008) states that industry competition defines its structure, and by extension the network shape. Johanson and Mattsson (2015) explain that nowadays firms do not compete on an individual level but on a network level. This means that domestic and foreign suppliers as well as their customers are involved in this competition.

Conversely, cooperation or collaboration consists on working together for the same purpose. Business collaboration presents the advantage of obtaining skills, knowledge, and resources in a shorter period of time than that required if they had to be developed internally (Chan et al., 1997). This means that firms cannot obtain profit from competitive advantages without developing internal and external support capabilities (Küster & Vila, 2011). There are mechanisms that promote this process by establishing a close collaboration relationship, also called alliance, between the satellite entities and the focal firm (Schilling, 2005). Cooperation also contributes to enhance organisation's flexibility by externalizing capabilities and resources. This is particularly interesting for gaining competitiveness in highly changing markets (Zaheer & Bell, 2005). The business level strategy may also demand to set a strategic alliance in order to adapt better to the market and competitors.

Organisations have established research alliances to join efforts towards providing improved products and services to their customers (Schilling, 2005). Such cooperation between partners allowed to develop new technologies and gain knowledge experience (Li Sun, 2009). Hence, networks can be considered as linkages for acquiring potential learning, skills and achieve novel discoveries (Powell et al., 1996). The information sharing and the access to resources such as productive means, manpower or markets can facilitate the increase of barriers for new market incomers (Ahuja, 2000; Mathews, 2006).

### **2.1.3.2 Globalization & Localization**

The international context of an organisation is an important characteristic to be considered in the performance of its business. There is a large set of reasons that promote the internationalization of firms. Their strategy may contemplate a better market adaptation, larger business spread, a quality improvement, higher revenues, stronger customer satisfaction and greater business opportunities (Majkgård & Sharma, 1998). Nevertheless, this process entails the strategic paradox between the localization of business activities to every market, and the globalization of the functions; treating every market from a pragmatic perspective (Morris, 2014). In reference to Easley and Kleinberg (2010), they state that networks have a powerful role in bridging both the local and the global markets. As a result, companies shape their international business expansion model. Morris (2014) presents a categorization based in three types: multi-domestic, global and arbitrage. The author defines ‘Multi-domestic’ as the business expansion that treats every country as a unique market with different customer needs. Conversely, the definition of ‘Global’ is that in which customers of different countries demand similar products. Thus, companies are in a particular market producing standard products/services for different national markets. On the other hand, the category of ‘Arbitrage’ is that concerned in exploiting the differences between costs and quality between countries. For instance, selling products from one country to another because of the reputation of the country label name. In the globalization – localization business strategy firms seek to reduce factors like costs, risks and market competitiveness. Cooperation agreements with other organisations is a tool that enhances this process (De Wit & Meyer, 2014; Gadde et al., 2010; Schilling, 2005). Through this mechanism, companies may desire to provide a more specialized or standardized product depending on their international business spread (Morris, 2014). Hence, networking creates new business opportunities (Küster & Vila, 2011). They also have an impact on the market selection and the mode of entry (N. Coviello & Munro, 1997). Networking processes and how these networks affect the internationalization process are vital for the design of an appropriate strategy in which the value-chain would prevail together with the business model over an uncertain international environment.

### **2.1.3.3 Logic & Intuition**

Collaboration and networking are particularly helpful for the learning of firms (Easley & Kleinberg, 2010; Hohenthal et al., 2014; Kurz-Milcke & Gigerenzer, 2007; Lombardo, 2016; Zaheer & Bell, 2005). Thus, they enhance the decision-making processes (DMPs) and the level of rationality involved in them. As a consequence, the level of intuition or logic in the DMPs as well as the bargain position affect organisation’s effectiveness. Additionally, such organisational effectiveness is managed by forming the context surrounding the firm rather than by planning a future pattern of activities (Håkansson & Snehota, 1989). In other words, the network conditions the extraction of resources of a firm. The higher this acquisition, the greater the power position as the dependencies between firm’s environments are greater. Thus, the firm becomes more competitive when there is a successful networking strategy.

## 2.2 The Path Towards Internationalization

### 2.2.1 Introduction

Internationalization accounts for the level in which a corporation performs its operations outside its home country (Li Sun, 2009). When an enterprise is keen on expanding its business across national borders, it has to consider beforehand the reasons for such expansion, the place in which propagate and the manner to perform it. This is fundamental from the strategy perspective. Morris (2014) describes that a firm may internationalize encouraged by a possible attractiveness to cut costs, the acquisition of new knowledge and an increase of sales revenue. The latter is usually less profitable at the beginning than that at the home market due to the ‘liability of foreignness’ (Johanson & Vahlne, 1977). This means that, in general terms, firms also find barriers to access international markets such as: geographical distance, cultural disparity, a variety of regulations, and several paradoxes, for instance, in terms of reduction of costs and risks (De Wit & Meyer, 2014). For this reason, the creation of an appropriate strategy can lead to a successful internationalization process, since it will take into account all these elements and it will compensate the effects of the paradoxes (ibid). This overall strategy will overcome the great challenges by joining the right reasons with the right plans together with a balanced set of tactics and their subsequent decisions.

Entering foreign markets is a costly process that requires irreversible investments. For this reason, Melitz (2003) observed that firms which had gained knowledge about their own abilities, limits, and productivity inside the borders of their homelands, and before the internationalization process began, were the ones that could be more successful when internationalizing. On the other hand, ventures may encounter overwhelming competitors in their domestic market (Barnett & Hansen, 1996). Such an environment may lead to the end of the weakest firms, thus, allowing the others to acquire the left market share, and hence, becoming stronger. As a result, ‘the survival of the fittest’ can trigger firms to seek to expand their business abroad and, but not necessarily, in other markets (Håkansson & Snehota, 1989).

Li Sun (2009) addressed three main streams of research about the process of internationalization of firms:

- The Eclectic paradigm.
- The Uppsala model.
- International entrepreneurship approach (‘Born Global’).

These three models are presented in more detail in the following sections of this chapter. Furthermore, the literature review about internationalization is completed with the contribution of networks to this regard, since networking plays an active role in the expansion process across international markets.

## **2.2.2 The Eclectic Paradigm**

The eclectic theory was published by John H. Dunning in 1980. It combines a diverse group of economic theories related to internationalization. At that time, it was believed that the internal structure of a firm was one of the most important elements to internationalize successfully (Buckley & Casson, 1976). However, Dunning (1980) added another three dimensions to this statement: ownership, location and internationalization strategies. For this reason, his model is also referred to as 'the OLI-model'. These three dimensions can be seen as advantages that endorse the process of crossing the national borders of a firm (Buckley & Ghauri, 2015). Particularly, the author studied the phenomenon of producing abroad by accessing the market through either licensing, foreign direct investment (FDI), or exporting (e.g. the Uppsala model).

The dimension of ownership is related to the factors that attract most the FDI by generating competitive advantages, for example, reputation, available technology, innovation, or internal organisation model (Buckley & Casson, 1976). The location refers to a new place in which the firm can get settled (Aharoni, 1966). The factors for this to happen can be, for instance, the availability of a specific resource in that region, lower production costs, better tax regulations, etc. The internationalization factor refers to the level to which a company, usually top management, decides to produce internally its products and does not outsource them (Dunning, 1988). In other words, the extent to which the firm manages its entry in the new country internally and does not use any other methods like licensing. The reason for doing this is that the internal access costs are lower than those found in the outer (international) market.

As a conclusion, the Eclectic paradigm encourages a higher interaction between the involved entities – MNEs - to consolidate their network position and to increase their business added value correctly (Dunning, 2000). It can also be understood as a pointer towards the primitive outsource concept between the demand of organisations of having a required level of internal capabilities and the attraction of new investments.

## **2.2.3 The Uppsala Model**

### **2.2.3.1 Contextualization**

The Uppsala model was developed in the seventies and published in 1977 by Jan Johanson and Jan-Erik Vahlne. These two professors were based back then at the University of Uppsala in Sweden, and hence, the name of the model. Their work explains the general phases of the internationalization process of organisations through exportation. Particularly, it addresses aspects like the characteristics of the internationalization process, the level of commitment, which defines the degree of collaboration with other firms, and also the strategy that the studied companies at that time put in practice in order to expand their business abroad.

The model was motivated by the lack of precision of the business theory with respect to the entrance of enterprises in the international market, especially lacking to address cultural differences and the internal status of the internationalizing firm (Zohari, 2008). The literature prior to their work indicated that firms should consider entering in a new international market by analysing the risks and costs based solely on their own resources and the market characteristics (Johanson & Vahlne, 2009). Furthermore, it treated companies as single units that could extend their market share supported by their power position, that is, with the help of their suppliers, subsidiaries and customers. However, the empirical observations gathered by the authors showed an existing different tendency of the Swedish firms (Johanson & Vahlne, 1977). They identified four steps when attempting the expansion in an international market; each one of them indicates a gradual intensification of the activities.

- Step 1: Ad hoc or sporadic exportation activities.
- Step 2: Exportation through a representative or focal point.
- Step 3: Exportation by creating own sales subsidiary.
- Step 4: Get settled and manufacture in the market.

These four steps conform the pattern of establishment of a given company in the foreign market (Johanson & Vahlne, 2009). Concretely, when the maturity increases, as reflected in steps three and four, the internationalizing firms are performing a direct investment in the foreign market (Forsgren et al., 2007), and thus exposing themselves to a higher commitment, and by extension, to a higher risk. The increase in maturity is also intimately connected to the company's internal and external situation, type of business market, the possessed knowledge about such market and the international experience.

The internationalization pattern includes two features that can be seen as the rails conducting such expansion process. The first one is known as the '*psychic distance*' which can be considered as the factors hindering the flow of information (MeanThat, 2013). This can be due to language dissimilarities, cultural differences, and constraining economic and political regulations. In turn, such distance can affect adversely the acquisition of information and knowledge, which are vital for maturing, as well as hindering their entrance in a given market (Li Sun, 2009). The second is the '*liability of foreignness*'. This is defined as the need of a foreign firm to have a specific competitive advantage to overcome the barriers impeding its entrance in a new foreign market. Therefore, Johanson and Vahlne (2009) argue that the higher the psychic distance is, the greater the difficulties are in order to enter the desired market – the greater the liability of foreignness.

Their results show that the degree of internationalization can be described as a function of the geographical diversification and the market commitment (Zohari, 2008). The relationship between the three variables is directly proportional. This is equivalent to saying that the internationalization process will keep growing as long as



the other two variables perform in a similar way. Their work also addresses the positive correlation between market knowledge and market commitment expressed by Aharoni (1966). This fact enabled the authors to create a matrix that establish the relationship between the “state” variable of the company, which is affected by these two factors, and the parameters that “change” such state of the company. The latter refer to the level of commitment with the market and the operation partners, and the current activities that the company is performing. The matrix is depicted in Figure 4.

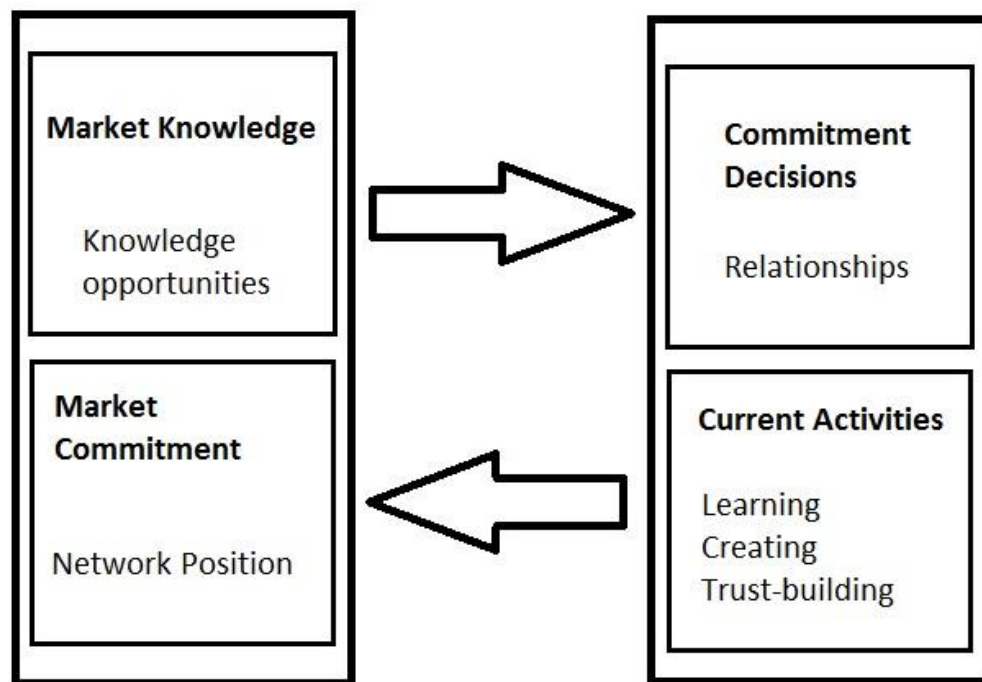


Figure 4 The Uppsala Model. An adaptation.

Source: Johanson and Vahlne (2009)

Note: The text in bold letters are the findings published in 1977. The others correspond to the updated version performed in 2009.

### 2.2.3.2 Limitations of the model

The Uppsala model contains several limitations and assumptions that need to be considered. These limitations need to be adapted to the current business environment as it has evolved dramatically in the last decades. In fact, the model was revisited by its own authors in 2009 in order to update it. In this new version, Johanson and Vahlne (2009) recognise the radical change of the regulatory framework as well as the new economic dynamics. Such variation opens a new perspective for firm’s internationalization strategy. On the other hand, the model laid on the assumptions of uncertainty (lack of knowledge) and bounded rationality (lack of information). This implies that knowledge is created by a growing experience in the international context, and this facilitates at the same time the learning of the organisational actors.

Another limitation is the fact that both researchers carried out their investigation under the umbrella of Swedish companies and the behaviour of the Swedish market abroad (Johanson & Vahlne, 1977). Hence, the results have to be considered within this context. Furthermore, companies are treated in the model solely from the internal point of view towards the exterior. However, nowadays, companies are situated in a network within a globalised world. As a result, firms also need to look at the potential of the market as well as the restraining forces such as competitiveness (Zohari, 2008). On the other hand, the model also ignored other forms of entering the international market, for example, by expansion via franchising (relatively cost saving), strategic alliance, outsourcing or licensing. The spectrum of possibilities for firms to access cross-border markets has widen requiring a new understanding of the context and the internationalization strategy.

### **2.2.3.3 Adaptation to today's market**

The adapted (revisited) Uppsala Model includes the modern feature of 'network model of internationalization'. This may be used to understand the individual perspective of a company within a greater context that conditions its internationalization. The model can be used to strengthen the position of the firm in the network by increasing the opportunity to create new products or deliver new services (Child & Hsieh, 2014). This is due to the fact that a network is seen as a pool of relations that can lead to a source of potential knowledge and learning (Johanson & Vahlne, 2009). The model can also be applied to study the interaction between the internationalization environment and the business network. This is reflected with the inclusion of new state and change variable characteristics in the matrix model (See Figure 4).

### **2.2.4 The 'Born global' Approach**

The Born global Companies are those that operate in an international market from the very beginning. Most of them are small or medium enterprises (SMEs) flourishing in both traditional and high technology sectors. Their resources are, in general, limited (Li Sun, 2009). Thus, they follow a strategy that is focused in controlling assets instead of owning them, so that they save expenses in terms of investments (Font, 2012). The network of these companies allow them to grow in a fast and dispersed fashion in foreign markets. Although the impression given from the outside may be of randomness, their activities are based on a strategy that focuses also on the market and on their contacts, rather than on the managerial skills of their employees (N. E. Coviello & Munro, 1995). In addition to that, Mathews and Zander (2007) identified three milestones that promote crossing the national boundaries. It can be due to the discovery of new opportunities, the access and exploitation of new resources, or the possibility to get more closely with competitors.

## 2.2.5 The Role of Collaborators

The current business environment is not seen as the roots of a tree, but as a galaxy full of stars. The chain with several customers and suppliers has evolved to a network of multiple actors that can interact freely with each other and without any interdependencies. This has generated a wider and more tangled range of possibilities of interaction (Gadde et al., 2010). The network relationships can affect the decisions related to the type of foreign market to be accessed as well as the country(s) and the mode of entry (N. E. Coviello, 2006). A particular theoretical example is taken from the adaptation of the Uppsala model, which was performed in 2009. The revisited version included the dimension of networks. Johanson and Vahlne (2009) considered them as vital mechanisms that can enhance knowledge creation and share, which in turn can result in a higher commitment and an improved trust relationship among the entities within that network (see Figure 4). This means that networks play an important role in the internationalization of firms as well as in their international era.

In the last decades, there has been an extensive research addressing the importance of networks in the internationalization process of firms (Bonaccorsi, 1992; Johanson & Vahlne, 2009; Majkgård & Sharma, 1998). The topics of research varied from relationships between contracted suppliers, customers, and competitors. For instance, Johanson and Mattsson (2015) explain in their book that the success of a firm accessing new international markets is more dependent on the already-established relationships within the current market of activities rather than on the particular new business market and its associated cultural characteristics (N. E. Coviello & Munro, 1995). This implies that networks exert power on focal firms by conditioning their internationalization strategy mode (Castells, 2011). It is their position in such network the one allowing them to possess the initiative to internationalize and the way to perform it.

The role and influence of networks and collaborators in the internationalization process may be different from every industry and from every case. However, networks can act, for instance, as facilitators of this process, they can improve the development of a product or service, provide a higher market share, support in the diversification of activities, and facilitate the bridging to new markets (N. Coviello & Munro, 1997; Kazanjian, 1988). Even though, scholars investigating about the internationalization process are highly concerned about firms established in one country and willing to expand abroad, most of their conclusions can also be applied to MNEs. The main difference is that the latter are already pictured in an international position. However, they can further internationalize by applying the same mechanisms as the ones presented in the literature of enterprises settled in one country.

## 2.3 Decision-making Process and Techniques

### 2.3.1 Introduction

The strategy sets the line to follow, but it is the decisions the ones marking the steps to be able to walk in the lane. The process of making decisions is present in the day-to-day life. It ranges from deciding the strategy, the type of collaboration or the partner to collaborate with. Decisions can strengthen firm's position in the international market (Johanson & Vahlne, 2009). This is due to the fact that they can generate competitive advantage by applying correctly not only the learning but also the power extracted from their networks and the performed market research (Pellegrino & McNaughton, 2015). In general, the decisions in MNEs are goal-driven, planned and rational (Child & Hsieh, 2014). The decision-making process (DMP) is surrounded by a number of elements that define its context. Figure 5 depicts such environment.

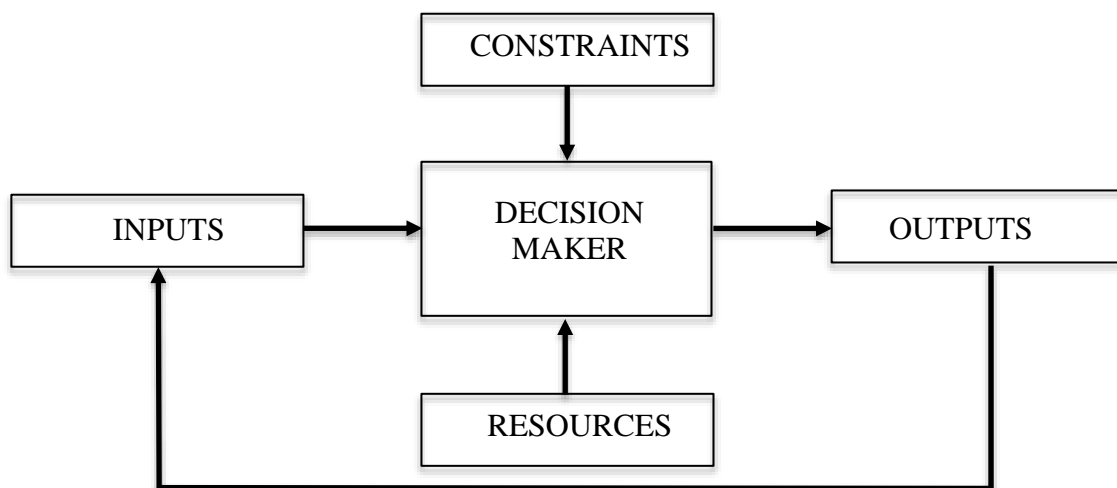


Figure 5 The context of the decision-maker.

The decision-makers (DMs) can face similar circumstances as any organisation, project, activity, or model defining a process (Barto et al., 1989; Henderson & Nutt, 1980; Scott & Bruce, 1995). However, the type of inputs, outputs, resources and constraints vary from one case to another. The input of a decision-maker (DM) is the available information and knowledge to make a decision, the output is the decision criteria itself, the resources are associated to the decision techniques, and the constraints are, for instance, the business environment, or the bounded rationality of the person or group of people taking the decisions (Greenwood, 2015). It is important to note that there is a feedback loop between the outputs and the inputs. Knowledge and learning can be generated in the decision process, thus, resulting in outputs. Later, these outputs can be used as inputs for future processes.

## 2.3.2 Decision-making Process

### 2.3.2.1 Inputs

A DMP is caused by the need of selecting an option that best satisfies the presented situation. For this reason, the process starts by the detection of an anomaly, opportunity, risk or any other factor that may impact the current status of the circumstances. Once the awareness about this deviating factor is raised, the detection process evolves to a situation in which the individuals start gathering information in order to understand better the flaw and to have a greater knowledge about it (Pellegrino & McNaughton, 2015). When the analysis of the situation begins, one has to consider the cost and the value of information as well as the resources providing it. Particularly, networks can be important links for data gathering (Child & Hsieh, 2014). In a second stage, the focus moves towards the mechanisms of information transfer. This aspect is more related with communication, data access, retrieve codification, and information type (Hohenthal et al., 2014). The latter can be essential for defining the level of network attachment and decision-mode (Child & Hsieh, 2014) as depicted in Figure 6. DMs should concentrate on the actions that generate a better quality understanding of the situation and the deviation, thereby generating consistent possible measures (Goerzen & Beamish, 2005). According to Hohenthal et al. (2014), the preliminary or input process decision-making phase needs to be accompanied by knowledge about the customers, the competitors, the network, and internal knowledge about both the market and previous international experience.

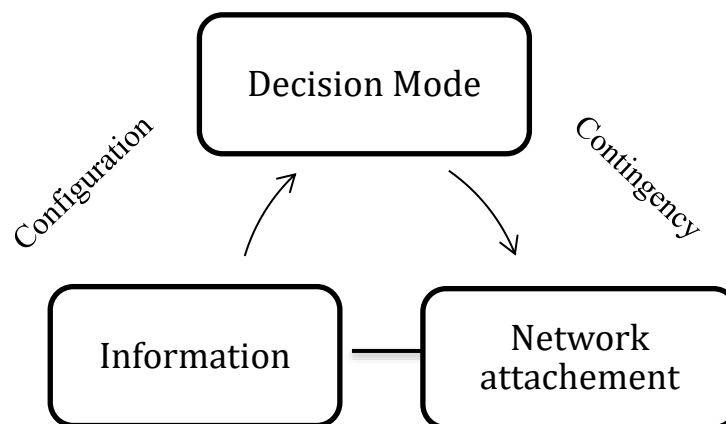
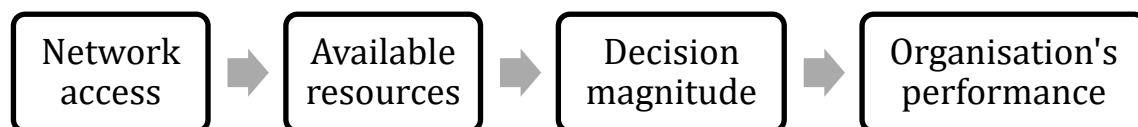


Figure 6 Decision mode. Method & Logic.

Source: Child and Hsieh (2014). An adaptation.

### 2.3.2.2 Resources

The range of available resources for DMs can be quite extensive. These impact the different decision techniques and the factors that determine the selection and application of the chosen method (Simon, 1959). Organisations may take into account factors such as innovation, market identification, or product differentiation in order to generate a decision criteria that will be used to establish a collaboration framework (Chen et al., 2014). Resources can also dramatically impact the mode in which firms learn (Küster & Vila, 2011) and internationalize (Chen et al., 2014). As a consequence, the performance of the organisation is related to the already made decisions, the available information and data, and the collaboration with other entities. Figure 7 provides a visual depiction of the process.



*Figure 7 A relationship between Network and Performance.*

Source: (Chen et al., 2014; Håkansson & Snehota, 1989; Küster & Vila, 2011).

The range of DMPs can be bounded by the level of intuitiveness or rationality of the decision. Heuristic or intuitive decisions are employed when time, knowledge and sophisticated tools are outside the range of practitioners (Kurz-Milcke & Gigerenzer, 2007). As a result, heuristics depend to a great extent on the skills of the DM (Lombardo, 2016). These decisions are constructed under the basis of simplicity. For instance, heuristic tools can be a preliminary selection of alternatives based exclusively on the identified ones on the spot. To increase the validity of the outcome, Gigerenzer and Goldstein (1996) suggest to follow three steps related to Lexicographic Heuristics: search, stop, and decide. The individual starts by looking for attributes that could comply with the identified deviation. The process finishes when an attribute is strong enough to discard the other alternatives. It is, then, when the practitioner makes a decision and chooses such alternative. The selection process can be based on figures, plots, quick mathematical formulas, situational hypothesis, etc.

In a second phase of the decision-making formulation, this may evolve from a heuristic to a probabilistic nature. The decisions constructed on probability count, in general terms, on a more evaluated approach in which sophisticated tools and more robust mechanisms are used. Examples of this type of formulation can be stochastic simulations, discrete probabilistic choice models and decision trees. The latter conforms an important field of research. Trees are treated as networks, thus, complex algorithms are applied in order to model them and extract the information about their performance and extension (Quinlan, 1990). Decision trees constitute a powerful tool to obtain a consistent path of possibilities of events and their subsequent integrated tactics (Dechter & Mateescu, 2004; Maguire Jr et al., 1994). Despite the validity and correctness of the applied methods, the outcome is uncertain as these methods are

based on a probabilistic nature. Hence, there is certain likelihood of falling in error of prediction. The third stage in the rationality scale of decision-making process are those decisions having a sound basis in terms of input information and a correct environment frame. They are usually referred to as deterministic or informed decisions (Greenwood, 2015). The common tools applied in this case can be numerical modelling, such as mathematical optimization or linear programming, sequencing, and scheduling. In this case, the practitioners work under the assumption of having full information and detail about the deviant situation and they try to perform a data fit through a computer-aided process.

### **2.3.2.3 Constraints**

Any DMP contains intrinsically a determined amount of rationality. As Kurz-Milcke and Gigerenzer (2007) point out, there are three key ideals towards which rational theories target: optimality, omniscience and universality. Optimality aims to obtain the best option. Conversely, omniscience assumes that the gathered information is complete and consistent (Simon, 1959), and universality understands rationality as unique. These three ideals support the four rationality concepts defined by Gigerenzer and Engel (2006), which are: unbounded rationality, optimization under constraints, cognitive illusions, and ecological rationality.

Unbounded rationality considers the ideals of optimality, omniscience and universality (Kurz-Milcke & Gigerenzer, 2007). Furthermore, these assumptions are also made by classical economic theory in relation with decision-making terms (Greenwood, 2015). Simon (1959) presents rational agents as users of optimisation basing their calculations on perfect competition and knowledge. However in reality, DMs face a bounded rationality reinforced by limited capacity cognitive knowledge, available information and resources, deviation traceability and process time. Relatedly, optimization under constraints drops the assumption of omniscience but keeps optimality. This means that DMs need to look for information and they need to know when the saturation point of data retrieve has been achieved (Lincoln & Guba, 1985). On the other hand, cognitive illusions can be associated to heuristic decision-making modes, in which it is not required a demanding level of rationality (Gigerenzer & Engel, 2006; Gigerenzer & Goldstein, 1996). Finally, ecological rationality envisions decision agents as having a role in which the module reality under a limited search frame and their outcome targets to satisfy rather than optimize (Kurz-Milcke & Gigerenzer, 2007). This rational concept is more connected to the actual working mode of practitioners. Other factors that may constrain the decision mode can be the skills and cognitive performance of the agents, the transfer capacity of knowledge (Child & Hsieh, 2014), the sequence of actions and events (Barto et al., 1989), the decision process (Aharoni, 1966), the market selection and mode of entry (N. E. Coviello, 2006), and the international strategy of the enterprise (Buckley & Ghauri, 2015). Together, these factors represent a network of driving and restraining forces that influence the success of the final decision.

#### **2.3.2.4 Outputs**

The output of a DMP is the decision criteria itself. In the wide range of possible decision modes and techniques, there is a common thread between all of them. Deviant situations are addressed in several steps under the constraints of time, knowledge, and available resources. In the first stage of this process, the problems or opportunities are identified (Gigerenzer & Goldstein, 1996). After this, a phase of data gathering follows. In this case, the cost and value of information prime remarkably. Once the situation is framed, there is an analysis with the generation of several options that can be based on a large amount of parameters (e.g. risk adversity). After that, there is a rational evaluation of alternatives and the selection of the desired one (Child & Hsieh, 2014; Kurz-Milcke & Gigerenzer, 2007). It is here, where the different decision-making styles of the practitioners play an important role for the correct development and success of the decision. Furthermore, the acquisition of skills and knowledge on behalf of practitioners and organisations can serve as an important background experience for future DMPs.

#### **2.3.3 Decision-makers' Practices and Partner Interaction**

In the DMP, it is vital to consider not only the available techniques and the present context but also the human perspective standing behind them. The skills of practitioners constitute a valuable asset for all enterprises. Learning from experience, or in other words, learning from the past and current activities can build knowledge about the market in which firm's operations are being developed (Johanson & Vahlne, 2009). Nevertheless, learning and building such knowledge is a process that may be extensive in time. In similar terms to the ones expressed in Figure 6, the level of information and knowledge of DMs can affect the types and modes of the decisions as well as help to build the trust and commitment required towards network partners (Håkansson & Snehota, 1989; Johanson & Vahlne, 2009; Li Sun, 2009; Nutt, 1984). The greater the learning and commitment, the more fruitful the process may become.

Knowledge and learning of the DMs can be classified as part of the resources used in the DMP (see Figure 5). Additionally, the generated knowledge in such process is considered as an output that can be lately used as well as input for future DMPs. There is an extensive list of factors that depending on their nature and the applied strategy may trigger or hinder the learning process of DM. These contingency factors (see Figure 6) can be, among many others, knowledge management policies, knowledge transfer procedures, organisational structure and effectiveness, product and service portfolio, network capacity for information sharing, and the cost and value of such information (Barto et al., 1989; Castells, 2011; Chen et al., 2014; Ghoshal & Bartlett, 1990). Furthermore, there are other contingency factors that are directly dependent on practitioners, for instance: their international experience, their congenital abilities, learning modes, knowledge domain, and their decision-making styles (N. E. Coviello, 2006; Child & Hsieh, 2014; De Wit & Meyer, 2014; Easley &



Kleinberg, 2010; Pellegrino & McNaughton, 2015). In the particular case of networks, their role is found to be key in reducing information asymmetry (Child & Hsieh, 2014). Thus, they improve the effectiveness of information transfer and coding, which ultimately leads to a more efficient learning process.

Li Sun (2009) and Hohenthal et al. (2014) explore the concept of the value curve in relationship with the knowledge about the business in foreign markets. The value curve is a diagram used to compare the offered products or services over a range of key success factors. It depicts the performance of the organisation across established targets (Chan Kim & Mauborgne, 2004). A higher knowledge about the business market, the concerning external factors, and the available information produce a more realistic and accurate value curve. When DMs possess a clear representation, then decisions are taken upon a common framework, thus enhancing the consensus and the quality of the outcome (Ghoshal & Bartlett, 1990). A strategy constructed under the light of the value curve may consider cultural, economic, political and technological barriers (Li Sun, 2009). In other words, the factor of the psychic distance can alter the DMP as well as the learning of the DMs. Hohenthal et al. (2014) express that business development in an international market requires not only international experience and knowledge about the network, but also, knowledge about the characteristics of the firm, the customers and the competitors.

The analysis of these sources of knowledge has to be accompanied with the understanding of the term used by Pellegrino and McNaughton (2015, p. 458): “foci of learning”. This is related to the concepts from which practitioners learn about, for example: available technology, innovation mechanisms, product features, international business, and current market features. The same author states that learning process is a result of the interactions between the learners and their knowledge. Therefore, experienced managers are essential in boosting the DMP and its associated learning outcome (Kazanjian, 1988). Moreover, more relevant decisions need to count on a more explicit information that contains a greater scope (Child & Hsieh, 2014). Kogut and Zander (1993, p. 626) understand MNEs as a “repository of knowledge” in which the information travels throughout an internal organisational network. The accessibility to that information, and by extension, the creation of knowledge and learning, depends upon the dimensions of traceability, complexity, codification, and teachability. The latter can be confined under the tacit-explicit knowledge transfer scheme introduced by Nonaka et al. (1996). Another important factor in the DMP is the decision-making style of the practitioner. Individuals can adopt different approaches when gathering, structuring and analysing the data that they will use for making a decision (Scott & Bruce, 1995). Vroom and Yetton (1973) present an extensive analysis of the degree of participation and engagement of DMs and their styles: participative, democratic, and authoritarian. Hence, humans act as a filter in the DMP, since they have the last word in taking a decision and in the way they do it.

## **3 Research Method**

### **3.1 Research Background**

The current research is devoted to explore the role of collaboration between companies with a multinational presence and within an international context. As a result, the investigation aims to enlighten how the studied companies make use of their international network collaborators to consolidate their position in their business market. Thus, the research connects collaboration with internationalization from the perspective of the description provided by the research participants. In the end, the research contributes with implications for managers in terms of internal procedures for learning and collaborating. These implications resulted from the analysis between theory and the described practice.

### **3.2 Research Design**

As exposed in Chapter 1, the theory was selected due to the need of studying the relationship between the role of collaboration and internationalization, together with the associated decision-making processes. The first two topics were chosen since Goerzen and Beamish (2005) consider them to have a direct impact on the economic performance of an enterprise (see Figure 1), and also, since the studied firms are operating internationally. The third topic was introduced in order to complement the study from the understanding of the respondents. Hence, the research provides a human perspective to the analysis of the addressed topics.

As an overview, the research was designed according to a deductive approach. Theory served to extract the elements that were tested in practice. For this purpose, the used research tool was a survey subsequently divided in two parts: a multiple-choice questionnaire with multiple-choice questions and a set of open questions. Moreover, two semi-structured interviews were carried out to complement the surveys. Some of the extracted data were used quantitatively to generate some plots and figures that helped identify the position and features of the studied firms. Nevertheless, the most vital contribution of the study was made through data extracted qualitatively. The open questions and interviews allowed to comfortably delve in the research topic, and hence, obtain more voluminous information from the respondents. As a result, the research design is mainly based on a qualitative method.

The study has an interpretivist epistemological position. This is due to the fact that the study aims to explore and interpret a social world. The interpretivist method uses a logic that focuses on humans and how these make sense of their world (Bryman, 2015). However, N. E. Coviello and Jones (2004) address in their work the need of developing a method that combines both positivist and interpretivist epistemological approaches. The positivist approach is generally applied in research within the field of natural sciences, whereas the interpretivist epistemology is generally applied in social

sciences. Furthermore, the interpretivist epistemology usually implies an inductive research method, meaning that, theory and conclusions emerge from the extracted data (Bryman, 2015). Nevertheless, this research partially complies with this last statement, since the theory served to construct the research tool that tested reality, hence, employing a deductive approach. The extracted empirical data was used to discuss the described practice with the existing theory about the addressed topics. The result of this process was to obtain valuable conclusions that could further understand the knowledge provided by such theory.

This study can be framed under the ontological categorization of critical realism. This frame understands that the testimony of people is a mirror of reality (Archer et al., 2013; Danermark et al., 2001). Hence, the researcher does not need to question about the accuracy of the data given by the research participants. In connection to qualitative researches, they seek understanding, revelation and exploration of similar situations (Hoepfl, 1997). For this reason, the events are also subjected to the researchers' interpretation, flexibility, and language which, in turn, shape the studied reality. The design of the survey document was primarily built on two investigation lines: first, to detect common characteristics and practices among the studied organisations and second, to establish the possible correlations between these elements.

### **3.3 Research Structure**

As previously mentioned, the research tool is built on a multiple-choice questionnaire followed by a set of open questions and two semi-structured interviews. The format of the first part of the survey – the questionnaire – contains a set of 22 closed questions with multiple-choice answers. This format has several advantages. It allows respondents to complete questions more quickly and easily without missing data between one another, and improves the process of comparing the given answers. However, this model can result in a higher restrictiveness in the range of answers, less spontaneity of the respondents and it leaves a gap for variation in the interpretation of the questions (Bryman, 2015). The main purpose of this part is to extract data for a definition and comparison of the characteristics of the studied firms.

Conversely, the open questions and the semi-structured interviews, or second part of the survey, constitute the main contribution of the research tool. Structured open questions are often used in social surveys. They reduce the variation, and by extension, the error between the survey interviews, since the set of questions are the same in all cases. Furthermore, it enables the researcher to process the data more easily and lower variability in the coding (Bryman, 2015; Whittaker, 2012). In this case, the second part of the survey was composed by a set of 21 open questions with free-essay-type answers. The overview of this format type is that of having a fixed and standard set of questions for all respondents in which each participant gets the same questions, with an equal format and in the same order (Bryman, 2015). This part

was built according to the features that delimit the scope of the research. These elements are (also found in page 3):

- Multinational Enterprises (organisation size in terms of employees).
- International context (geographical spread).
- Collaborating and partnering (business interrelations).

As a result, the open questions were divided in five thematic blocks in which the above features were embedded: the need of collaborating, the international context, corporate strategy and power distribution, setting an alliance, and partnering and internationalization. The survey template can be found in Appendix B.

### **3.4 Data Collection**

The target group of research are already established MNEs. This means that they have already internationalized and possess certain knowledge about the internationalization process and the international business market. In spite of this fact, they may be still growing or planning to grow further. Hence, the data collection targets to analyse how the network partners support that business development process and what are the decision making modes that enable such process to become successful. There was not any selection constraint about company size or business sector, since collaboration is a realm belonging to all organisations, independently of the type of their activities. Nevertheless, in this case, the studied companies involved functions within the domains of Engineering and Technology addressing the sectors of Aerospace and Defence, Industrial applications, Oil, Mining and Chemicals, and IT-Telecommunications. As a result, their business activities are mainly oriented towards manufacturing and production (M&P), and research and development (R&D). Furthermore, the fact of setting a unique country of research would have limited the radius of action of MNEs themselves, meaning, that analysing several MNEs in the same country could be somehow restrictive. Thus, the intrinsic international character of this type of enterprises allowed to extend the research to participants sitting in a worldwide level.

The approach to select the candidates was based on the relevance of these to be valuable for the research question (Hart, 2005). The selected participants were considered to have enough knowledge and expertise to complete the survey, since they were required to have career experience in MNEs independently of their job position, geographical location, age, gender, etc. This selection approach is known as judgemental sampling, which is constructed on an interpretative criteria of the researcher (Whittaker, 2012). The research sample is composed by *10 surveys* and *2 interviews*. The functions of the research candidates in the organisation vary from top level managers, sales managers, and middle-low level engineers. Additionally, the surveys were carried out with people situated in different regions of the world.

The method for collecting the data was performed by sending by e-mail the survey. In this manner, the respondent had time to read, reflect and write calmly, allowing the answers to be better formed and argued. The estimated time for completion of the survey was around one hour and a half. After completion, the participant sent back the finished document. Then, the data was analysed by processing every question of the multiple-choice questionnaire and by generating a text document with bullet points that provided a synthesis of the open question and interview parts. If the person asked for further clarification, needed to comment something or discuss the survey, then phone-call or video-call (oral conversation) took place. The notes coming from this part were also integrated in the processing of the replies of the surveys. The format of the conversation was built upon already formulated questions, so that the semi-structured interview condition was preserved and satisfied.

Table 1 provides further details about the research participants and the extent of the interaction to obtain the data.

*Table 1 Research sample overview*

#	Position	Identification	Region	Written Survey	Call
1	Sales Manager	SM1	North America	Yes	Yes
2	Sales Manager	SM2	Europe	Yes	No
3	Sales Manager	SM3	Europe	Yes	No
4	Sales Director	SD	Asia-Pacific	Yes	Yes
5	Engineer	ENG1	Europe	Yes	No
6	Engineer	ENG2	Europe	Yes	No
7	Engineer	ENG3	Europe	Yes	No
8	Engineer	ENG4	Europe	Yes	No
9	Head Department	HD	Europe	Yes	No
10	CEO	CEO	Europe	Yes	No

### 3.5 Research Evaluation

The evaluation of social research is subjected to the criteria of reliability, replicability and validity (Bryman, 2015). However, these three are essential in quantitative research, but not in qualitative research (Golafshani, 2003). Stenbacka (2001) argues that the concept of reliability, which is related to the replication of a study, is misleading in qualitative terms. Lincoln and Guba (1985) go beyond and establish a criteria based on concepts such as credibility, neutrality, consistency and dependability. This is due to the fact that any qualitative study aims to create understanding (Stenbacka, 2001). Similarly, the validity of a qualitative study can be judged better in terms of quality, rigor and trustworthiness (Golafshani, 2003). Since validity is related to causality and generalization.

The study also had several limitations. Qualitative research, in general, is difficult to replicate. It is subjected to the researcher criteria, the studied topics may be abstract,

generalization is not applicable as the samples may not be representative for all cases and also there may be a loss of context and narrative flow when interpreting the extracted data (Bryman, 2015). Additionally, the survey was made up of questions that could condition somehow the answers of the respondents due to the fact that they may be interpreted differently. In order to minimize the variations of these possible cases, questions were written as clear as possible in an open-answer format, additional blank space for the candidates to write freely their ideas and comments was provided at the end of the survey, and the participant had the possibility to go for an oral interview with the researcher.

These three mechanisms enhanced research freedom for both parts. They also helped to mitigate likely misinterpretations as well as avoided redundancies in the answers (Hart, 2005). Having a common survey document makes all the replies fall inside the desired research scope. There was neither reiteration nor evolution of the research form as surveys and interviews were carried out over time (i.e. no research scope creep). Therefore, the answers grasp all points of the investigation, although every sector may be more focused or interested on some of the studied matters. Furthermore, the study is subjected to the fact that the participants are players, but in a second plane. They can only describe their perception and understanding of the situation, but they cannot provide the complete vision of their companies. Besides, their perception impacts the criteria in the way they answer the questions. For instance, in the case of a question to mark some feature according to a scale. It may happen that what for one is 'high' for another can be 'very high', even though both may actually consider it equally important. Another example is that two people sitting in the same company differ in the way they provide the data about the features of their organisation, or, for instance, the fact that English may not be the mother tongue language of some respondents, and hence, the quality in which they participants respond to the questions may be limited.

The ethical considerations of the study included anonymity, confidentiality and the right to withdraw at any time for the research participant. The opportunity for the candidate to interact with the researcher was also provided by allowing questions and feedback comments. Also, the identity of the studied firms have been kept anonymous.

The results of this research cannot be generalized (external validity) to any specific business sector, since the studied firms are in different sectors within Engineering and Technology, and also because the number of studied companies (eight) is small. However, the study reveals how a variety of multinational firms cope with their network collaborators in their respective business development, and also the factors and practices that trigger these collaboration strategies.

## 4 Empirical Results

### 4.1 Introduction

This chapter is devoted to the presentation and analysis of the empirical results of the research. The study was performed by using a survey tool composed by a multiple-choice questionnaire and a set of open questions followed by two semi-structured interviews. There was a total of 10 participants positioned in various levels of the organisational hierarchies of 8 different companies. There are top level managers, sales managers, and middle-low level engineers (see Table 1). The data was obtained by sending via email the written surveys and allowing the respondents to have enough time to reflect about and write their answers. Two of the participants were also willing to carry out an additional oral interview based on the questions. The contributions of these meetings were integrated in the qualitative part of the study together with the answers coming from the open questions.

This chapter is constructed upon two main threads of data analysis. One corresponds to the more qualitative part. In this case, the data was processed within the already-presented three features that delimit the scope of the research, and then, it has been presented in connection with the theory of Chapter 2. The other line of analysis is more related to the quantitative aspect of the study. Here, survey participants were given a closed set of answers to the proposed set of questions. However, they were free to select more than one option within this set of answers. The data gathered by this method is presented in charts and tables throughout this chapter.

### 4.2 Overview and Assessment of the Companies

This section of result provides a general classification of the studied enterprises. Hence, the first step of the analysis was to look at the type of business of the firms. Figure 8 presents such context. The proportions are built on the number of performed surveys.

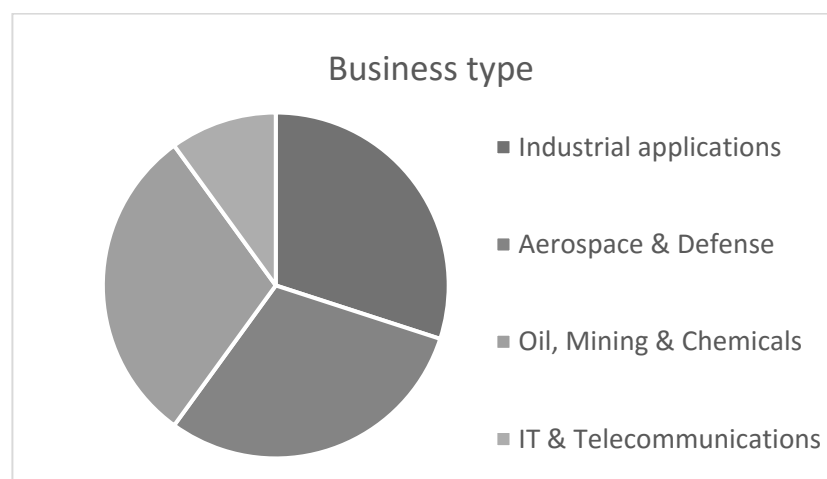


Figure 8 Studied business types.

Within these business fields, most of the studied firms are dedicated to activities related to Manufacturing and Production (M&P) as well as Research and Development (R&D). Thus, the studied companies fall inside the domains of Engineering and Technology.

Additionally, the age of the company denotes the maturity in terms of business success, as it is related to its survival. The age is also indicator of the consolidation process in the international market. Hence, it could be used to benchmark the geographical spread of the studied firms against time. Figure 9 represents the age of the studied firms.

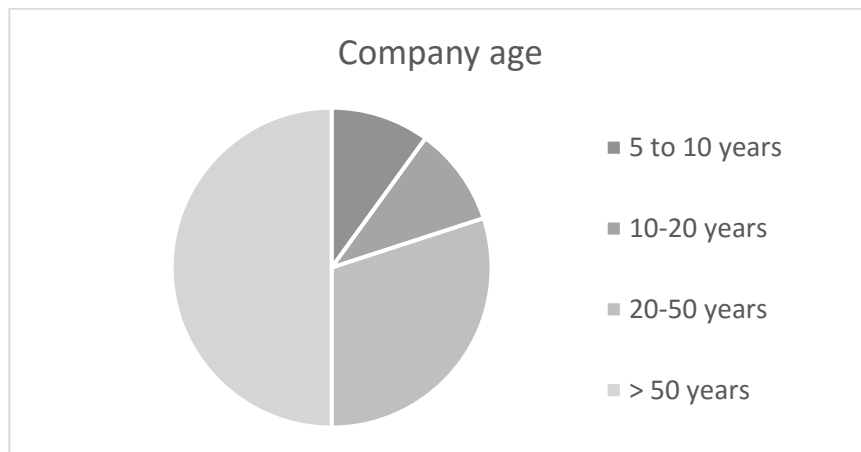


Figure 9 Age of the studied firms.

Half of them have an operational life of more than 50 years and 80% are more than 20 years old.

Figure 10 presents the geographical spread of the addressed firms, which is related to the countries where they perform business.

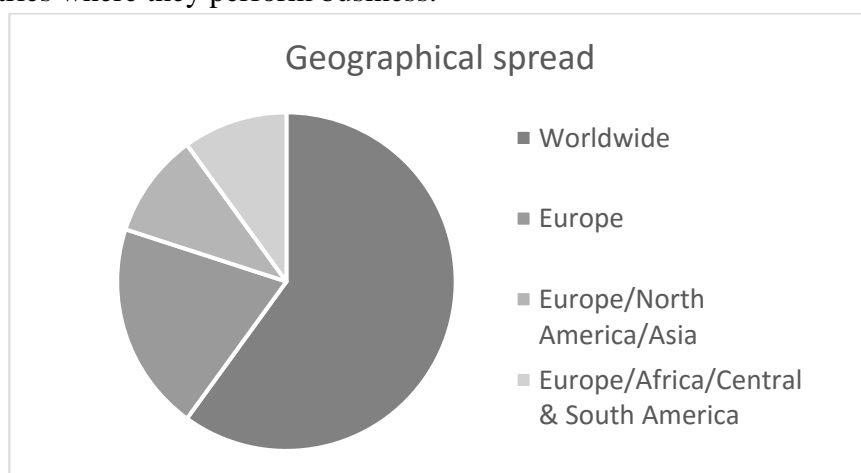


Figure 10 Geographical spread of the studied firms.

60% of the studied firms operate worldwide and almost 80% can be categorised as multicontinental enterprises.



In connection to the international presence of firms, participants were asked to indicate the international business spread of their firms, that is to say, the number of countries in which they have collaboration. This can be related to the countries that report revenue to the company (see Figure 11).

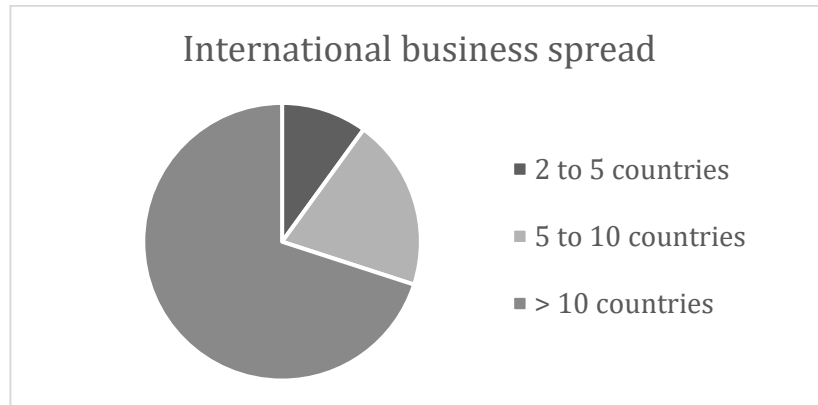


Figure 11 International business spread of the studied firms.

The range of spread can also be complemented with the size of the company. Figure 12 introduces these data.

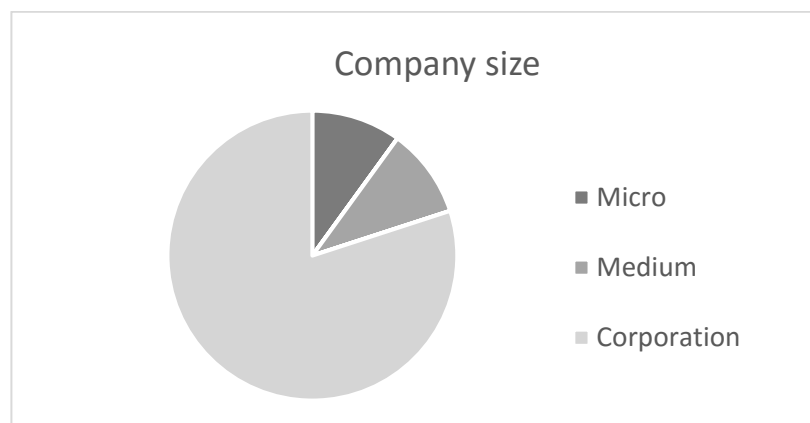


Figure 12 Number of employees of the studied firms.

In similar terms, three out of four are considered as ‘Corporation’ meaning that the number of employees is above one thousand people. The figures for this classification were extracted from the book of Bwalya et al. (2014) in which there is a definition of the business size for companies in Europe (see Figure 13).

	Australia	United States	EU
Minute/Micro	1-2	1-6	<10
Small	<15	<250	<50
Medium	<200	<500	<250
Large	<500	<1000	<1000
Enterprise	>500	>1000	>1000

Figure 13 Definition of company size.

Source: Bwalya et al. (2014). An adaptation.

Another studied characteristic was the organisational distribution of the company (see Figure 14).

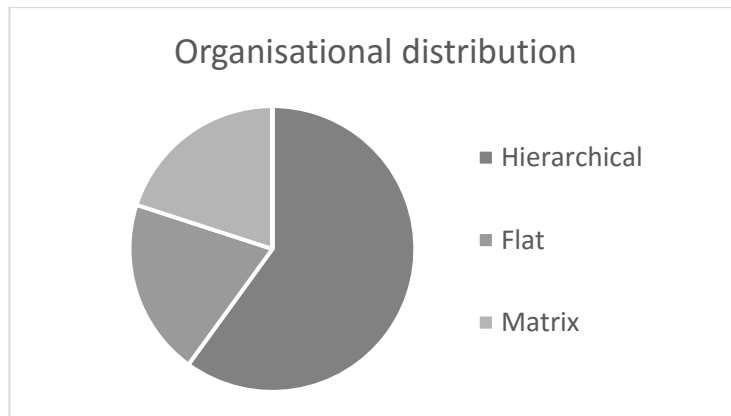


Figure 14 Organisational distribution of the studied firms.

It is important to note that, even though large MNEs can perform as a multi-departmental structure with different business units, none of the research participants saw their company as a decentralized entity composed by autonomous teams. What is more, all the organisations are built upon a defined structure (e.g. matrix, flat or hierarchical). Hence, they rely on a strategy based on rigorous control with an established infrastructure and defined interaction channels.

In connection to the previous feature, the organisational distribution of the entity is related to the organisational structure in terms of the level of project practice. The latter can be seen as a strategic choice of the company to tackle its tasks in order to achieve its goals. Figure 15 illustrates the company structure.

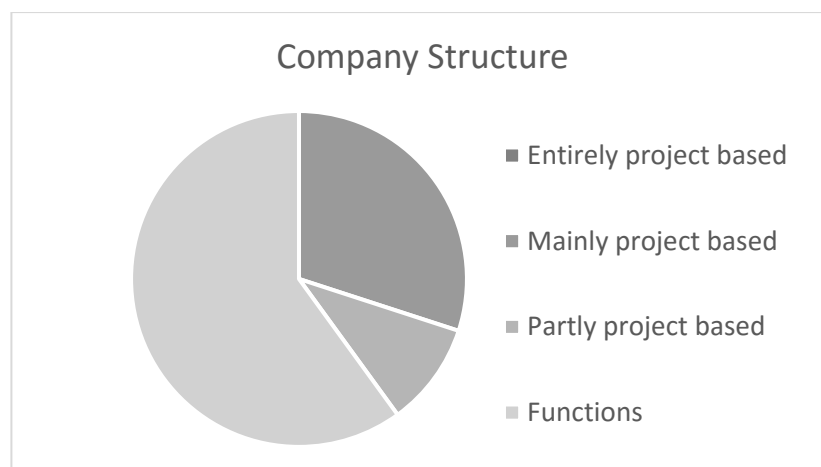


Figure 15 Structure of the studied firms.

A majority of the studied firms are functionally based, followed by those structuring their business mainly around projects. None of the addressed firms relies exclusively on projects.

The last studied parameter was the strategic choice of the studied MNEs to address the global-local paradox by the product solution they offer (see Figure 16).



Figure 16 The business solution of the studied firms.

A large majority of the addressed firms provide a global solution to their customers, which means that customers situated in different countries demand similar products. Nevertheless, none of them applied the arbitrage model.

#### 4.2.1 Summary of the Most Common Firm Characteristics

Table 2 gathers the features of the studied companies that were most commonly found.

Table 2 Most common characteristics of the studied firms.

Number	Most common characteristic	Category
1	Business type	M&P – R&D
2	Company age	More than 50 years
3	Company size	Corporation
4	International business spread	Worldwide
5	International Presence	More than 10 countries
6	Organisational distribution	Hierarchical
7	Company structure	Functional
8	International business expansion	Global

As a result, the investigated firms were devoted to activities related to M&P and R&D. Six out of eight were large in size, old in time, experienced and consolidated in the market, with a strong international dependence, with a defined structure and functionality, and offering a global solution to their customers.

## 4.3 Cooperation and Internationalization

*“The market type and the project nature can affect the network mode”* - Sales Manager 1

In the business strategy of MNEs, it is important to analyse the parameters that connect the international presence of the firm with its cooperation strategy. As exposed in Chapter 2, both dramatically impact the performance of the organisation.

### 4.3.1 Some of the Reasons for Developing International Cooperation

Figure 17 shows, according to the research participants, the causes of their companies to seek collaborators abroad.



*Figure 17 Some of the reasons for seeking international collaboration of the studied firms.*

The research participants marked that their companies seek international cooperation to increase their market opportunities, outsource services, consolidating their network and market positions, and increasing their internal knowledge (i.e. knowledge expansion). The HD and the SD also pointed that a balanced combination between networking and internationalization can generate a precious non-tangible asset for improving business, project and product quality, cost and efficiency. Furthermore, the SM1 said that this equilibrium can help to improve the adaptation to an ever-changing market in which there is a high competition. This can be achieved by increasing the rate of production, while reducing costs.

The SD, SM1, SM3, ENG4 and the CEO stated that their enterprises try by internationalizing to diversify their portfolio, adjust their presence to the business demands (i.e. dealing with global companies require global presence), and adequate their product lines. On the other hand, the HD mentioned that networking and internationalization generate added value to the firm, that is, both encourage the identification of new value fields. Furthermore, according to SD, SM1, SM2, and

SM3, these two elements increase the international brand recognition, strengthen customer loyalty, and improve reputation which is especially needed in highly competitive markets, for example, by following international standards and becoming a certified company. They also increase the market share, help to adapt to local markets, consolidate the position of the company or capture new markets yet to be exploited. As a result, all these reasons target to assure long-term business.

### 4.3.2 Resources for International Cooperation

Respondents were also asked to indicate the resources that facilitate the effects of internationalization. The answers are shown in Figure 18.



Figure 18 Resources for internationalization of the studied firms

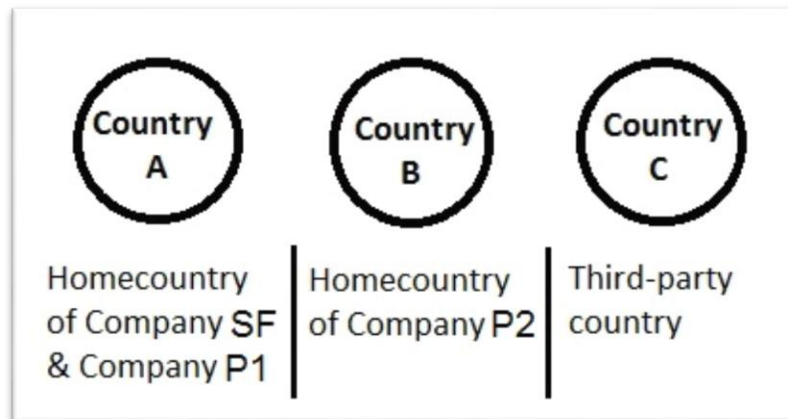
According to the above presented results, the two mechanisms that most facilitate the effects of internationalization are primarily based on new market opportunity identification and the desire of achieving superior performances. Furthermore, the fact of gaining market recognition was not selected as a parameter that boosts the expansion abroad. However, the enterprises of SD, SM1, SM3, ENG4 and CEO look at this feature when selecting collaboration partner. It is important to note that partner is a term used to refer to those firms that establish a defined collaboration link with the focal entity.

### 4.3.3 Geographical Spread of Partners

Another parameter to analyse is the relationship between the partner origin/location and the country in which both the studied firms and their partners make business. To address this question, research participants were given the following data:

- Company SF = Studied firm.
- Company P1 = Partner 1.
- Company P2 = Partner 2.
- Country A = Home country of studied firm and partner 1.
- Country B = Home country of partner 2.
- Country C = 3rd country different than the ones of the studied firm and its international partners.

Figure 19 provides a visual description of the above information.



*Figure 19 Geographical spread of collaboration network of the studied firms.*

After this, the respondents were presented a simplified set of possibilities for establishing a partnering connection in order to perform international business. The possible options were the following:

1. Companies SF & P1 partner and make business in country B or in country C.
2. Companies SF & P2 partner and make business in country A.
3. Companies SF & P2 partner and make business in country B.
4. Companies SF & P2 partner and make business in country C.
5. Companies SF & P1 & P2 partner and make business in country A or B or C.

Respondents were free mark more than one option in this question. The results are presented in Table 3.

Table 3 Geographical partnering spread according to the research participants.

Identification	Option 1	Option 2	Option 3	Option 4	Option 5
SM1					X
SM2	X	X	X		
SM3	X	X	X	X	X
SD			X	X	
ENG1					
ENG2	X	X	X	X	X
ENG3		X	X		X
ENG4	X	X	X	X	X
HD					
CEO	X				
<b>Total</b>	5	5	6	4	5

As it can be seen in Table 3, there is a certain disparity in the results. Every option was marked at least once and also approximately with the same frequency. As a matter of fact, it can be said that the geographical location and the country of origin of the companies do not necessarily hinder the possibilities of collaboration. Hence, the partner selection may not strictly depend on the location but on other more significant factors. For example, ENG3 mentioned that a multicultural environment always enriches the values of the company.

#### 4.4 Cooperation Strategy and the Decision-making Process

*“A partner today can become a competitor tomorrow”*. - Sales Director.

The aim of this section is to analyse the link between cooperation strategy of the studied entities and its collaborators, and the nature of the DMPs that lead to those business interrelationships. Thus, in order to formulate the cooperation strategy, one needs to set the aims of collaboration. Survey and interview participants denoted that collaboration helps to achieve superior performance of products, improve productivity and profitability by saving time in delivering results (higher man power), get to complete targets and objectives that could not be otherwise performed individually, allow to capitalize new resources such as external expertise and experiences, new methods for tackling tasks, and benchmark different solutions to the same problems. Conversely, when they were asked about the benefits of collaboration, they underlined the need of having a mutual growth and both-side adaptability conducted by a shared strategy.

#### 4.4.1 Building the Collaboration Links

The next step of the analysis leads to defining some of the sources for finding collaborators in the network in order to carry out new business activities. Figure 20 shows the result of those mechanisms that were presented to the research participants.

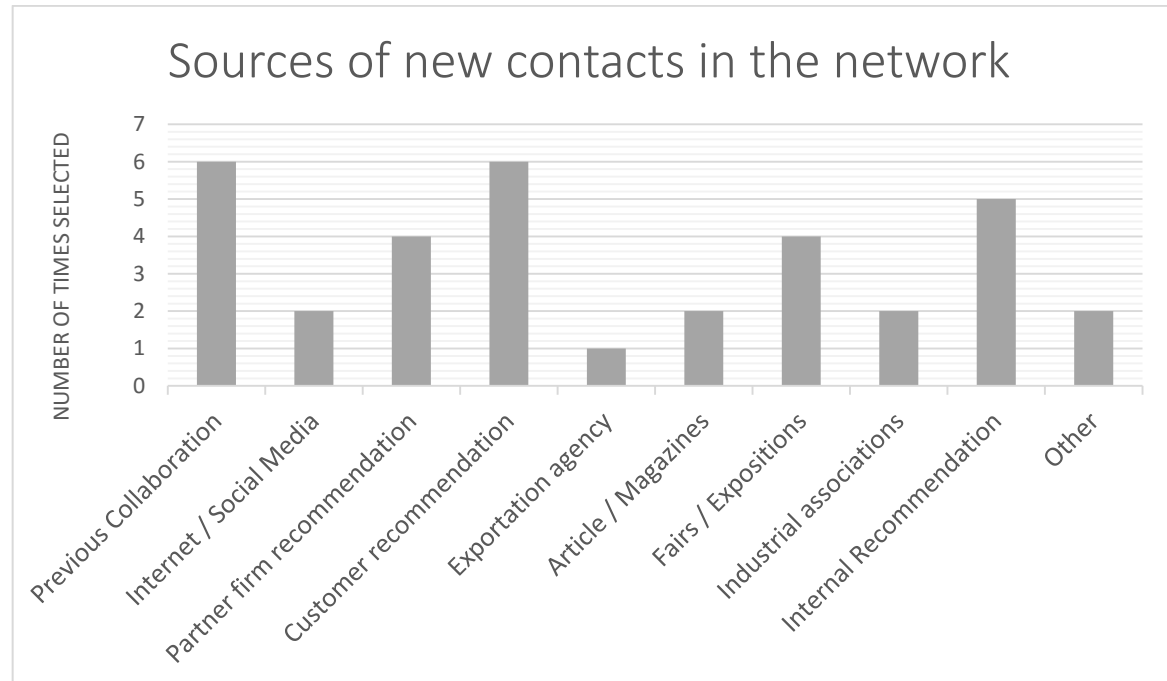


Figure 20 Sources of new contacts of the studied firms.

Therefore, the most common noted ways are by customer recommendation and previous collaboration, followed by internal sources such as information coming from colleagues and business departments.

In connection to this last point, the observed MNEs, except the case of the micro-company, have common procedures to address the establishment of corporate interrelationships independently of the historical collaboration file. According to the surveys, the procedure they follow can be summarized in five steps, although they are interconnected:

1. In the MNEs of SD, SM2, HD, ENG2, and ENG3, the *technical division* of the organisation creates alternatives or possibilities based on the requirements set by the customer. In the case of ENG2, ENG3 and HD, they can provide feedback from past experience and recommendations for partners. SD and SM1 also mentioned that customers, consultants or engineering firms can also provide advice.
  - a. SM1 emphasized in the interview the need to balance between risk and benefit of collaboration when choosing partner.
  - b. Further inputs can come from external entities that contact the focal firms as in the case of SM1, SM2 and CEO. SME3 and ENG3 mentioned that if there is a match between the scope, ideas and



interests, then employees can scale the case up for a better consideration.

2. In the case of SM1, SM2 and HD, their output goes to the *procurement* and/or purchase departments. Their aim is to find the sources for fulfilling the requirements. Also, the criteria for partnering is defined in this step and the candidates are sought in the network of collaborators.
  - a. The partner needs to fulfil the technical and organisational criteria. Nevertheless, ENG2 stated that if it does not, but its profile is very attractive, then the requirements may be relaxed and some adaption time could be given.
  - b. ENG2 also said that the higher the partner adaptability, the more intense is the collaboration, resulting in a higher reliability and effectiveness, coinciding with the ideas provided by SM1.
3. In the studied large MNEs of SD, SM2, SM3, ENG2, ENG3, ENG4, and HD, the list of candidates and the details of the project are scaled up to the *managers*, relatively high in the hierarchy, having the competences to take and approve decisions.
4. It is then, when a *negotiation process* begins to sign a collaboration contract and confidentiality agreement with the potential partner candidate.
  - a. Agree on the amount of allocated resources from each party.
  - b. Comply with regulations of local countries.
  - c. Decide on the level of information to share.
5. The decisions and agreements are given back to the procurement department and the technical division for starting to work.

The next studied parameter was the evaluation between the following organisational features and their impact in partnering (i.e. defined collaborative relationship). Respondents were asked to mark one option from a scale, in which ‘very high’ means that the feature affects to a great extent partnering, whereas ‘very low’ means that the feature has barely an influence on partnering. Table 4 presents the results. The marked option in this table denotes the average of the voted options by the participants.

Table 4 Organisational features and partnering.

	Very Low	Low	Medium	High	Very High
<b>The difficulty for information access</b>				<b>X</b>	
<b>Cost of information/ knowledge</b>				<b>X</b>	
<b>Extensive background experience</b>				<b>X</b>	
<b>Organisational politics and norms</b>			<b>X</b>		
<b>Embedded resources</b>			<b>X</b>		
<b>Shared strategy and goals</b>				<b>X</b>	

According to the research participants, they perceived that the extensive background experience in the functional domain of the cooperating organisation impacts the most partnering, whereas the embedded resources of the same organisation the least.

#### 4.4.2 The Process of Selecting Partners

When addressing the selection process, the criteria needs to be defined, particularly, in the step of the analysis performed in the procurement department or top level management. Research participants mentioned that the need of seeking partners has to be primarily related on finding someone who adds value, increases competitive advantage and improves organisational performance. Then, in a second stage, one has to look at characteristics such as superior knowledge domain and expertise, being closer to local markets, thus improving the presence in certain countries, compliant with the sales and development strategies, count on a previous proved experience by completing reference projects, and complies with the objectives, value curves (i.e. price and performance) and cost-value ratios. In a third step of the process, SM1 said that companies tend to select partners which offer premiums such as warranties, provide profit feedback, possess remarkable reputation, and generate trust through mechanisms like understanding their values and practices like transparency.

Respondents also marked the features that their organisations primarily use in the DMP when choosing a partner company. The results are shown in Figure 21.

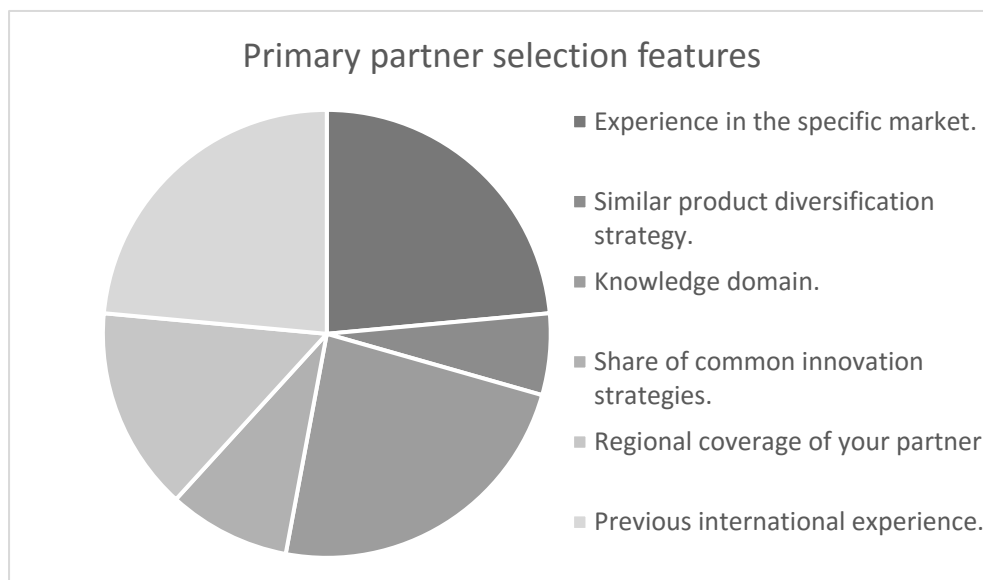


Figure 21 Primary partner selection features of the studied firms.

The studied MNEs mainly seek partner companies which have experience in the local market, extensive international experience, and they share the same knowledge domain. For the HD, there are other considered features such as level of innovation, team power and project control procedures.

Examining the autonomy of the DMs, respondents stated that depending on the level of responsibility within the organisation, they are able to take part of the decisions in selecting a specific partner or not. If the partner is of their responsibility domain, then they are more involved. The more strategically important the partner is, the higher is the decision level. In most cases, main or top management get advice from middle managers in terms of market needs and requirements for the DMP. However, if the decisions are directly imposed from top management, respondents said that they can still provide feedback and report the status of the activities or the working environment through meetings, forums, conferences, and so forth. It is worth mentioning that practitioners mark the budget dimension as an important element in the DMP. They indicated that a good source to extract such data is to consult their internal Enterprise Resource Plan (ERP). Nevertheless, the current financial status of the focal entity is as vital as the financial situation of the cooperative candidate. Hence, they also look at their partner's status to get inputs for the DMP. Furthermore, sales managers and SD mentioned that the budget can impose a strategic choice to be made which is decide on the time-basis of collaboration.

## **4.5 Practices in the Dimensions of Networks**

*“Believe or not, we google!” - Engineer 4*

This sections presents the findings related to the activities that are performed in the studied companies. The data is presented within the three dimensions addressed in the theory of networks (Section 1 of Chapter 2).

### **4.5.1 The Time Dimension**

The evolution of the network in time is vital for correct organisation performance. The addressed firms distinguish different practices between historic partners and new partners. When considering new partner firms, the studied MNEs establish a set of different procedures. In the case of SD, HD, ENG2 and SM3, they impose a trial period with a closed number of projects. This is done to test whether the candidate is suitable or not. If it is, then the collaboration relationship expands. Furthermore, the companies of SD, SM1 and SM2 look at variables such as number of employees, financial situation which is particularly important for large projects, bonding capacity, products selling strategy, competence, market recognised and experienced companies in terms of know-how knowledge. Conversely, with historic partners, the common practices of the six large addressed MNEs are, for example, to have a list of approved suppliers that is revised on a monthly, quarterly or yearly basis, to have external and internal auditing to enhance transparency and consolidate the rationality of the DMPs, to execute managerial tools such as the SWOT analysis, to revisit the agreements and contracts, and to deploy a more complete version of the risk analysis process and business plan.

### **4.5.2 The Structural Dimension**

According to the interview with the SD, to manage efficiently the internal situation and activities of the firm, it may be required to have a powerful ERP, and integrated management system (IMS) and a quality management system (QMS). Hence, one can continuously monitor for example the available resources of the firm. Making use of this knowledge, firms can manage the structure of their networks by allowing themselves to access others resources. Thus, they reinforce their bargain position within their network. The latter can be also, enhanced according to SM1 and SM2, by marketing the products of the partners through the sales force of such focal firm. Furthermore, the studied large MNE employees found that the competitive strategy also demands to establish operational agreements with a common standardized regulatory framework. Though, this process can be extensive in time and may alter the structure of interactions between the network nodes.

### **4.5.3 The Interactional Dimension**

The interaction between organisations is built on the attributed level of collaboration and access to resources. Both are approved by the global executive team and constitute an important element for business success. As stated by SM3, the level of cooperation depends on different functions. Hence, every department may require different partners. Analogously, different markets can require different networks of collaborators. Based on the perceptions of the research participants, the strength of the relationship relies on aspects like innovation, confidentiality, task, objectives, needs, knowledge and expertise. Furthermore, SM1 mentioned that innovation strategy can change the network collaboration mode. In other words, the innovation of the internal processes and products is considerably impacted by the collaboration type. Nevertheless, innovation can play not only a positive role, but also negative one. According to SD and SM3, in some occasions, their own innovation is so unique that sharing it would generate a loss in competitive advantage.

Another important element in the cooperation interaction is the communication flow. Participants agreed that this is strongly influenced by sharing values, cultures and goals. Additionally, communication has to be fluent and strong between the parties. For example, in the case of SM1, their focal firm gets occasionally business from their partner companies. Also, as mentioned by SD, consultancies can sometimes recommend to collaborate with a given firm. Another case is that partner gets a contract that requires the focal node expertise. Thus, close collaboration between the entities can enhance market coverage and business expansion. Furthermore, good communication also facilitates the creation of knowledge. For this reason, respondents were asked about how to create engagement between the parties. Their answers disclosed that their organisations put efforts in creating engagement between partners via meetings, e-mails, video calls, phone calls, trainings, visits, product exhibitions, generating a positive working atmosphere, and exposing mutual benefits. Besides,

they invest in data comparison processes that can reveal the weak points of the company (e.g. audits). As a general idea, participants coincide in pointing that partner interaction is seen to have a positive effect in their business endurance.

## **4.6 Concluding remarks**

- Studied firms work with companies that already know, that are consolidated, and financially healthy; hence, preserving their Status Quo.
- Big seeks big.
- The cooperation strategy does not necessarily vary due to their business solution or the geographical location of their partner, but on other more primarily reasons based on the satisfaction of their needs.
- The sought characteristics of a partner are: add value, increase competitive advantage, improves organisational performance, potentiate knowledge domain, and market and international experience of the focal firm.
- Every business area and hierarchical level can have their own specialized network.
- Depending on the level of responsibility, actors can influence DMPs.
- Governance & monitoring schemes: international standards, audits, due-diligence evaluations, financial status, approved supplier list, etc.
- Defined internal procedures and communication channels.
- Informal information retrieve mechanisms at individualistic levels.
- Negotiation process to meet criteria: confidentiality agreements with non-disclosure statements to protect their intellectual property

## **5 Discussion: Bridging Theory and Practice**

A company establishes connections with other firms thanks to the contacts that the particular individuals or groups may possess or can have access to. The key is that such confined information travels from the contact point, who possesses it, to the power-holding entity of the organisation. There are parallelisms between corporate connections and human relationships, since any type of networking is highly influenced by the degree of consolidated trust. Hence, the behaviour of corporations is impacted by the people conforming it, and thus, their performance is key for business success. In the case of large MNEs, such transmission can become more intricate due to the larger amount of individuals, departments and internal constraints that a robust organisation may have. For this reason, corporations can advance in a slower motion in spite of the large amount of resources that enables them to minimize the possible adversities. They are big elephants. Nevertheless, the studied MNEs establish through their organisational structure clear channels, procedures and practices to tackle the management of their network partners.

### **5.1 The Context of the studied Multinational Enterprises**

#### **5.1.1 Introduction**

The results of the study show that seven of the eight addressed firms count on more than twenty years of business operation (see Figure 9). Their timeline allowed them to increase in number of employees (see Figure 12) as well as expand internationally. As explained by Li Sun (2009), the internationalization process makes the companies become more mature with a higher international experience and with a broader knowledge about the market: customers, competitors, contractors and suppliers (N. E. Coviello & Munro, 1995). Hence, the existence of the studied MNEs prove certain maturity degree for business success. For this purpose, companies follow their customers and their associated opportunities. This fact generates two paths of evolution: pace of internationalization and value creation. The results lead to claim that both ways are enhanced by collaborating with other entities (see Figure 17). For this reason, the studied companies seek to appropriately collaborate, since selecting the correct partners also impacts their performance.

From the perspective of the effects of internationalization, the studied MNEs embrace such process due to a wide range of reasons as depicted in Figure 17 and Figure 18. They also seek to access new markets and new opportunities, optimize their product portfolio by proposing a complete process solution to their customer, and sustain their business model in markets with high competition. From the perspective of cooperation, this opens new business opportunities, but also increases risk exposure. Nevertheless, according to SM1 and SD, appropriate collaboration strategy can build barriers against potential entrants by maximizing risks to the competitors making the access to the market difficult for them. This statement is supported by the work of

Ahuja (2000) and Mathews (2006). Collaboration also allows to share adverse risks on certain projects or tasks between the collaborating entities. Hence, collaboration strategy can reduce these unfavourable internal risks and transform challenges into opportunities. Furthermore, reality puts organisations facing not only risks, but also conflicts of interest as expressed by the interviewed SM1:

*“An ideal partner has experience, sales network, engineering influence relationships, service organisation, and adaptability. In the real world very few may meet all these requirement and when they do, in a lot of cases there is usually a conflict of interest in the products or projects. This is one of the main challenges we face, since the real world is not an ideal situation”.*

### **5.1.2 International Context**

None of the studied firms makes use of the steps of the original (i.e. first version) of the Uppsala Model for internationalization (Johanson & Vahlne, 1977). As presented in Figure 20, they make little use of, for instance, exportation agencies. As discussed by Kazanjian (1988) and Li Sun (2009), one of the reasons to overcome this model may be due to the fact that the addressed firms have already internationalized and they are settled in an international market. Therefore, they may interpret the original model in a past phase. However, the lessons from the revisited version can be still applicable to the theory of network collaboration and internationalization. Furthermore, Kazanjian (1988) empirically derived a framework that could complement the Uppsala Model in terms of business expansion. The model was developed for technology-based new ventures with internally-generated growth and it comprises four stages:

- Stage I: Concept generation, resource acquisition and technological development.
- Stage II: Production-related start-up and commercialization.
- Stage III: Sales growth and organisational issues.
- Stage IV: Stability and profitability.

The studied firms can fall inside the fourth stage as they are consolidated firms with long-term profitability. These MNEs expanded, and look to keep expanding internationally, triggered by factors that generate added value for the firm and satisfy their customer needs. According to Chen et al. (2014), a multinational presence helps to achieve superior performance and is commonly increased by technological and marketing resources such as market opportunity identification, market adaptation, decrease in costs, and increase in knowledge availability. As a result, such resources have a positive balance effect in the relationship between internationalization and performance. As shown in Figure 18, respondents agreed in majority that market identification as well as improvement in the performance constitute essential values for their businesses. However, according to the qualitative data, companies do not

only employ their resources for such balance, but also for seeking new ways of networking. This in last term point to ensure business survival in new countries and in new markets; coinciding with the work of Håkansson and Snehota (1989). Addressing the particular case of market recognition, and complementing the arguments of Chen et al. (2014), studied companies mainly used this feature to partner but not as a priority effect to internationalize (see Figure 18).

In the case of firms with a strategy that focuses on local markets, they are more interested in generating a network of companies for every market that could provide specific solutions rather than having a global actor adapting at the same pace as the focal entity. This strategic choice to diversify partners can be considered as step to seek more specialization in a multimarket position (Morris, 2014). Nevertheless, the counter-choice would be that the focal node could also be accompanied by other firms having a transversal and international market character (i.e. same as the focal firm). Hence, they could provide support and services to their partner in all its business geographical units. This is the case of most of the studied firms (see Figure 16). However, they also go one step further. They do not only look for suppliers and vendors locally or globally, but they rather look for partners able to provide support with specific internal processes in terms of knowledge and expertise, and hence improve their market adaptation, since their business activities are focused on engineering and technology and these demand highly developed skills. Besides and for this reason, every department, depending on their function type, may have different partners. Hence, the multiple partners of the studied firms are experts in every step of their internal value chain, independently of their international business solution (i.e. global or multi-market).

### **5.1.3 Collaboration Context**

The research participants pointed that if their companies require partners, they first look within their own networks as they value a broad background experience (see Table 4). Then, if still not satisfied they will search outside to find them. Hence, it can be said that the network cluster represents the ‘comfort zone’ of the company. Having a stable network increases the security feeling of the organisation. Ronald (1992) recommended firms to join unconnected network clusters as this enables firms to access remote novel information that could be used to strengthen the organisation position in the network. In connection to this idea, Li Sun (2009) said that growing in a local cluster can generate a valuable competitive advantage for firms. Conversely, Child and Hsieh (2014) stated that networks can be used to reduce information asymmetries and, according to Powell et al. (1996), they can also lead to novel knowledge. The research participants pointed to the need of establishing collaboration with those entities that ensure their reciprocal stability. This circumstance may enhance the protection of interests of both firms. From one side, the partner company can benefit by ensuring its revenue and adjusting its demand of the studied company. From the other side, the big company ensures that its best-option partner keeps



providing the desired input under the basis of the shared interests. As a result, the current network strategy invites to overcome the paradox between competition and cooperation by combining these antagonistic concepts in the following statement: “*let us cooperate to compete better*”.

This scheme opens the concept of ‘network heterogeneity’ presented by Goerzen and Beamish (2005). Their work explains that the advantages of having a heterogeneous network, among many others, is that it increases the cognitive resources as well as the information about markets and technologies (i.e. helps to share knowledge and experiences), but it makes the exchange of information more difficult from function to function. These facts faithfully reflect the reality of the studied organisations, in which the respondents, unless they were top managers, were not able to depict a full picture of their organisation partners and the details about such process of network management. Thus, every unit in the company works focused on their own collaboration cluster, which can be provided by another department and approved from above. As depicted by respondents, seeing every hierarchical level having its own network matches the ideas of Ghoshal and Bartlett (1990), which described large MNEs as ‘networks of networks’. The matter is that the overall delivery complies with the expected customer outcome.

As described in Chapter 2, the revisited Uppsala Model by Johanson and Vahlne (2009) introduced substantial changes in the approach of the model scheme (Figure 4). The new version introduced the concept that relationships between enterprises enhance the network attachment as well as the learning and knowledge sharing. Zohari (2008) states that such interaction may lead to an increase in trust, and hence, the cooperation strategy can be executed properly. In practice, the interviewed sales managers pointed that there is an expansion of the network if they need to be supplied with new knowledge. Research participants categorized the impact that implies the difficulty to access information as well as its associated cost in terms of partnering with an average of ‘medium-high’ (see Table 4). Furthermore, according to Child and Hsieh (2014), the cost of information influence the decision-making mode and the level of rationality of the decisions.

Another contribution to understand the context of the studied MNEs is that they can have a given partner supporting a given function. Nevertheless, this partner can be situated in a geographical position different than that of the department of the studied organisation. For example, the group work of ENG2 is situated in a country in Europe, but their consulting firm specialized in their engineering function is located in Asia. Another example is the organisation of SD, which has partner factories spread in Europe and Asia, but the organisation itself is spread worldwide. Furthermore, as depicted in Table 3, the studied organisations seek partners focused on their value contributions and they do not discriminate exclusively based on their international presence. As a result, the studied MNEs do not face anymore the barrier of the psychic distance or the liability of foreignness; concepts introduced by Johanson and

Vahlne (1977). Since, companies collaborate with partners wherever they are in the world (see Figure 10 and Figure 11). As a conclusion, respondents perceived that the collaboration process emanates from their corporate and business strategies that are based on their needs to improve their organisational performance and business growth. Then, they seek appropriate partners to fulfil those.

## **5.2 Implications for Managers**

### **5.2.1 Governance in the Decision-making Processes**

As shown in Figure 14, all the studied firms have a defined organisational structure. In this case, the most popular has been the ‘hierarchical’ structure. As a result, the addressed MNEs contain defined channels that enable to implement governance mechanisms. Such mechanisms contemplate, among other objectives, to have the most complete information to support the DMPs in terms of cooperation strategies and to facilitate the learning of DMs (see Section 3 of Chapter 2). The latter can be addressed by tackling the contingency factors that hinder the gain of knowledge (Barto et al., 1989; Ghoshal & Bartlett, 1990). The former can be based on defined procedures and rational techniques. For this purpose, the focal entity needs to access the required data of the partner company in order to carry out a more rational analysis (Hohenthal et al., 2014). After that, Henderson and Nutt (1980) suggest to compare the obtained information with the other competitors in the market and business sector.

It is essential to be aware of the penalty that bounded rationality can cause on DMs, since it partially pictures the reality that individuals have. Therefore, although practitioners target to obtain the optimum option, they are subjected to the assumption of omniscience, which says that the gathered information is complete and consistent (Simon, 1959). Hence, practitioners assume perfect knowledge within a bounded rationality. Theory says that they tend to make decisions in an environment where the optimization is performed under constraints, and by extension, they will target to satisfy their needs under a given optimum. The latter is defined by Kurz-Milcke and Gigerenzer (2007) as ecological rationality. The practical implications of this idea is that the studied companies try to minimize these effects by establishing procedures to share information and knowledge (e.g. forums, meetings, feedback transfer, etc.).

In practice, SD, SM1 and SM2 explain that there is a distinction between the level of information and the tools applied to make decisions about the selection of new partners (see Figure 20 and Figure 21). When they have facts like feedback and figures about the performance, their decisions are more of a deterministic nature. Conversely, they also address figures such as the ones describing the financial situation of the partner firm as well as the number of their employees, etc. They said that this is particularly important for large projects or risky tasks. For this reasons, the decisions need to contain steps such as: situation frame, option generation, option selection and execution.

### **5.2.2 Monitoring Partners**

Monitoring increases knowledge and awareness about the current situation of the collaboration between firms. Moreover, it helps to reduce the pressure that the information constraints exert over DMs (Barto et al., 1989). Hohenthal et al. (2014) presented people as information hubs or gate keepers, hence influencing the volume and direction of information flow in the network. This fact is by extension connected to the level of bounded rationality to which players are subjected (Kurz-Milcke & Gigerenzer, 2007). Therefore, information becomes strategically vital for having a clear picture of the ongoing collaborations (Strang & Macy, 2001). Thus, it is required to have organisational practices to monitor consistently the partners. The studied firms present tools that help them to keep track of their business interrelations. Once the selection process has concluded and partners have been collaborating for certain time. Although every participant pointed to certain practices, these can be extrapolated to others, since what is useful in one organisation, it can also be applicable in another. The described mechanisms are internal reporting through documents and exhaustive analysis, defined escalation processes, internal and external auditing to reveal deviations and flaws, the existence of an approved supplier list with partners meeting the requirements of the focal entity, the periodic revision of their performance, revision of the register of partner companies, and a ‘due-diligence’ procedure in which the collaborators are opposed to international standards as well as financial and cooperation criteria. Additional described practices include feedback reports, meetings used as consultation for knowledge sharing about contacts, network partner mapping and official criteria definition. All these mechanisms require fluent and strong internal communication patterns.

### **5.2.3 Engagement with Collaborators**

Recalling the three dimensions of networks: structural, interactional and time, managers need to be aware that the collaboration processes also depend on these three features. Particularly, the dimension of time is essential for the generation of the required trust between collaborators. In order to build a strong link, both parts need to engage by sharing goals and strategies, but also by sharing common procedures and practices. A proactive engagement policy can increase the information and resource access, and hence, according to Zaheer and Bell (2005), the organisation effectiveness is improved. Such engagement between partners can lead to a higher interaction between the network clusters, which in turn increases network effectiveness (Easley & Kleinberg, 2010). Ahuja (2000) adds that connecting clusters, or in other words, decreasing the network structural holes, strengthens the links between information and knowledge. Thus, developing close relationships with the surrounding entities can improve learning (Pellegrino & McNaughton, 2015) and the access to new resources (Håkansson & Snehota, 1989).

Resources, in general, can constrain significantly learning and sharing of information and knowledge (Hohenthal et al., 2014). However, the research participants considered the fact that the embedded resources of partners affect their relationship on average as 'medium-low' (see Table 4). This result opposes the expectations from theory as the expansion of resources through collaborators can enhance, among others, knowledge access and organisational performance (Bwalya et al., 2014; Easley & Kleinberg, 2010; Ghoshal & Bartlett, 1990; Hohenthal et al., 2014; Kogut & Zander, 1993). Conversely, in the same table, they categorized as 'high' impact on partnering the cost of information and shared strategy. This fact coincides with the work of Child and Hsieh (2014).

As exposed in the results (chapter 4), the research participants generate engagement with their partner companies through meetings, emails, phone conversations, personal visits and activities, etc. It can be concluded that these mechanisms are some of the tools that organisations possess to extract information and knowledge from alien firms. SM1, ENG2 and SD also pointed that their respective firms focus on sharing a strategy based on certain common targets. Hence, communication strategies and practices may be seen as core in the business collaboration formulation.

### **5.3 Suggestions of the Author**

In this section the author of this research makes suggestions to the studied firms based on the reviewed literature and under the light of the withdrawn empirical findings. To improve their internal dynamics and performance, organisations can empower people as well as the formalities that these can apply. In other words, they can enhance the human resources and their available organisational tools.

In the relation to the international context of the studied firms could consider the possibility of expanding further internationally by making use of the Eclectic Paradigm or the Born Global approaches. The Eclectic Paradigm can be useful to attract new investments for projects that the firms wish to develop requiring specific internal capabilities that they lack at the moment. Literature presented in Chapter 2 argues that the applied strategy can be built upon the dimension of the model: ownership, location and internationalization. Conversely, the Born Global approach can be used by the studied MNEs to propagate simultaneously in several countries. In this manner, they can consolidate their presence in the same market but, in different geographical locations, hence, increasing their international presence. For instance, the studied micro-MNE is considering to grow further internationally by applying a similar mechanism in which they provide support to partners and these use their products, hence achieving these new geographical markets.

On the other hand, in terms of partner selection and governance, and according to the qualitative findings, DMPs are generally based on an established criteria that can be subjected to modifications inspired by the appreciations of the people in charge of taking the decisions. These appreciations arise from qualitative data extracted from

studies performed to the partnering companies, meetings with representatives coming from internal departments of the firm or external ones, advertises, audits, corporate figures, etc. In order to increase the rationality level of the decision modes and to support better the final decisions, it may be suggested the introduction of discrete probabilistic choice models (DPCM) within the frame of the ‘due-diligence’ assessment. These models are similar to decision trees. DPCMs can be described as mathematical tools used in a wide variety of applications in order to predict the probability of choice between discrete alternatives (Garrow, 2012). The input variables of the model can be, for instance, a score of the reputation of the partner firms, level of knowledge and expertise, background experience, operational life, and key financial ratios (e.g. ROA, ROE, Liquidity ratio, etc.). Then, these inputs are processed by an algorithm to extract as output a given figure that tells about the predicted probability of occurrence to select one of the given alternatives. Thus, DMs can have another precious source of processed information in their DMP that could help them to construct a more solid argument for the selection of a given collaboration alternative. Probabilistic decision-making techniques, like decision trees and DPCM, can become intricate, since these tools imply the use of robust algorithms to model the set of discrete alternatives. Despite the existence of this complexity, it may be suitable to apply them as they can increase the rationality of the decisions, thus, improving the efficiency and effectiveness of the DMPs

As a general concluding idea, top managers can enhance their decision-making solutions by combining two previously mentioned mechanisms. First, they can empower people to make decisions by investing in developing their responsibilities, competences, learning and skills. Second, they can go one step further in the formalisation of their rational decision methods by implementing the previously described tools.

### **5.3.1 A Scheme for Business Internal Interaction**

The scheme presented in Figure 22 was motivated by the need of mapping the contributions of the research participants (i.e. empirical data) together with the literature. Thus, it aims to define the relationship between collaboration, internationalization and DMPs. The map was firstly constructed around the arguments presented by the different authors in Chapter 2. Then, these were embedded in the surveys in order to check them in practice. Hence, the results helped to shape the final scheme. Nevertheless, since the research is composed by only ten surveys, the model remains in a tentative status. It requires further testing in future research to prove its validity.

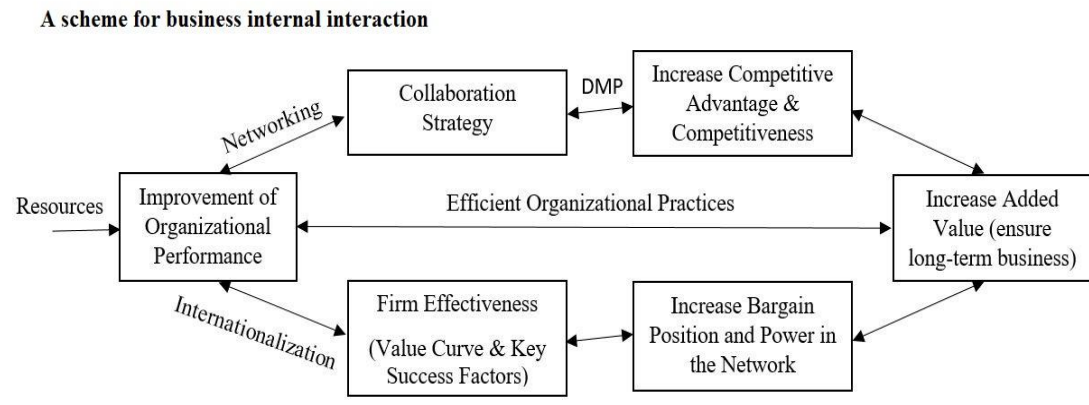


Figure 22 A scheme for business internal interaction.

The scheme starts by relating networking and internationalization with the performance of the organisation as described in Figure 1 by Goerzen and Beamish (2005). The authors addressed in the literature review, as well as the information provided by the respondents, created a discussion relating these three concepts. Besides, a key input for an improvement of the performance is the resources that the firm may be able to access or accumulate. Both networking and internationalizing open the possibilities to gather more resources for organisations. This also has to be accompanied by a strong resource planning. From this point onwards the performance targets to increase the added value of the firm, ensure long-term business survival, and hence, business success. In order to achieve it, the studied firms possess three mechanisms: define and execute their collaboration strategy, make use of their power position to increase their competitive advantages and competitiveness, and improve the effectiveness of their internal and external processes. All these were supported by the information extracted from the different actors, who were selected in a DMP according to their estimated added value.

## 5.4 Research Assessment

After carrying the research process throughout six month time, the main found difficulties were related to the survey tool. It was challenging to generate a form solely based on the literature findings and without any feedback from the reality. Furthermore, the large amount of proposed open questions created certain respondent fatigue. Hence, there is a tendency to find shorter answers to the last questions. A way to improve the survey would have been to reconsider some questions and synthetize others in order to avoid redundancies or participant overwhelming. An additional comment can be made around the short time frame to carry out the research that led to have a limited research sample. On the other hand, the compliance between the theory and the empirical findings helped to build in a relatively straight manner the results and discussion chapters of this document. This fact also reveals that the research tool was effective in revealing the desired information to answer the research questions and generate some conclusions.

## 6 Conclusion & Future Research

In the businesses of today, many companies seek to attain business success by expanding and selling their products and services all over the world. The study was motivated by the need of understanding how multinational enterprises make use of their collaborators to support their business activities abroad. Furthermore, the research participants provided some insight of their internal practices and procedures to explain the management of their network partners and the selection processes of their collaborators. The present research also enlightened the connection between such practices with the current existing theory. Therefore, the three proposed research questions remain answered.

The theory presented in this document addressed the concepts of collaboration, internationalization and decision-making processes linking them together with the literature provided by the strategy of networking in an international context. This theory served to generate a testing tool used to extract empirical data. Thus, the study is constructed on a deductive approach mainly based on a qualitative research method. For this purpose, this research has presented some of the insights of the practices found in eight multinational enterprises in terms of business stability in the international market. The research counts on 10 surveys performed to employees of 8 different companies within the sectors of Engineering and Technology. Most of them have more than 20 years of business experience. The addressed firms depart with the advantages of having previous business experience, gathered important knowledge and count on a consolidated market position.

According to the research participants, their MNEs base themselves on established formal procedures addressing some aspects of network management: select their partners, and engage and monitor them. They select partner collaborators primarily focusing on those able to add value, increase competitive advantage and improve performance of the focal firm. For this reason, the research participants pointed that collaborative partners are usually selected primarily to supply a given function or need. Furthermore, the geographical location of these partners are no longer seen as a barrier to collaborate. However, this factor could have a prominent role if, for instance, the market has strong regulatory framework, high duty barriers or their regional coverage increases competitiveness. These ideas lead to have different collaborators for the different levels of the organisational hierarchy and also for the different steps of the value-chain and business areas of the firm. Nevertheless, the selection processes may not depend on the hierarchical level being affected by such partners. In other words, the study revealed that six of the addressed MNEs count on an established procedure in which engineering department interacts with procurement to set the requirements for collaborating that will be later checked and approved by competent DMs situated in higher levels of the hierarchy. Thus, generating a pattern of internal interactions to tackle the collaboration strategy.

To increase the rationality of the DMPs performed in those hierarchical levels, it is suggested to introduce, for instance, DCPMs and Decisions trees. In general, any DMP requires, among other elements, complete information about the internal status as well as the partner situation. The latter can be enhanced by establishing monitoring mechanisms as well as ensuring a both-way engagement in the relationship. Thus, for acquiring such information, the addressed individuals or reduced groups within the focal organisation apply informal methods such as internet, fairs, magazines, visits, e-mails, calls, etc. Nevertheless, their organisations rely on formal procedures and criteria to process such information and the manner to implement it. They apply for example audits, international standards, have an approved supplier list, etc. As a result, it can be concluded that on an individual or group level the information feeding DMPs is based on informal procedures, whereas at a company level the practices to select partners as well as the internal communication paths are more formal and defined. Hence, this may generate tensions between these two dimensions.

As a conclusion, the studied firms perceive collaboration with other firms as crucial for performing adequately their businesses in an international context. Since, the addressed firms and their collaborators are all stakeholders of the same project, contract, product, task, etc. Hence, a good balance between internationalization and collaboration can lead to an improvement of the organisational performance and its value.

A future research may contemplate to expand the spectrum of researched countries and the studied MNEs within the boundaries of the domains of Engineering and Technology. Such study would provide a higher number of findings that could either support (validate) the extracted results or deviate, and thus, opening new possible paths of research. Moreover, with those results the applicability of the suggested scheme for business success could be tested. In a second step, the research could also assess the capacity of SMEs to establish more robust internal practices. As presented by the model, there is a direct link between these and the value and performance of the organisation. Another suggested research could be to picture one single company and its partners. Hence, the study would perform a detailed research about the network of that firm and the extent to which the latter impacts the organisational performance from the international perspective.



## 7 References

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