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CURRICULUM ECONOMIA E MANAGEMENT

CICLO XXXI

**The Role of the Internet in the Process  
of Internationalization of SMEs:  
A Mixed Method Analysis on the Furniture Sector**

Settore Scientifico Disciplinare: SECS-P/08

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Anno Accademico 2017/2018

*“Children shouldn't have to sacrifice so that you can have the life you want.  
You make sacrifices so your children can have the life that they deserve”*

To my daughter Giorgia

## **ABSTRACT**

The purpose of this Thesis is to obtain a better understanding of the process of Internationalization of Small and Medium-Sized Enterprises (SMEs) following globalization and the advent of the Internet.

Although the development of the Theories related to the process of internationalization of SMEs highlighted the importance of the Internet in this process, due to the constant and rapid evolution of the phenomenon, the literature is still lacking in some perspectives.

This lack gave rise to the Research Question “Is the Internet a Key Tool in the Process of Internationalization of SMEs to Acquire New Foreign Customers?”. To answer this question, a mixed method analysis on the furniture sector was performed. This research methodology, that embraced both a qualitative and a quantitative method, allowed to obtain a richer amount of data and generate an improved understanding of SMEs’ internationalization process.

The findings of the qualitative research phase, were obtained thanks to six company case studies, where six crucial factors regarding the internationalization process of SMEs emerged: 1) mode of adoption of the company website; 2) mode of adoption of the social media profile; 3) mode of management of the company website; 4) mode of management of the social media profile; 5) Internet data analysis; and 6) use of data in internationalization strategies. In order to test the results emerged, extending them to a significantly representative sample of SMEs, this phase allowed to produce a basis to realize a questionnaire for the quantitative research phase, administered to small and medium-sized enterprises belonging to the furniture district of Pesaro.

The statistical analyzes performed in the second quantitative phase confirmed the results of qualitative research. Furthermore, through the latent class analysis (LCA), within the sample interviewed, three groups of companies whose “strategic behavior” made them homogeneous within them and

heterogeneous among themselves, were identified. These results permitted to suggest some implications for management.

Lastly, the limits of this work provide some suggestions for future researches.

## ACKNOWLEDGEMENT

Firstly, I would like to express my sincere gratitude to my supervisor Prof. Fabio Musso for the continuous support of my PhD study and related research, for his patience, motivation, and immense knowledge. His guidance helped me in all the time of research and writing of this Thesis. I could not have imagined having a better supervisor and mentor for my PhD study.

My sincere thanks also goes to Mr. Daniele Godi and his company team, who provided me an opportunity to join them, and who gave access to their facilities. Without their precious support it would not have been possible to conduct this research.

I thank my fellow researchmates, Claudia, Gabriella, Novella and Giorgia, in for the stimulating discussions, for the sleepless nights we were working together before deadlines, and for all the fun we have had in the last three years. In particular, I am grateful to Dr. Michela De Rosa for enlightening me the first glance of research.

I must express my very profound gratitude also to my best friends, Paride, Giulia and Angelica, for providing me with unfailing support and continuous encouragement throughout my years of study and through the process of researching and writing this Thesis.

Last but not the least, I would like to thank my family: my daughter Giorgia, my parents Francesco and Tiziana, and my brother Riccardo and his family for supporting me spiritually throughout writing this Thesis and my life in general.

This accomplishment would not have been possible without them.

Thank you.

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# CHAPTER 1

## Introduction

### 1.1 Introduction

Chapter One explains the purpose of this Thesis. The Research Question is illustrated and the study's contribution is outlined. At last, in order to provide an overview of each phase of the study, the structure of this Thesis is presented through a figure.

### 1.2 Purpose of the Thesis

The purpose of this Thesis is to obtain a better understanding of the process of Internationalization of Small and Medium-Sized Enterprises (SMEs) following globalization and the advent of the Internet.

The decision to focus the analysis on SMEs derives from the growing importance in recent decades of this type of companies that often constitute the majority of all companies. This is the case of Europe (Eurostat, 2017), and in particular of Italy, where 99.9% of all companies have less than 250 employees (Istat, 2017).

In addition to deciding to focus on SMEs, it was chosen to take into account only one sector and only one specific geographical area. This was done for the following reasons:

1. the choice of a specific sector is due to the need to reduce the heterogeneity between companies depending on the structures and the processes related to the sector. Furthermore, the furniture sector was preferred both for the strong presence of small and medium-sized companies;
2. the choice of a specific geographical area derives from the need to reduce complexity during the data collection process. However, this did not

imply a big limitation because the furniture district of Pesaro is the third industrial pole of furniture in Italy (OND, *Osservatorio Nazionale Distretti Italiani*, 2017) and it is considered a district of excellence.

Finally, to understand the changes taking place on the international scenario it was necessary to identify the evolution of the Internationalization Process Theories in the economic literature. To this end, the main theoretical models (from the 1960s to present) which tried to interpret the internationalization processes implemented by SMEs were considered.

Furthermore, this analysis made it possible to identify some gaps in the literature and to investigate more in depth, through empirical research, some fundamental factors in the process of internationalization of SMEs.

### **1.3 Research Question and methodology**

The analysis of the SMEs' Internationalization Process Theories allowed to identify a gap in the existing economic literature. The Research Question of this Thesis that originated because of this gap is:

*Is the Internet a Key Tool in the Process of Internationalization of SMEs to Acquire New Foreign Customers?*

where the term "Internet" refers to both the company website and the social media profile(s) of the company.

In order to answer this Research Question, in the first phase of the research six in-depth interviews were submitted to entrepreneurs of Italian SMEs that undertook an international development.

The interviews results, together with the literature analysis, made it possible to formulate a questionnaire to be administer to a significative sample of companies. Indeed, in order to properly test the findings of qualitative research, a quantitative research was performed through a survey to 183

entrepreneurs and managers of SMEs working in the furniture sector. Therefore, the second phase of the research allowed to generalize the findings.

#### **1.4 The structure of the Thesis**

This Thesis is structured into six chapters (see Figure 1.1), the first of which is the Introduction. The remaining five chapters are organized as follow.

Chapter Two presents a review of the International Business Literature that was considered the most relevant for the investigation of SMEs' internationalization processes from Sixties to the present.

Chapter Three focuses on the research methodology and the approach adopted by this Thesis. This part starts by discussing the positivist and interpretivist paradigm and their different characteristics respectively in quantitative and qualitative research, before concentrating on the issue of mixed method, that seems to be the most appropriate for this analysis. Subsequently, the chapter continues with the explanation of two research phases:

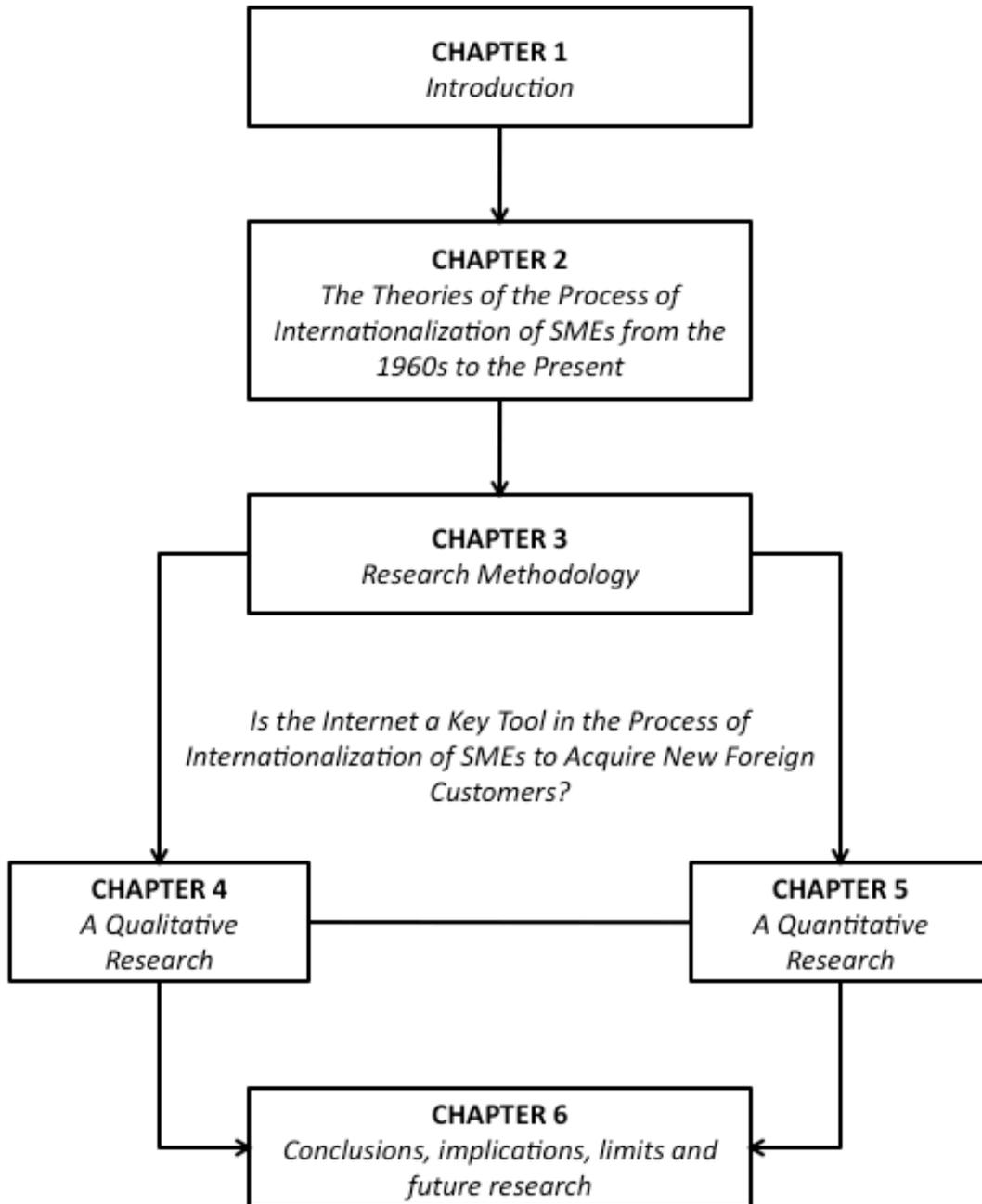
1. the first phase regards the qualitative research;
2. the second phase concerns the quantitative research.

Chapter Four, after a brief presentation of the Italian furniture sector and the furniture district of Pesaro, focuses on the findings of the first research phase using the case study methodology discussed in chapter three.

Chapter Five describes the findings of the second research phase in order to test the previous evidences through statistical methods and obtain a generalization of results. Moreover, this chapter presents a latent class analysis carried out in order to divide the sample into groups of companies that exhibit similar behaviour.

Chapter Six presents the overall conclusions of the research and deals with the key implications for management. The main contributions of this Thesis are outlined, while a number of research limitations are then considered and possible directions for further researches are identified.

Fig. 1.1 - Thesis structure



## **CHAPTER 2**

### **The Theories of the Process of Internationalization of SMEs from the 1960s to the Present**

#### **2.1 Introduction**

In this Chapter, after a brief introduction in which some different definitions of SME and the explanation of the concept of internationalization are provided, the development of the Theories related to the process of internationalization of SMEs, is illustrated.

#### **2.2 Definition of Small and Medium-sized Enterprise (SME)**

Even today there is no universally accepted definition of an SME.

Loecher (2000), in his studies on the definition of SME, identified two different groups of criteria: qualitative and quantitative.

Qualitative criteria provide information on the nature of SMEs. In order to distinguish between large companies and SMEs, relationships between “company” and “owner” in the framework of “unity of leaderships and capital” and the “personal principle”, are considered the main qualitative criteria. “Unity of leaderships and capital” indicates that company manager and owner is the same person. The owner-manager is much more independent and self-sufficient than the management of large companies. The “personal principle” implies that the company manager has a central role in the business decision-making. He has a general and complete view over organizational, administrative and technical procedures in the company.

Regarding the quantitative criteria, the term SME refers to all companies in any sectors as long as a given size threshold is not exceeded. For statistical purposes, economists propose several indicators such as invested capital, market

position, earnings, profits, total capital, equity, production and sales volume, balance sheet total, turnover and number of employees. Among all, “turnover” and “number of employees” are recommended as the most appropriate quantitative criteria due to their simplicity, compatibility and practical application.

However, there are still considerable differences in the world regarding the concept of SMEs. As shown in Table 2.1, various Multilateral Development Institutions attribute different criteria to the definition of SME.

Tab. 2.1 - Definition of SME by the main Multilateral Development Institutions

<b>Multilateral Institution</b>	<b>Max. No. of Employees</b>	<b>Max. Turnover or Revenue (\$)</b>	<b>Max. Assets (\$)</b>
<i>World Bank (WB)</i>	300	15,000,000	15,000,000
<i>Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IADB)</i>	100	3,000,000	(none)
<i>African Development Bank (AfDB)</i>	50	(none)	(none)
<i>Asian Development Bank (AsDB)</i>	Use of the definitions of individual national governments		

Source: Own elaboration on WB, MIF-IADB, AfDB and AsDB data.

The World Bank’s SME definition includes companies that are three times larger for employees and five times larger in terms of turnover than the largest SME according to the definition proposed by the Multilateral Investment Fund of the Inter-American Development Bank (MIF - IADB). The African Development Bank (AfDB) considers in its criteria of an SME only the number of employees (less than 50). Instead, the Asian Development Bank (AsDB) uses definitions of individual national governments.

In the United States of America, company standard sizes are established by the Small Business Administration (SBA), a United States government agency that provides support to entrepreneurs and small businesses. In order to

participate in government contracting programs and compete for contracts reserved for small businesses, the Office of Size Standards makes recommendations to the companies for establishing or revising size standards, according to changes in industries and the economy. The Office uses the most recent North American Industry Classification System (NAICS) codes available. The NAICS classifies businesses according to type of economic activity. This classification was designed by the government to better reflect the differences of companies between different sectors.

Micro, small and medium-sized enterprises (SMEs) play a central role also in the European economy, where they represent 99% of all enterprises. Therefore, support for SMEs is one of the European Commission's priorities for economic growth, job creation and economic and social cohesion. However, SMEs frequently have difficulties in obtaining capital or credit. As in a single market with no internal frontiers, it is essential that measures in favour of SMEs are based on a common definition to improve their consistency and effectiveness, in 1996 a recommendation establishing a first common SME definition was adopted by the European Commission. In 2005, the European Commission adopted a new recommendation in order to take account of economic developments since 1996, setting the following three criteria (see Fig. 2.1):

- staff headcount,
- annual turnover,
- annual balance sheet.

Fig. 2.1 - Definition of SME by the European Commission

Enterprise category	Headcount: Annual Work Unit (AWU)	Annual turnover	or	Annual balance sheet total
Medium-sized	< 250	≤ €50 million (in 1996 € 40 million)	or	≤ €43 million (in 1996 € 27 million)
Small	< 50	≤ €10 million (in 1996 € 7 million)	or	≤ €10 million (in 1996 € 5 million)
Micro	< 10	≤ €2 million (previously not defined)	or	≤ €2 million (previously not defined)

Source: "The new SME definition. User guide and model declaration", European Commission, 2005.

As Figure 2.1 shows:

- medium-sized enterprises are defined as enterprises which employ fewer than 250 persons and whose annual turnover does not exceed 50 million euro or annual balance sheet total does not exceed 43 million euro;
- small enterprises are defined as enterprises which employ fewer than 50 persons and whose annual turnover or annual balance sheet total does not exceed 10 million euro;

- lastly, micro enterprises are defined as enterprises which employ fewer than 10 persons and whose annual turnover or annual balance sheet total does not exceed 2 million euro.

It is important to highlight that while it is compulsory to respect the staff headcount thresholds, an SME may choose to meet either the turnover or balance sheet ceiling. In fact, it does not need to satisfy both and may exceed one of them without losing the status of SME.

For Member States, use of the definition is voluntary, but the Commission invites them to apply it as widely as possible.

In an attempt to partially harmonize these definitions, this Thesis uses EU definition.

### **2.3 The concept of Internationalization**

The concept of internationalization is constantly evolving. Several researchers have adopted different approaches in defining internationalization according to the field of study.

In the literature there are some main research areas that have attempted to give their own definition.

The economic approach focused on the transition of national companies into Multinational Enterprises (MNEs) through Direct Foreign Investments (FDI), while, the behavioral approach described internationalization as a gradual and incremental process (Fina and Rugman, 1996).

Nevertheless, both approaches tend to explain the internationalization process on the basis of internal phenomena, omitting the role of the increasingly international environment of firms (Karlsen, 2000).

In particular, Wind et al. (1973) affirmed that internationalization is “a process in which specific attitudes or orientations are connected with successive stages in the development of international operations” while, similarly, Johanson and Wiedersheim (1975), Piercy (1981), and Turnbull (1985) described

internationalization as “the outward movement in a firm’s international operations”. Other scholars defined it as “a sequential and orderly process of increased international involvement and the associated changes in organizational forms” (Bilkey and Tesar, 1977; Johanson and Vahlne, 1977; Cavusgil, 1980; Reid, 1981).

Later, the network approach offered a new perspective to explain the process of internationalization in which the development of businesses tends to depend on relationship with others (Coviello and Munro, 1997). Welch and Luostarinen (1988), stated that the process of internationalization implies the existence of a continuum from purely domestic companies to internationalized companies, thus defining internationalization as “the process of increasing involvement in international operation”. Afterwards, Beamish et al. (1990) offered a new and wider definition of internationalization, defining it as “the process by which firms both increase their awareness of the direct and indirect influences of international transactions on their future, and establish and conduct transactions with other countries”. Later, Calof and Beamish (1995) termed internationalization as “the process of adapting firms’ operations to international environments”. Lastly, Lehtinen and Penttinen (1999) defined internationalization as “the process of developing networks or business relationships in other countries through extension, penetration and integration”.

In addition to these three approaches (economic, behavioral and network), other research areas have been developed in the literature.

The entrepreneurial approach studied the process of internationalization from a different point of view, that of the key role of entrepreneurs in the internationalization of companies, particularly SMEs (Miesenbock, 1988; Westhead et al. 2001). This approach suggested that “a strategic change will not start without entrepreneurial action” (Schumpeter, 1934), such as the discovery and understanding of market opportunities (Kirzner, 1997).

Finally, in the recent literature, Etamad et al. (2010) called on the international entrepreneurship scholars to integrate the theory of what they called internetization with internationalization.

While the term internationalization refers to the process whereby a firm increases its commitment and involvement to international markets, on all aspects of its productive activities, with the term internetization the authors suggest that it provides for the information, the information infrastructure, and the internet-based information processing capabilities for the interlinking of value creating agents and processes in the firm.

## **2.4 The theories of Internationalization from the 1960s to the 2000s**

In the last decades, following the phenomenon of globalization, there has been a growing and progressive opening of production processes and exchange at the international level. The widening of geographical and sector boundaries, in fact, has led to an accentuation of the competitive dynamics of companies - with particular reference to small and medium-sized ones - forcing market players to review their strategies. Thus, strong implications have also impacted on the company's size, the degree of concentration of the sectors, the choices of diversification and innovation of companies and on market relations (Musso, 2013).

The acceleration of international openness has not only led to a quantitative increase in the number of players in the market, but also to a redevelopment of the methods of the foreign presence of companies. Indeed, there have been strategic, organizational and, in part, financial changes; the companies have also changed their attitude towards foreign markets, registering a considerable increase in Foreign Direct Investments (FDI).

In order to understand the effects for small and medium-sized enterprises in the face of these changes, it is necessary to analyze the evolution of economic

literature by identifying the theoretical models that, over time, have tried to interpret the internationalization pathways implemented by SMEs.

These models, which tend to increasingly recognize the potential for openness to foreign markets by companies, are examined through five main perspectives of analysis:

- 1) Economic approach;
- 2) Behavioral approach;
- 3) Network approach;
- 4) International entrepreneurship approach;
- 5) Born Global approach.

#### **2.4.1 The Economic approach**

The Economic approach includes three different lines of research:

- a) the Monopolistic Advantage theory;
- b) the International Product Life Cycle Model ;
- c) the Internalization Theory, and the Transaction Cost approach.

The Monopolistic Advantage theory is a macroeconomic model, conceived by Stephen Hymer in the Sixties/Seventies of the last century. Hymer starts from the Traditional theories of Adam Smith (the Absolute Advantages theory, 1776 - Classical approach) and David Ricardo (the Comparative Advantages theory, 1817 - Neoclassical approach), until then considered by the economic literature as the main theories to explain international exchanges.

Hymer (1960) argued that these theories, while explaining the reasons for the development of trade between the different countries of the world, were not able to adequately justify the logical choices made by companies regarding their structural and organizational conditions. In fact, they originated from unrealistic basic assumptions: a market characterized by perfect competition, the absence of transaction costs, a rational decision-making of the companies and the presence of high information symmetry.

The Monopolistic Advantage theory no longer considered the objective existence of differentials between countries, but focused on the subjective qualities of the company and, therefore, on the differentials between companies.

According to Hymer, in fact, the company has a set of exclusive oligopolistic or monopolistic advantages, which he defined as “proprietary knowledge”. These advantages - which derive from technological superiority, product differentiation, organizational and management know-how, etc. - and the ability of the company to exploit them on their own, represent the potential to compete beyond national borders.

In the choice between export or on-site production, the company is influenced by the conditions of the market in which it operates: the presence of tariff and non-tariff barriers, the high transport costs, the discriminatory tax treatments and other external constraints. These market characteristics - defined by Hymer “market imperfections” and placed at the base of his theory - lead the company to favour local production. Therefore, according to this model, the exclusive advantages of oligopoly and monopoly are an essential condition for the company to develop abroad through Direct Investments.

The second approach to internationalization lies in the International Product Life Cycle Model of Vernon (1966).

Unlike Hymer, Vernon developed a microeconomic concept, explaining the international activities of companies by analyzing the operations undertaken with foreign markets by American multinational companies in the post-war period.

The scholar argues that, in order to compete on international markets, in addition to possessing financial resources and human capital, companies must concentrate their resources on product or process innovation using technology. According to Vernon, in fact, there is a strong relationship between the product

life cycle, the characteristics of the countries and the widening of the geographical boundaries by companies.

Analyzing USA companies, Vernon identified four phases in the life of each product (Figure 2.2):

Fig. 2.2 - *International Product Life Cycle Model of Vernon*

<b>INTERNATIONAL PRODUCT LIFE CYCLE</b>				
<b>Product Stage</b>	<b>Trade</b>	<b>Target Market</b>	<b>Competitors</b>	<b>Production Cost Locally</b>
<b>1. INTRODUCTION</b>	Limited; production for home market	USA / inventor's country	Few local firms	Initially high
<b>2. GROWTH</b>	Increasing exports	USA advanced and later developing markets	Competitors from advanced markets	Declining due to economies of scale
<b>3. MATURITY</b>	Declining export at first; later in phase become imports	USA / inventor's country	Competitors from mostly developing markets	Increase owing to lower economies of scale and comparative disadvantages

Source: Adapted from Vernon (1966)

1) *introduction* - the country of origin is characterized by the high availability of capital, high per capita income, high labor costs, high technological level. Domestic demand is growing and, although there are countries where production costs are lower, production takes place in the country of origin because it is considered more important to develop innovation than to optimize costs;

2) *growth* - domestic demand is heading towards a state of saturation, while demand begins to emerge from foreign countries similar to those of origin (Europe). Thus, the flow of exports begins, which increases even when foreign countries start to locally produce the same goods. Furthermore, new competitors emerge, who can enjoy the advantages of localization (public

facilities, the absence of customs barriers, lower transport costs, knowledge of the local market, low labor costs, etc...). Therefore, some companies in the exporting country are urged to install their plants in the foreign country;

3) *maturity* - the product has reached the highest standardization. Exports, replaced by on-site production - more competitive also in terms of production costs - take the form of "inverse flows" before reaching the fourth phase of decline.

The Internalization Theory (Buckley and Casson, 1976) and the Transaction Costs Theory (Williamson, 1975) date back to the late Seventies. The basis of the first Theory is the assumption that the markets are imperfect and inefficient. Therefore, companies consider it convenient to circumvent these markets through an internal market to the company.

According to this Theory, multinationals originate when the process of internalization of markets crosses national boundaries, namely when the internal costs of coordination are lower than the costs of using the market. In this sense, we must also refer to the second Theory, that of the Transaction Costs of Williamson, which identifies two different structures of governance of transactions: markets and hierarchies. Williamson stated that the context in which the company operates is characterized by environmental and human factors that hinder exchange relations as they increase transaction costs and reduce the efficiency of market use: uncertainty and environmental complexity, information asymmetry among the actors involved, limited rationality and opportunism. On the contrary, hierarchical internalization is more efficient as the proprietary link ensures better coordination, control, and monitoring of operations.

Therefore, multinational companies, being a particular form of hierarchy, lead the comparison between exports and direct investments to the comparison between the costs of use of the market and costs of use of the hierarchy.

Therefore, foreign direct investment, prevails when the organization of cross-border transactions is more efficient than the market.

The integration of the three approaches analyzed above gives rise to the Eclectic Paradigm of Dunning. The paradigm connects the market imperfections with the factors in possession of the companies that allow them to develop internationally. With regard to market imperfections, Dunning (1988) identified two types of market failure:

a) the *structural market failure*, which occurs when the market allows the creation of natural monopolies allowing the company that benefits from them, to raise entry barriers. It creates a disparity between companies in the control of international activities and limits their ability to exploit their potentials;

b) the *transactional market failure*, that pertains to the inability of the market to organize transactions in an optimal manner at a lower cost than that deriving from a hierarchical organization.

As mentioned above, market imperfections are in contrast with the endowment of factors that companies have available to enable them to establish themselves internationally. Hierarchical choice, therefore, allows exploiting three types of advantages: ownership advantages, internalizing advantages and, location-specific advantages.

These three advantages constitute the conditions to allow the realization of foreign direct investments and the international development of a company.

Ownership advantages are specific advantages of the company and refer to the competitive advantages of companies seeking to engage in foreign direct investment. The greater the competitive advantage of the companies investing, the more likely they are to engage in their foreign production.

Internalizing advantages derive from the integration in the company of the activities carried out. The company can organize the creation and exploitation of its key competencies. The greater the net benefit deriving from the internalization of the markets of transnational intermediate products, the

greater the probability that a company would prefer to engage in foreign production rather than licensing the right to do so.

Location-specific advantages are related to the characteristics of the host countries and their specific economic, political, financial, cultural and institutional environment, which are therefore available to all companies that decide to carry out certain activities.

#### **2.4.2 The Behavioral approach**

The Behavioral approach is placed temporally in the Seventies, when new models of international development emerged on the world scene.

The American model, defined as “coordinated federation”, developed after the Second World War and characterized by a strong weight of the parent company in determining the strategies and activities of external units (which still has a rather wide autonomy in the use of new products, process technology and marketing and production know-how), is flanked by the Japanese model and the European model.

In the Japanese model, the parent company takes strategic decisions and centrally manages the R&D and production activities, delegating the rest to the outlying units.

The European model, instead, developed as a form of “decentralized federation”, corresponding almost perfectly to the multinational company: each national branch has a high degree of operational independence regarding the production of the product, the production processes and the strategies of marketing.

Simultaneously with the appearance of such models, on the international scene small and medium-sized enterprises began to appear, taking on an ethnocentric attitude in which exports, of a prevalently occasional type, were destined towards countries that were culturally and geographically closer.

Taking these elements into account, the behavioral approach explains the processes of internationalization through the concept of gradualism. According to this vision, whose main exponents are Johanson and Vahlne (1977), the internationalization of the company is nothing more than an incremental evolutionary process, in which the organizational, strategic and financial involvement grows with increasing experience. The sequential path, which starts with indirect exports up to foreign direct investments, also accompanies the company's growth in size.

In support of these theories, two schools of thought were developed: one based on the Uppsala model (U-Model), the other on models of innovation (I-Models).

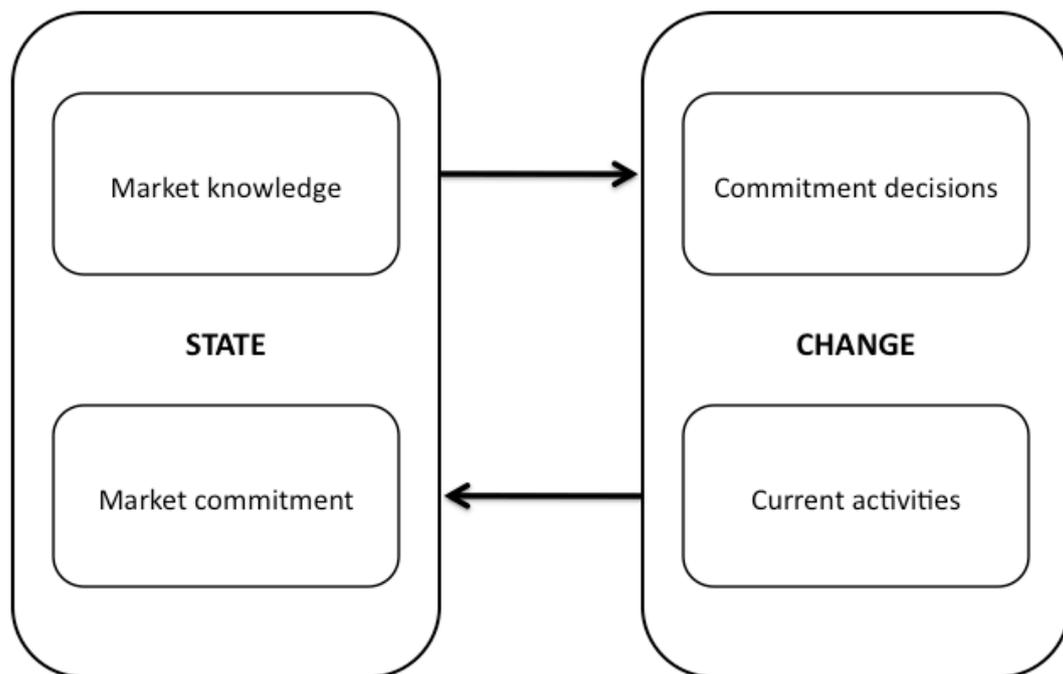
The first model, that of Uppsala (Figure 2.3), considers internationalization as a medium-long period process that develops gradually, incrementally, during which the organization explores the foreign environment and gradually increases its commitment, according to the logic of bounded rationality. The U-Model develops according to two perspectives: one of state and one of change. The knowledge of the market (state of the company) affects the decisions of involvement abroad, with a view to change. This change modifies the state of the company based on its degree of involvement. This creates the conditions to restart the cycle starting from a state of greater involvement. Therefore, the model assumes that the internationalization of the company occurs through a sequence of four stages:

- 1) sporadic or non regular export activities;
- 2) direct export through independent representatives;
- 3) establishment of a branch in the foreign country;
- 4) establishment of production units in the foreign country.

The foreign markets reached by the company are positioned in a growing geographical and mental distance with respect to the country of origin. In particular, Johanson and Vahlne (1977) speak of "psychic distance" to indicate

the set of factors that can act as an obstacle to the flow of information that the company needs to operate in foreign markets (political system, culture, language, etc...).

Fig. 2.3 - Uppsala Model: basic mechanism of Internationalization: state and change aspects



Source: Johanson and Vahlne (1977)

Compared to the U-Model, the models based on innovation (I-Models) add a fundamental element.

Andersen (1993), affirmed that every stage the company faces in its process of internationalization represents an innovation in the management of the company. For this reason, while the U-Model interprets international development as the result of the experience of exploring opportunities, for the I-Models the internationalization is the result of a decision by management and, since the management lacks a knowledge of the foreign market, the company is driven to operate gradually.

### 2.4.3 The Network approach

The Network approach identifies markets as a system of relationships among companies (Coviello and Munro, 1995; Glückler, 2006), defining the relationships and the social capital of the enterprises as the driving forces for international development.

The network is essential especially for small and medium-sized companies because - having limited resources - their ability to maintain international relations within a consolidated network, facilitates their process of internationalization.

Johanson and Mattsson (1988), identified three different ways in which the company can start its process of internationalization:

1. international extension: a company establishes new relationships on foreign markets;
2. international penetration: a company develops its current network position in countries where it already operates;
3. international integration: involves the enhanced coordination of positions occupied by the company within various foreign networks.

Starting from these premises, Johanson and Mattsson (1988) subsequently define four different variants of companies deriving from the crossing of two different dimensions: the degree of internationalization of the market in which the company operates, and the degree of internationalization of the company (see Figure 2.4).

The four variants are:

1. the “Early starter”: both the market and the company are in a state of low internationalization. The company has weak links both with foreign entities and in the network. The knowledge of foreign markets is insufficient for the company to begin business activity abroad. Furthermore, given the similar situation of the other network participants, the company cannot obtain information from them, and it cannot use their experience. Thus, for an early starter, the lack of resources is the main limitation;

2. the “Lonely international”: the high level of internationalization of the company within a network with a low level of internationalization allows the company a greater chance to expand than the other players in the network. The company can connect with new foreign business networks through the exchange for knowledge of the home market and the relationships a given company has on it;
3. the “Late starter”: these companies have not direct relationship with foreign markets, whereas the other players of the network all display a high degree of internationalization. Thus, the position of a “late starter” is not advantageous because all of the competitors know the “late starter” lacks. However, this type of company can take advantage of the internationalization of entities belonging to its network may reach a position from which it can begin its own internationalization process.
4. the “International among others”: is the case in which both the company and the network are characterised by a high degree of internationalization. The status of an “international among others” requires the highest degree of coordination of activities on foreign markets because the company face changes in demand and supply. The company have to be flexible and responds in advance of its competitors. This position has many advantages for a company, such as facilitating access to many external resources.

Fig. 2.4 - *The four variants of company internationalization*

		<i>Degree of market (network) internationalization</i>	
		Low	High
<i>Degree of company internationalization</i>	Low	The Early starter	The Late starter
	High	The Lonely international	The International among others

Source: Johanson and Mattsson (1988)

Therefore, in the Network Theory, the company is directly dependent on the network it belongs to, and indirectly with all the actors who undertake relationships with it. For this reason, this theory defines internationalization as the process by which the company establishes relationships with actors within foreign networks.

As the Behavioral approach, here too there is a lack of resources and knowledge for small and medium-sized enterprises, which circumvent the obstacle proceeding according to a gradual approach.

#### **2.4.4 The International entrepreneurship approach**

After analyzing the technological innovations, Morrow (1988) elaborated the International Entrepreneurship Theory. Morrow explained how the reduction of trade barriers and cultural homogenization offer the possibility, even for small businesses, to reach markets previously considered inaccessible.

According to Morrow, international entrepreneurship is the combination of innovative behavior determined by the entrepreneur's propensity to risk. The entrepreneur, in fact, represents the key figure for the company that intends to widen its borders, because is the only subject in possession of the experiential knowledge necessary to seize the opportunities of the market and exploit them to the best to compete on international markets.

#### **2.4.5 The Born Global approach**

One of the most relevant lines of thought on the study of the international dynamics of small and medium-sized enterprises is the Born Global approach.

The term "Born Global" was used for the first time in 1993, during a survey carried out for the Australian Manufacturing Council, whose objective was to examine the behavior of the so-called "emerging exporters". The sample

consisted of Australian small and medium-sized enterprises that had recently started an export process, regardless of their date of constitution.

The survey revealed two main types of clearly distinguishable exporting companies:

1. the *Home Market Based Firms*: they were the companies strongly affirmed in the internal market and with many years of experience, characterized by a solid market share and a rather stable financial situation. For these companies, exports represented a natural choice to continue their growth process;
2. the *Born Global*: they were companies exporting one or more products and whose exports, which took place within two years of their establishment, corresponded to at least a quarter of their total production. For the Born Global companies, foreign markets represented the natural reference point since the beginning of the activity, giving the internal market a supporting role. These companies corresponded with 25% of the total sample.

The concept of Born Global analyzed, is based on two fundamental factors: on the one hand, the propensity of management towards the implementation of an internationalization strategy, exploiting its own capabilities and resources, standardizing production and marketing, and all the activities of the value chain. On the other hand, the willingness to turn to well-defined market segments, according to a global niche strategy, preferring this strategy to the offer personalization.

Jolly, Alahunta and Jeannet (1992) and later on Knight and Cavusgil (1996), identified the main features of Born Globals:

- a) a global vision since the company was founded by management;
- b) an innovative and high quality product offer;
- c) standardized products;

- d) rapid access to the market;
- e) emphasis on updated products;
- f) creation of a global, efficient and well-coordinated network organization.

With this new model, the question of management is no longer whether or not to adopt an internationalization strategy but: “How to implement it?”, “With which combinations of product/customer/market?”, “With which entry modes into foreign markets?”. Thus, the literature assumes that, in a now globalized market, the process of internationalization must necessarily be carried out by every company, regardless of its size.

In this sense, two different approaches to internationalization have been developed: a) the proximity approach; b) the global approach.

a) A company that embarks on a path of internationalization through the proximity approach chooses to expand in the geographically and culturally closer markets, following a sequential process, both in terms of the number of markets served, and the intensification of presence, developed gradually in parallel with the degree of international learning of the company.

b) Instead, with the global approach the company tends to pursue a cross-segmentation strategy, addressing groups of potential customers with the same characteristics and present in many different countries, with a standardized products offer. In this case, the adopted internationalization process is serial, meaning that the company decides to enter several markets at the same time.

The global approach allows the company to expand its borders even without a thorough knowledge of the markets, as the necessary information is limited to the segments of interest. Moreover, competitive conditions are based on non-price competition and, lastly, by using a centralized organizational structure to operate on a global scale, the complexity of international action is reduced.

To maintain the competitive advantage through a global niche strategy, the company must set its own strategy approaching in a dynamic way: it must have a particularly attractive offer, constantly updating the product in a logic of “continuous improvement”. The company able to constantly improve its distinctive skills while maintaining a global projection of the niche, in fact, as well as contributing to strengthening its competitive advantage, is able to maximize the information learning opportunities necessary for its geographical expansion.

The serial approach, therefore, does not arise as an opportunity for the company but as a necessity. Therefore, a serial approach indicates the tendency of the company to immediately adopt more demanding entry modes compared to simple exports.

## **2.5 Industrial districts**

The existent literature has analyzed the theoretical models that study the internationalization processes of the companies illustrated so far, taking into account the influence exerted by the industrial districts in the internationalization paths of the individual company.

Industrial districts are recalled by the Behavioral Theories for their ability to put the companies in the condition of being able to force the incremental sequence of the international commitment, which otherwise would take place in a predetermined way.

Even the Network approach (see previous chapters), recognizes the influence of industrial districts in the process of internationalization of SMEs. In particular, the district context allows companies to complement for their lack of resources and skills to develop foreign markets more quickly and extensively.

Finally, the Born Global theory, in addition to recognizing the role of the districts, from time to time attributes it a function of stimulation, support and driving to the process of internationalization of companies.

Becattini (1989) defined the industrial districts as *“a socio-territorial entity characterized by active coexistence, in a territorially circumscribed, naturalistically and historically determined area, of a community of people and of a population of industrial enterprises. In the district, unlike what happens in other environments, the community and businesses tend to interpenetrate each other”*.

Grandinetti (2001), Grandinetti and Rullani (1992), stated that an industrial district must present, within a circumscribed territory, a cluster of companies that share the same specialization and have relationships of interdependence and complementarity.

Yet in 1919, Alfred Marshall identified the main characteristics of the industrial district so that smaller companies could obtain the same benefits as large companies. In particular, the three characteristics identified by Marshall (1919) concern: 1) the small size of companies; 2) their relevant number; 3) their localization in the same geographical area.

Internationally, industrial districts are recognized as being promoters and mediators of local competitive values and advantages (Becattini and Rullani, 1993, Gradinetti and Rullani, 1992). The district, therefore, plays an indispensable role for the international development of small businesses that otherwise would be particularly fragile (Pepe, 2000). Therefore, in industrial districts, where the leading companies are directly related to the international market, the potential of the district is represented by downstream relationships, which are favoured by the belonging of firms to the same geographical area, gaining more attractiveness to market intermediaries (Musso, 2013).

Thus, the district plays an important role for small businesses that are part of it. As said above, the value of the districts is contained in the ability to generate value by uniting skills and experiences, and the strengths that characterize industrial districts are various and create advantages for the individual companies that belong to them. In particular, the industrial district has greater visibility with respect to the individuality of the company; it offer a

quantitative and qualitative flexibility that allows companies to present a better offer to the market than that of a large company. Finally, industrial districts represent a natural network of information among the companies that belong to it (Musso, 2013). However, local links can be an obstacle to the internationalization of companies, especially because of the complexity of replicating the district's relationships, collaborations and uncodified languages outside the district (Conti and Menghinello, 2003; Marini, Bordignon and Turato, 2003; Pepe and Musso, 2003).

## **2.6 The process of internationalization of SMEs and the change of scenario after the advent of the Internet**

The emergence of new countries in the international competition, the accentuation of the process of international decentralization of production and, above all, the reduction of barriers to mobility and communication, are dramatically contributing to change the rules of world trade. In particular, the advent of network technologies allowed large multinational companies to regain competitiveness on the fronts where industrial districts have always built their competitive advantage (Chiarvesio, Di Maria, Grandinetti, 2005).

Rullani, Micelli and Di Maria (2000) affirm that companies within industrial districts are divided in two groups in terms of their attitude towards digital innovation: half of them “breathe an air of activism”, concrete and serious; for another half, new technologies are almost suffered as a “trend phenomenon of the moment”, accepted by a substantial disinterest.

However, network technologies - as a communication issue - are an important tool for small and medium-sized businesses as they allow the development of dyadic relationships, which on the one hand transfer information from the company to the consumer (wherever it is), and on the other hand, allow to acquire useful knowledge about the client's needs in order to develop marketing strategies tailored to the characteristics of the demand.

Today, compared to only twenty years ago, there are numerous digital communication tools available to companies to start their relationships with potential customers or to strengthen those with customers already acquired, wherever they are in the world, by the use of the website, e-mail, blogs, and social media.

### **2.6.1 The theories of internationalization after the 2000s: the Internetization concept**

The most recent literature in the field of internationalization started to recognize the role of the Internet in the processes of internationalization of companies. In particular, Etemad et al. (2010) identified among the theories discussed above, three main correlated waves and highlighted some limitations.

The authors affirm that the first wave is represented by the Uppsala model (Johanson and Vahlne, 1977) which introduced the learning, experiential and tacit knowledge (all based on information acquisition and knowledge mobilization) to the field of internationalization (Etemad et al., 2010, p. 323). In particular, as seen above, this model defined the knowledge of the market as a state variable. In fact, the basis of this theory is the assumption that a better knowledge of a foreign market allows greater commitments on that market and reduces the operational risk for the company. As it is evident, this theory - and its subsequent revisions by Bilkey and Tesar (1977), Newbould et al. (1978), Cavusgil (1980, 1984) and Bartlett and Ghoshal (1989) - was developed before the advent of the Internet and the first waves of globalization. Therefore, this wave did not discuss the influence of information/knowledge deriving from the Internet.

The second wave of these theoretical developments is represented by the study on the internationalization of multinational companies started by Stephen Hymer (1960) and followed by contributions by Buckley and Casson (1976) and John Dunning (1980). These theories were focused exclusively on the concept of internationalization of large companies and, given the characteristics of the

historical period, were inevitably anchored to the state of the art before the Internet and globalization.

Finally, the third wave begins with the innovative work on the International New Ventures (INV) of Oviatt and McDougall (1994) and the Born Globals (Rennie, 1993).

The subsequent theoretical developments of Madsen and Servais (1997), Acs and Yeung (1999), Dana (1999), Etemad (2004, 2007), overlapped with early Internet developments while globalization was in full swing. The third wave of developments has shifted attention from the international investments of large companies in the first wave, and from slow, gradual and controlled internationalization, mainly characterized by the second wave, to an early internationalization of small and medium-sized enterprises (90s). However, it did not sufficiently emphasize the impact of the information revolution that was under way thanks to the Internet. Although Oviatt and McDougall (1995, 1997) suggested globalization and technological developments (i.e., fax, internet, etc...) as potential contributors in accelerating internationalization of companies - even and especially for small enterprises - the true impact of the information revolution driven by the information highway by technology-savvy entrepreneurs was not fully envisioned (Etemad et al., 2010, p. 324).

After a deep analysis of the previous theories, Etemad et al. (2010) have coined a new term: "Internetization". With "Internetization" the authors indicate *"the information, the information infrastructure, and the internet-based information processing capabilities for the interlinking of value creating agents and processes in the firm"*.

Thus, scholars claim that technology has been (and it is) an influential factor in internationalization, capable of advancing the idea that information processing technology, especially through the Internet, has played (and it plays) a fundamental role in acceleration of internationalization, especially for small businesses (Etemad, 2007).

The central idea of the “internetization” is the power of relevant information that allows the company to appropriately employ skills and competences to create value-adding activities. In turn, these skills and competences allow the company to acquire further competitiveness and growth in its activities across the border. These information link all activities that create added value and support internationalization.

In other words, the increase in information due to globalization and to the information revolution, has allowed the connection of local resources and activities at the international level to provide maximum value to the final customer.

At the same time, the Internet is becoming contingent on the value expected by the customer (increasingly informed thanks to the Internet). In effect, the Internet, in addition to facilitating these links, is becoming the main information collector through which information on all transaction flows is transmitted and received. These information are fundamental and incorporate other influential factors, including learning, speed and temporal aspects, access to networks, and risk-controlled expansion, which are all of great concern to the delivery of value in general and to smaller internationalizing companies in particular (Etemad et al., 2010, p. 325).

In conclusion, through the information deriving from the Internet, the company can modify its business model and give rise to business opportunities that had not previously been perceived. Finally, the new business opportunities push the company to increase its degree of “internetization”, giving new life to the circular path that is being formed. Therefore, the researchers state that the Internet must be considered as a tool to increase the efficiency, competitiveness, growth and international activities of the company.

## **2.6.2 SMEs and the Internet: determining factors in the process of internationalization**

As already mentioned above, in recent times, the digitalization of SMEs has become increasingly important in the field of business management as it influences the possibilities and the opportunities for growth and success of a company. In fact, it represents a fundamental driver to facilitate the development of SMEs and an important competitive advantage for innovation, cost reduction and internationalization.

Digitization has become part of the daily routine and is radically changing the way consumers and businesses interact with each other. Furthermore, it is causing a marked transformation in the behavior of potential customers, with important consequences for companies, products and brands (Kaplan and Haenlein, 2010; Muntinga et al., 2011). In fact, people spend more and more time connecting to the network, through various types of devices and using websites and social media. Therefore, the use of digital channels is fundamental for all companies, and especially for SMEs, above all in terms of competitiveness and growth.

The recent literature has shown that digitalization, in its many forms, is positively related to small companies performance, competitiveness and growth, offering opportunities to attract new consumers and reach the existing ones more efficiently (Spurge and Roberts, 2005; Galloway, 2007; Shideler and Badasyan, 2012; Taiminen and Karjaluoto, 2015). Moreover, the use of the website and social media allows cost reduction (Chong and Pervan, 2007; Kanyak et al., 2005; Lohrke et al., 2006), optimization and improvement of internal and external communication (Kaynak et al., 2005; Eriksson et al., 2008) and, in many cases, the positive relationship between the strategic exploitation of Web 2.0 and the business results has been confirmed (Taiminen and Karjaluoto, 2015).

Some scholars suggest that SMEs are in an early stage of adopting digital channels (Eriksson et al., 2008) and that company size has a strong influence on

the adoption (Bordonaba-Juste et al., 2012). In particular, Barnes et al. (2012) affirm that large companies are more likely to have the required knowledge and resources to successfully adopt new digital tools. For this reason, digitization represents for SMEs an important challenge. In fact, SMEs usually adopt informal, spontaneous, disorganized and not well-planned marketing techniques (Gilmore et al., 2004; Hill, 2001; Parry et al., 2012). This represents an important limit to the achievement of an effective and well-structured process of digitization of SMEs (Taiminen and Karjaluoto, 2015).

However, the indispensable premise for SMEs to achieve effective web presence, is the existence of a solid and effective Internet network in their work sites and a strategic use of the network. The Internet can be a critical factor for increasing the size of a company's market and its efficiency (Porter, 2001). Furthermore, the Internet can be essential to achieve greater competitiveness in even the largest and most competitive markets (Hamill and Gregory, 1997; Lituchy and Rail, 2000). Moreover, Williams (1999, p.20) affirms that the Internet technologies:

- increase ability of small companies to compete with other firms both locally and nationally (promotional tool);
- create the possibility and opportunity for more diverse people to start a business;
- offer convenient and easy way of doing business transactions (not restricted to certain hours of operation);
- offer an inexpensive way for small companies to compete with larger companies and to sell in distant markets.

Despite the advantages and benefits listed above, it is clear that not all companies, with particular reference to small and medium ones, effectively implement the use of the web and its tools in company offices. Many scholars have shown interest in investigating the reasons that influence the adoption or rejection of web-based technologies by companies. In more detail, several

researchers have focused on the internal factors (firm-specific factors, strategy, attitudes and experience); on the external factors (infrastructure and environmental factors); and on the resource-based factors, suggesting that resources are the dominating factor explaining decision making in small companies. Finally, Karjaluoto and Huhtamäki (2010) have identified three reasons to adopt digital channels by small companies:

1. firm-specific and owner-manager factors (capabilities, motivation, background and experience);
2. resource-related factors (human, financial and technological resources);
3. environmental factors (product or service type, competitive landscape, the industry sector, consumer behaviour and outside support),

highlighting that these can act either as facilitators or inhibitors of the Internet tools adoption.

In the light of the internal, external and resource-based factors above exposed, it is clear how each company operates in different situations and where the importance of using web-based technologies takes on a different relevance. Nevertheless, it is possible to state that the recent developments of society and the economic system make the strategic use of this type of technology a necessary condition.

### **2.6.3 The strategic use of the Internet in international markets**

A theoretical generalization about the adoption of the Internet by SMEs in international markets is complex, because of the quick evolution of the phenomenon analyzed. However, it is possible to try to understand the importance of the strategic use of the Internet for SMEs in the global competition.

Although it is demonstrated that the strategic use of the Internet offers competitive advantages, only a small part of SMEs intend to exploit them. In fact,

most SMEs adopt the Internet only if it is totally suited to a particular communication need. In general, it seems that a “wait and see” approach (Miller and Lammas, 2010), rather than the adoption of the Internet tools, is currently the prevailing position among SMEs.

However, unlike traditional information exchange, the Internet does not require high costs, investments or telecommunications infrastructure (Deelmann and Loos, 2002). This certainly makes it easier for SMEs to adopt the Internet tools (website and social media), and offers them new opportunities to exploit their business in a more strategic and functional way (Santovito et al., 2016).

In fact, the strategic use of the Internet implies the recognition of the potential of this tool with regard to the control of relations and the points of contact in relationships between consumers and companies (linked to the company's strategy) (Miller and Lammas, 2010). This is not strictly connected to pre-existing business relationships, but it makes possible new strategic opportunities with potential consumers or business partners.

Establishing an online presence through the creation of a website and/or a social media profile, in fact, is different from a use where the control is in the hands of simple users inside the company (i.e., the use of e-mail). Therefore, the implementation of a website and/or a social media profile shows a more strategic use of the internet.

The role of the internet has now also been recognized in the more traditional business literature.

According to Porter (2001), the key question is not whether to use Internet-connected technologies (companies have no choice if they want to be competitive) but how to develop them.

Wright and Etemad (2001) stated that in the context of SMEs internationalization, technological developments in telecommunications allow even the small companies to have access to consumers, suppliers and collaborators wherever they are. Moreover, the web allows overcoming many of

the barriers traditionally faced by SMEs in their internationalization process. Thus, it is a relatively inexpensive form of marketing, and allows companies to reach people all over the world.

Internationalization can be facilitated by the Internet both for what concerns the production of outputs (e-marketing and distribution), the supply of inputs (e-procurement and sourcing), and also for the management of internal processes of the company (Intranet for information management, ERP software to manage resources and production). Furthermore, the Internet has a positive impact on many aspects related to resources, information, and networks, thus facilitating the entire process of internationalization (Prashantham and Young, 2004).

Therefore, the Internet is a resource of immeasurable value for SMEs, as it allows them to obtain advantages that no other instrument would grant (Loane, 2005). According to Kobrin (2001), web access is available to all companies regardless of size, presenting benefits which include:

- the reduced importance of economies of scale,
- lower marketing communication costs,
- greater price standardisation,
- reduced information float time,
- temporal asynchronicity,
- increased contact between buyers and sellers,
- changes in intermediary relationships.

The Internet undoubtedly offers significant opportunities that facilitate the process of internationalization of SMEs, especially those located in outlying regions and in developing economies. In particular, the Internet can be very important for SMEs with scarce economic resources to invest in the process of internationalization.

At the same time, however, it is always useful to remember that despite the Internet-related technologies, the traditional aspects of the business - such as the importance and the centrality of face-to-face interaction, and the building of trust through actions connected to the offline world - remain of vital importance even today (Loane, 2005).

In summary, SMEs are often more suitable to the strategic use of the Internet thanks to their greater flexibility and the strong need to contain the costs of marketing and communication activities (Pentina et al., 2012). In particular, according to Gligorijevic and Leong (2011), it can be noted that, depending on the different objectives and the different skills and competences present in the company:

- some SMEs use the website and social media only to group all the information related to their business and their sector or to promote their events;
- others, are much more active both on social media sites through online advertising campaigns and using interactive website with the aim of creating a real network in these online spaces.

Although the theoretical reflection on the use of the website and the social media in the marketing strategy has been largely underway for more than fifteen years, however, there are few studies regarding its international dimension.

In particular, the few existing literature in this field states that the Internet is a key tool in the process of internationalization of SMEs. Scholars have focused mainly on the convenience of adopting the Internet for SMEs, analyzing the advantages and benefits, and the internal, external and resource-based factors.

However, there is a lack in the existing literature that does not explain whether the Internet can be considered a key tool in the process of internationalization of SMEs as it allows companies to acquire new foreign

customers. The acquisition of new foreign customers, in fact, which translates into international sales for SMEs, is the focal point and most interesting for these companies that try to survive in an increasingly global competition.

Therefore, this Thesis intends to investigate the role of the Internet as a key tool of the process of internationalization of SMEs by analyzing the ability of the small and medium-sized enterprises to acquire new foreign customers through the Internet.

## **2.7 Summary**

This Chapter started with an overview of the different definitions of SMEs existing in different global contexts.

Subsequently, the concept of internationalization, which is constantly evolving, was illustrated.

Finally, the Chapter focused on the development of the Theories related to the process of internationalization of SMEs from the 60s to the present. In particular, the recent literature highlights the importance of the Internet in the processes of internationalization of SMEs but, given the constant and rapid evolution of the phenomenon, it is still lacking in some perspectives.

The next Chapter shows the research methodology adopted in this Thesis to fill the gaps relating to the adoption of the Internet as a key tool for the acquisition of new foreign customers by small and medium-sized enterprises.

# CHAPTER 3

## Research Methodology

### 3.1 Introduction

The previous chapters provided a framework and a description of the research.

This Chapter illustrates the research methodology used in this Thesis to investigate the acquisition of new foreign customers through the Internet tool by SMEs in their process of internationalization.

In particular, a combination of qualitative and quantitative approaches has been adopted. This combination can be described as mixed method.

### 3.2 Three different approaches into the research process: quantitative, qualitative and mixed methods.

In sociological research the debate between quantitative research and qualitative research has had alternate events throughout the course of the last century.

After the lively confrontation of the 1920s and 1930s, when both approaches provided results of high-value and contributed significantly to the advancement of the research, the discussion entered a latency phase. This phase saw, from the 40s to the 60s, the domination of the quantitative approach.

For all those years, qualitative research was considered as a sort of “illegitimate child” of social science, in which the researcher was considered to be a good journalist, denying the title of the social scientist.

In the 1960s the problem returned to the limelight starting with a series of important theoretical contributions (Goffman, 1959; 1967; Schutz, 1967; Glaser and Strauss 1967; Blumer, 1969).

However, since the second half of the 1980s, the qualitative approach has strongly affirmed its presence not only in the methodological debate but also in terms of empirical research (Corbetta, 2014).

In the literature, therefore, qualitative and quantitative research are presented as two fundamentally different paradigms through which studying the social world.

The notion of “paradigm” has an ancient origin in the history of philosophical thought. In fact, it was used both by Plato, in the sense of “model”, and by Aristotle, in the sense of “example”.

In the social sciences its use is inflated and confused by many different meanings: from a synonym of “theory”, to an exemplary research process, to an equivalent of “method”.

With the term “paradigm”, Thomas Khun (1962) defined a theoretical perspective which is:

1. shared and recognized by the community of scientists of a specific discipline;
2. based on previous acquisitions of the discipline itself;
3. which operates by directing research in terms of both: a) the identification and selection of relevant facts to be studied, b) and the formulation of hypotheses within which to place the explanation of the observed phenomenon, c) both of the preparation of the necessary empirical research techniques.

The founding paradigms of social research, from which the first procedures that guided the development of empirical research were born, are two: Positivism and Interpretivism (see Table 3.1).

Positivism was born in the mid-nineteenth century when people began to question themselves on social reality as such, and to transform it into an object of study.

The scholars Auguste Comte and Herbert Spencer, founders of the discipline, shared their faith in the methods of the natural sciences. The positivist paradigm, in fact, can be defined as:

*the study of social reality using conceptual apparatuses, observation and measurement techniques, mathematical analysis tools, inference procedures of the natural sciences (Corbetta, 2014)*

where:

*Conceptual apparatuses* are the categories of “natural law”, “cause-effect”, and “empirical verification”, etc.

*Observation and measurement techniques* are the use of quantitative variables also for qualitative phenomena, the measurement procedures applied to ideological orientations, mental abilities, psychic states.

*Mathematical analysis tools* the use of statistics, mathematical models, etc.

*Inference procedures* are the process that starting from the known allows to advance hypotheses on the unknown (therefore, the passage from the particular observation to the general law), the use of theory for prediction purposes, and the inference from the sample to the universe.

While Positivism saw its origins in French and English culture, the most radical and organic criticism of its approach came to light in the context of German historicism at the hands of the scholar Wilhelm Dilthey (1883).

Dilthey emphasized a distinction between the “natural sciences” and the “human sciences”, focusing on the different relationship established between the researcher and the studied reality. In fact, while the object of the natural sciences is represented by the reality external to man, which remains so also in the cognitive process (explanation of the phenomena in terms of cause and effect, or the general and the particular), the human sciences do not show this separation between researcher and studied reality. So, in this second case,

knowledge can occur only through a process of understanding or comprehension.

However, this new perspective, named Interpretivism, entered the field of sociology fully thanks to the German sociologist Max Weber (1904 [1949]). The scholar claimed that, since human life is in its essence different from that of the natural world, it must be studied with different methods from the positivist ones. Therefore, the subjectivist approach can not use the “language of variables” but requires its own research procedures, its own techniques of observation, and its own analysis of the empirical reality, giving rise to qualitative research.

Tab. 3.1 - *Positivism and Interpretivism*

<b>Positivism</b>	<b>Interpretivism</b>
Assumes that society has objective social facts	Reality is constructed through the meanings created by individuals
Society exerts influence on its members	People’s actions are the result of people’s personal meanings
The point of research is to uncover the laws that govern human behavior, just as scientists have discovered the laws that govern the physical world	The point of research is to gain in-depth insight into the lives of respondents, to gain an empathetic understanding of why they act in the way that they do
Scientists should use similar methods and approaches to the natural sciences	Scientists need to use non-scientific methods to see the world through the eyes of the actors doing the acting
Prefer quantitative methods which allow for the researcher to remain detached from the respondents	Prefer qualitative methods which allow for close interaction with respondents
Objective meaning	Subjective meaning

Source: Adapted from Corbetta (2014), and Haralambos and Holborn (2013).

Therefore, as mentioned above, two main research methods emerge in the literature: quantitative and qualitative.

The qualitative and quantitative methodology will be illustrated in detail in the following paragraphs. For the moment, in this section, the main characteristics that differentiate the two methodologies are simply shown in short in Table 3.2.

Tab. 3.2 - *Quantitative and qualitative research*

<b>Research</b>	<b>Quantitative</b>	<b>Qualitative</b>
<b>Characteristics</b>		
<i>Theory-research relationship</i>	Structured, logically sequential phases	Open, interactive
<i>Function of literature</i>	Fundamental for the definition of theory and hypotheses	Auxiliary
<i>Concepts</i>	Operativized	Orientative, open, under construction
<i>Relationship with the environment</i>	Manipulative approach	Naturalistic approach
<i>Research design</i>	Structured, closed, precedes the research	Deconstructed, open, built during the research
<i>Representativeness</i>	Statistically representative sample	Individual cases that are not statistically representative
<i>Nature of data</i>	Hard, objective and standardized	Soft, rich and deep
<i>Subject of the analysis</i>	Variable analysis	Subject analysis
<i>Objective of the analysis</i>	Explain the variance of the variables	Understanding the subjects
<i>Statistical techniques</i>	Intense use	No use
<i>Scope of results</i>	Generalizability	Specificity

Source: Adapted from Guba and Lincoln (1994) and Corbetta (2014)

In recent years, however, a third major research approach is currently being recognised in social sciences. This approach, which combines qualitative and quantitative research, is called “Mixed-method”.

Although there is not yet a univocal definition of mixed-method, several scholars (Giddings and Grant, 2007; Johnson et al. 2011) are working towards a definition of this paradigm.

In this Thesis, the definition by Tashakkori and Creswell (2007) is considered. The authors defined mixed-method *“a research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry”* (Tashakkori and Creswell, 2007, p.4).

Whitehead and Schneider (2013) stated that there are many and immediate benefits to be gained from not separating quantitative and qualitative research into distinct categories but, instead, acknowledging and understanding their interrelated nature and processes. In fact, mixed-methods offers a more complete and purposeful way of making research than a singular qualitative or quantitative approach, and provides the researcher with other valuable tools to add resources to their research resources. Moreover, Onwuegbuzie and Leech (2005) stated that a unified perspective of research facilitates the research question to determine the research methods and gives rise to the concept of a pragmatic researcher.

Table 3.3 summarizes the three methods aforementioned.

Tab. 3.3 - Qualitative, quantitative and mixed Methods

<b>Qualitative</b> ➔	<b>Mixed Methods</b>	<b>Quantitative</b> ←
Emerging methods	Both emerging methods and pre-determined	Pre-determined
Open-ended questions	Both open-ended and closed-ended questions	Instrument based questions
Interview data, observation data, document data, and audiovisual data	Multiple forms of data drawing on all possibilities	Performance data, attitude data, observational data, and census data
Text and image analysis	Text and statistical analysis	Statistical analysis
Themes, patterns interpretation	Across databases interpretation	Statistical interpretation

Source: Adapted from Creswell (2014)

Creswell and Plano Clark (2011) identified four mixed method designs: convergent parallel design, explanatory sequential design, exploratory sequential design and embedded design. Each of these mixed methods has its own features, but all four have in common the need to develop two different research phases, one qualitative and the other quantitative.

In order to overcome the limits of individual qualitative or quantitative research, in this Thesis the exploratory sequential mixed method design was adopted (Table 3.4).

Tab. 3.4 - *Features of exploratory sequential mixed method design*

<i>Timing</i>	<i>Integration</i>	<i>Methodological Rationale</i>	<i>Priority</i>
Sequential - beginning with qualitative phase	Data analysis stage (connected) and interpretation stage (merged)	Development, complementarity, and/or expansion	Qualitative data

*Source: synthesized and adapted from Creswell and Plano Clark (2011)*

In particular, the research process of this Thesis went through two phases:

1) the first phase was exploratory due to the lack of information on this theme. Thus, in order to increase knowledge a qualitative method was used.

2) the second phase was conclusive. In fact, as seen above, since the qualitative method did not allow to generalize and test the results, it was necessary to adopt a quantitative approach (Creswell and Plano Clark, 2011).

### **3.3 First phase: qualitative research**

#### **3.3.1 Introduction**

Qualitative research can be found in all social sciences and in the applied fields that derive from them. This research approach involves the collection, analysis, and interpretation of data that are not easily reduced to numbers (Anderson, 2010).

As seen above, in the literature, qualitative research is often criticized as lack of rigor, small scale, biased (i.e. Milliken, 2001; Patton and Appelbaum, 2003) and anecdotal (Silverman, 1989).

However, when it is rigorously executed, it is impartial, in-depth, reliable and valid (Anderson, 2010). In particular, although the words reliability and validity have traditionally been associated with quantitative research, they are increasingly seen as important concepts in qualitative research. Validity refers to

honesty and genuineness of research data, while reliability relates to the reproducibility and data stability (Anderson, 2010).

### **3.3.2 Case study methodology**

In order to enhance the understanding of how the Internet can be (or not be) a key tool in the process of internationalization of SMEs, in this Thesis the case study methodology was adopted.

The case study methodology has a long history in the social sciences.

The first generation of case study methodology appeared around 1900. Initially, it was an isolated island in the development of methodology in the social sciences.

After the Second World War this methodology received heavy criticism from the positivist researchers, who preferred the quantitative approach.

In the last decades the methodology of the case study has made a comeback: the methodology has become explicit and inclusive (Johansson, 2003, p. 7).

In the literature, there are different ideas about what a case study is. Rolf Johansson (2003) tried to find a common denominator that case study researchers (Eisenhardt, 1989; Yin 1994; Stake 1998; Miles and Huberman 1994; Gillham 2001) might agree on.

The scholar stated that the case study should have a “case” which is the object of study. The “case” should be:

- a complex functioning unit,
- investigated in its natural context with a multitude of methods, and
- contemporary.

However, the aforementioned case study researchers emphasise different features. Stake (1998) points out that the object of study is a case and that the methods of inquiry used are not crucial for the case study research.

Other researchers, such as Eisenhardt (1989) and Yin (1994), place more emphasis to the method and techniques that constitute a case study. In particular, Eisenhardt defines the case study as a research strategy that focuses on understanding the dynamics present within a single setting.

Moreover, Silverman (2005) and Benbasat et al. (1987) identified the analytic features of case study research and the main advantages of adopting a case study approach, respectively. In particular, Silverman (2005) affirmed that:

- each case has boundaries which must be identified at an early stage of the research;
- each case will be a case of something in which the researcher is interested. Thus, the unit of analysis must be identified at the outset in order to explain the research strategy;
- case study seeks to protect the wholeness and integrity of the case. However, in order to achieve some focus, a limited research problem must be established geared to specific features of the case.

Whereas, Benbasat et al. (1987) argued that case study methodology has several advantages, including:

- the phenomenon can be studied in its natural setting and meaningful;
- the case method allows the researcher to answer “how” and “why” questions, that is to understand the nature and complexity of the complete phenomenon;
- the case study method is particularly useful in exploratory investigations where the variables are still unknown and the phenomenon not at all understood.

Furthermore, Eriksson and Kovalainen (2008) and other scholars distinguished between multiple (or collective) case studies and single case studies. On one hand, Dyer and Wilkins (1991) supported important evidences in favour of single case studies. On the other hand, Yin (1989) and Eisenhardt (1989) mentioned and discussed about the multiple cases theory-building

properties. In more detail, multiple case approach stimulates the researcher to study models that are common to cases and theory, avoiding similarities and differences within a group of cases as well as intergroup, allowing the use of a replication logic.

Lastly, despite the case study methodology is a strongly recommended research method, however Yin (1994) highlights some gaps that can sometimes occur: *a)* lack of systematic handling of data; *b)* no basis for scientific generalization; *c)* takes too long, ends up with unreadable documents.

In this Thesis, as it was decided to develop ideas and research questions, case studies were used for exploration. In fact, several doctoral Theses begin with one or more case studies in order to generate a list of research questions that are worth investigating.

Moreover, the interview technique for case studies data collection was adopted. The interviews were complemented with on-site visits and observations.

### **3.3.3 Selection of cases**

Since in this Thesis a multiple case study methodology is used, a selection of cases is necessary.

Selecting cases is a complicated process, however, in the literature several guidance are offered (Yin, 1989; Tellis, 1997).

Some scholars (Perry, 1998; Moore, 2001; Marschan-Piekkari and Welch, 2004) tried to identified a number of cases required to obtain significant and representative results.

Rowley (2002) argued that the number of units taken into consideration in a case study is way less than in a survey, but the extent of details available for each case is bigger. Furthermore, Eisenhardt (1989) affirmed that, although it is not possible to state an ideal number of cases, it could be recommended to adopt from four up to ten cases. The reason is because with fewer than four

cases theory is difficult to produce, and with more than ten cases the volume of data is difficult to cope with.

However, Stake (2000), claimed that, in selection of cases process, it is not necessary to follow the representativeness criterion. The selection of cases must be determined by the research purpose, questions, propositions and theoretical context. However, Rowley (2002) included also other constraints that impact on case selection such as:

- accessibility, that is whether the data needed can be collected from the people or organisation being observed,
- resources, that is whether there are enough resources to incur travel and other data collection and analysis costs;
- time availability, that is if time is restricted it could be simpler to investigate a small business rather than a large business, or to identify only a unit of analysis within a large firm rather than trying to study the whole organisation.

Yin (1994) identified three main criteria for selection of cases: convenience, access and geographic proximity.

In this Thesis a convenience, access and geographic proximity sampling was adopted.

In this first phase, the sample dataset was composed by six companies belonging to the furniture district of Pesaro.

In particular, the geographic proximity criterion was strengthened by the fact that my Ph.D. was partly financed by a small company belonging to the furniture district of Pesaro.

However, the main criterion, besides proximity, was the fact that access to the sites was made easy by some prior personal contact on my part.

### **3.3.4 Data collection and interview**

In the literature, several scholars (Denzin and Lincoln, 1994; Yin, 1994; Marshall and Rossman, 2006) identified numerous sources of evidence for collecting data in qualitative research.

Denzin and Lincoln (1994) proposed a seven sources model, composed by:

- 1) interview;
- 2) direct observation;
- 3) analysis of artifacts;
- 4) documents;
- 5) cultural records;
- 6) visual materials;
- 7) personal experiences.

In the same period, Yin (1994) suggested six main methods/sources:

- 1) documentation;
- 2) archival records;
- 3) interview;
- 4) direct observation;
- 5) participant-observation;
- 6) physical artifacts.

Lastly, Marshall and Rossman (2006) divided the sources into two categories: primary method and secondary method. The primary method included:

- 1) observation;
- 2) participant-observation;
- 3) in-depth interviewing;
- 4) background and context and review of document.

Instead, the secondary method included:

- 1) focus group;

- 2) life histories and narrative enquiry;
- 3) historical analysis;
- 4) films, video and photography;
- 5) interaction analysis;
- 6) questionnaire and survey;
- 7) projective technique and psychological testing;
- 8) dilemma analysis;
- 9) using computer and Internet technologies.

According to Yin (1994), in order to enhance validity and reliability of the results, the adoption of different sources is recommended. Thus, in this Thesis, different methods for data collection were used. Although the main methodology was the in-depth interview, also the analysis of the documents provided by the companies and the analysis of the company website and social media profile(s) were performed.

In particular, the in-depth interview is defined by Malhotra and Birks (2007) as an unstructured, direct, personal interview in which a single participant is probed by an experienced interviewer to uncover underlying motivations, beliefs, attitudes and feeling on a topic.

Moreover, the in-depth interview can be divided into two different categories: non-directive interview and semi-structured interview (Schmidt and Hollensen, 2006).

Non-directive interview is an interview in which questions are not prearranged. This kind of interview, generally, have no set format. The lack of structure allows the interviewer to ask questions which comes to their mind next as a follow up and interrogate points of interest as they go on further. They tend to be more open-ended, informal, free flowing and flexible. As mentioned above, questions are not preset, although there might be some topics that the researchers wish to explore. This gives the interview some structure and direction. Thus, a non-directive interview is an interview which has no any set

format but in which the interviewer might have some key questions formed in advance. These interviews proceed in such a manner: questions based on an interviewee's responses are interrogated further and proceeds like a friendly conversation.

In contrast, semi-structured interviews are those in-depth interviews where the respondents have to answer preset open-ended questions. In this case, the interviewer seeks to cover a specific list of topics.

In this Thesis six semi-structured interviews were elaborated. However, respondents were granted the freedom to give any kind of feedback and the majority of the interviews were more like a friendly conversations rather than a formal interview.

In more detail, the interview guide (see Appendix A) was created on the basis of the research question, and was divided into six categories:

- A) information about the interviewee;
- B) information about the entrepreneur (if different from interviewee);
- C) firm's profile;
- D) information about firm's domestic activities;
- E) information about firm's internationalization process;
- F) information about firm's internationalization history after the advent of the Internet.

The six in-depth semi-structured interviews to entrepreneur or Senior Managers were carried out from September to December 2017.

Each interview was carried out in Italian and lasted around two or three hours.

### **3.3.5 Evaluative criteria for qualitative research**

Criteria for evaluating the quality and rigor of qualitative studies vary somewhat, based on methods used. However, in the literature, the classification given by Lincoln and Guba (1985) prevails.

Lincoln and Guba (1985) identified and described four criteria for evaluating qualitative studies. They determined that quality rests in trustworthiness of the study and its findings. Moreover, they agree with other researchers that conventional criteria are inappropriate for qualitative studies and that there do exist alternative criteria. These criteria are:

1) Credibility: it refers to the degree to which the researchers represent the actual meanings of the research participants.

*How can one establish confidence in the “truth” of the findings of a particular inquiry for the subjects (respondents) with which and the context in which the inquiry was carried out? (Guba 1981:79)*

2) Transferability: it refers to the degree to which the findings described in one study are useful to theory, practice, and future research.

*How can one determine the degree to which the findings of a particular inquiry may have applicability in other contexts or with other subjects (respondents)? (Guba 1981:79-80).*

3) Dependability: refers to the consistency and reliability of the research findings and the degree to which research procedures are documented, allowing someone outside the research to follow, audit, and critique the research process

*How can one determine whether the findings of an inquiry would be consistently repeated if the inquiry were replicated with the same (or similar) subjects (respondents) in the same (or similar) context? (Guba 1981:80).*

4) Confirmability: To achieve confirmability, researchers must demonstrate that the results are clearly linked to the conclusions in a way that can be followed and replicated.

*How can one establish the degree to which the findings of an inquiry are a function solely of the subjects (respondents) and conditions of the inquiry and not of the biases, motivations, interests, perspectives and so on of the inquirer?*

(Guba 1981:80).

### **3.4 Second phase: quantitative research**

#### **3.4.1 Introduction**

Quantitative research emphasize objective measurements and the statistical, mathematical, and numerical analysis of data collected through questionnaires and surveys, or by manipulating pre-existing statistical data using computational techniques (Babbie, 2010).

Quantitative method focuses on gathering numerical data, and generalizing it to explain a particular phenomenon (Muijs, 2010).

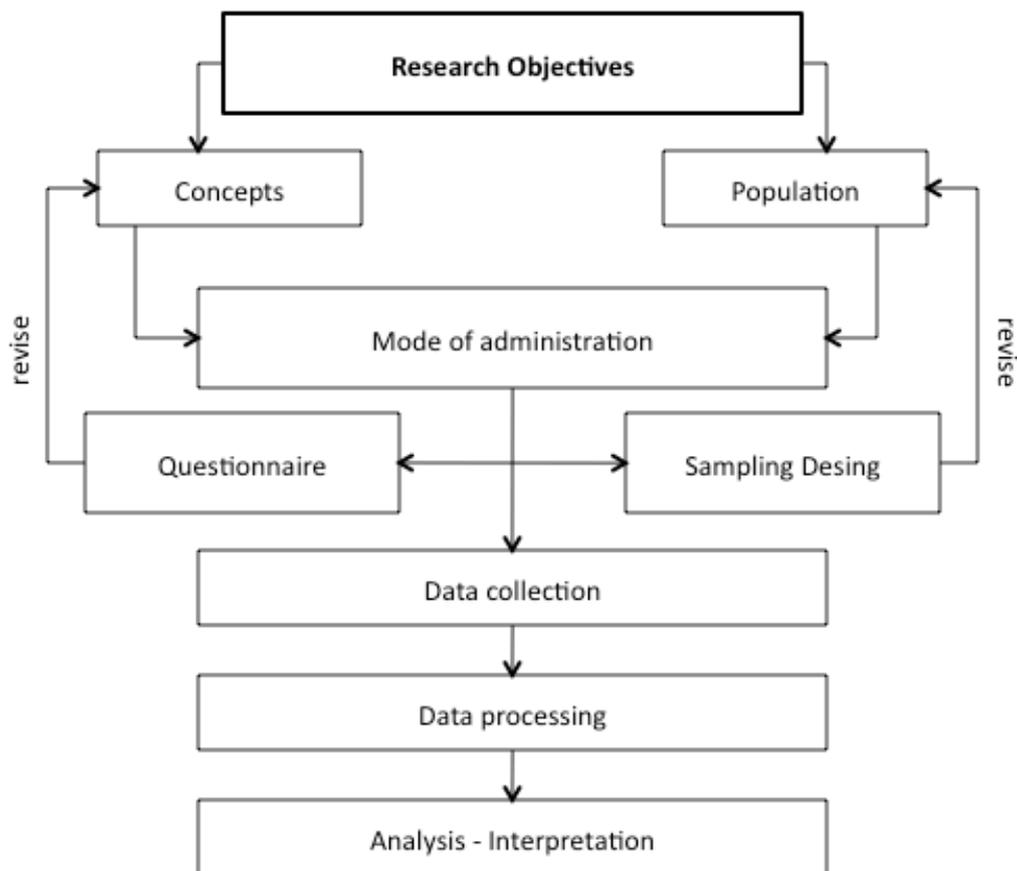
In the second methodological phase of this Thesis, a quantitative research was mainly used to test the emerged findings in the first phase and in order to obtain a generalization of the results.

#### **3.4.2 Survey methodology**

The survey process (Figure 3.1) of this Thesis was created consulting two well-known survey research handbooks: Alreck and Settle (1995) and, Groves et al. (2004). According to these scholars, starting from the research objectives, concepts and population were identified. In particular, the concepts refer to the questionnaire design, while population refers to the sampling design. At the end of the survey process, the interpretation of the results, was performed.

The quantitative phase of this Thesis was performed using a survey methodology process. Entrepreneurs and managers of SMEs operating in the Furniture sector were involved.

Fig. 3.1 - *The survey process*



Source: adapted from Alreck and Settle (1985) and Groves et al. (2004)

### 3.4.3 Questionnaire design process

As aforementioned, the survey process starts from two different elements, concepts and population, which refer respectively to the questionnaire design process and to the sampling design process.

Regarding the questionnaire design process, an explanation on the choice of data collection method is first necessary.

The three traditional methods of data collection (Corbetta, 2014) are:

1. postal surveys: the paper questionnaire is sent to respondents via postal service;
2. telephone surveys: the interviewers call the respondents on the phone;
3. personal survey: the interviewers go to the interviewees' home to personally handle the questions in face-to-face interviews.

In a postal survey, the questionnaire is self-compiled. It is sent to a preselected potential respondent. The respondent fills it and sends it back. Thus, in this case there is no third party between the respondent and the answers (Corbetta, 2014).

The telephone survey consists of calling a sample of respondents and asking them a series of questions. The interviewer, in addition to recording the answers, checks the sequence of questions, can implement instructions and explain unclear questions (Corbetta, 2014).

In the personal interview, the interviewer's task is to directly contact the interviewees, ask questions face-to-face and record the answers in real time (Corbetta, 2014).

Although the three methods are still widely used, after the appearance of computers and the Internet, the most used method is online questionnaires (Dudovskiy, 2016). This type of questionnaire, digitally created, can:

- be sent by e-mail to potential respondents when their address is known;
- be proposed on websites or social networks when the address is unknown and the researcher is interested in a sample of convenience (Angioni and Musso, 2018).

The online questionnaire shows important advantages (Schmidt and Hollensen, 2006), as:

- ease of creating and posting;

- inexpensive to administer: respondent can be shown stimuli and possible rewards;
- data can be quickly gathered;
- low costs per respondent;
- very flexible and fast online statistical analysis available.

For these reason, in this research the online questionnaire method was used.

The second step of the questionnaire design process referred to the construction of the questionnaire.

Based on the results of qualitative research, the online questionnaire was constructed with direct questions to investigate:

- A) firm's profile
- B) information about firm's internationalization
- C) information about the company website and the social media profile(s)
- D) information about the analysis and use of data in internationalization strategies.

The questionnaire, built through the website "sondaggio-online.com", was composed of 26 questions, both open-ended and closed-ended (see Appendix B).

Lastly, the link to the questionnaire was sent to the potential respondents via e-mail. The e-mail addresses of the companies were provided by the Chamber of Commerce and by the software AIDA, made available by the University of Urbino.

#### **3.4.4 Sampling process**

The sampling process begins with the definition of the population. The statistical universe of this Thesis is composed of companies having the following characteristics:

- internationalized small and medium-sized enterprises;

- manufacturing companies and subcontractor;
- operating in the furniture sector;
- members of the furniture district of Pesaro;
- equipped with company website and social media profile(s).

However, for reasons related to times and costs constraint, after a first selection of the companies carried out by crossing the databases of the Chamber of Commerce and the software AIDA, a second selection was made through the questionnaire. In fact, the companies that did not have the characteristics required by the sampling, ended the questionnaire after a few questions (for example, non-internationalized companies; companies did not equipped with a website and social media profile, etc.).

#### **3.4.5 Data collection**

As mentioned above, the companies were picked out by crossing databases obtained by the Chamber of Commerce of Pesaro-Urbino and the software AIDA.

982 companies belonging to these databases were contacted by e-mail from February to June 2018. After a first submission in February, a second reminder was sent one month later.

In some cases (for example, incomplete questionnaires), companies were also solicited by telephone.

Finally, 248 companies completed the questionnaire. However, once the answers were examined, the sample was reduced to 183 companies.

#### **3.4.6 Data analysis**

The analysis and the interpretation of the data were carried out with Excel, SPSS, and LatentGOLD®.

In particular, with SPSS and Excel it was possible to perform the descriptive statistics, the bivariate analysis, the principal component analysis (PCA), and the logistic regression.

Finally, LatentGOLD® was fundamental to perform the latent class analysis.

### **3.5 Summary**

This Chapter highlighted the philosophical thought of various researchers regarding different research methodologies adopted in the course of the history of social science.

Subsequently, the methodological approach chosen was illustrated.

The research design was then developed, explaining the reasons that led to both qualitative and quantitative research.

Lastly, details on case selection and sampling, questionnaire design, data collection, and data analysis procedure were presented.

Chapter Four presents the key results that emerged from the first qualitative phase, while Chapter Five illustrates the results of the second phase of the empirical research.

## **CHAPTER 4**

# **Is the Internet a Key Tool in the Process of Internationalization of SMEs to Acquire New Foreign Customers? A Qualitative Research.**

### **4.1 Introduction**

The purpose of Chapter Four is to explore the ability of the Internet (company website and social media profiles) to be a key tool in the internationalization process of SMEs to acquire new foreign customers.

In this section, the findings of the qualitative research phase, obtained thanks to six case studies, are presented.

To get an overview of the environment in which the six companies interviewed operate, a brief description of the Italian furniture sector and the furniture district of Pesaro is initially offered.

### **4.2 The Italian furniture sector**

The Italian furniture sector constitutes, together with the fashion sector and the niche food productions, one of the cornerstones of Made in Italy with a total production volume that accounts for 8% of the total Italian manufacturing industry.

The sector has over 79,000 companies distributed throughout Italy, and over 320,000 employees. In 2016, it generated revenues of around € 41 billion, up 2.2% on 2015<sup>1</sup> (Table 4.1).

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<sup>1</sup> Source: Rapporto FederLegnoArreda (2017).

Tab. 4.1 - Furniture sector profile

	<b>Companies</b>	<b>Employees</b>	<b>Turnover</b>
<i>Capital companies</i>	16,197	183,864	35.5 B
<i>Artisan companies</i>	63,075	136,156	5.5 B
<b>Total</b>	<b>79,272</b>	<b>320,021</b>	<b>41 B</b>

*Source: own elaboration on FederLegnoArreda data (2017)*

The companies are mainly small and medium-sized, family-owned, and operate in industrial districts with a high degree of deverticalization that makes specialized subcontracting an important link in the production chain. In the years of crisis, this production chain has survived only thanks to the strength of exports with an increase in foreign sales, between January and March 2017, of 5% compared to the same period of 2016.

In Table 4.2, the analysis of the subsectors shows that the productions most oriented towards foreign countries are those of semi-finished products (+ 10%), kitchens (+ 4.6%), upholstered furniture (+ 4.6%), professional furniture (+ 4.4%), chairs (+ 1.7%) and furnishing accessories (+ 1.7%). The remaining subsectors, on the other hand, are more oriented towards the domestic market.

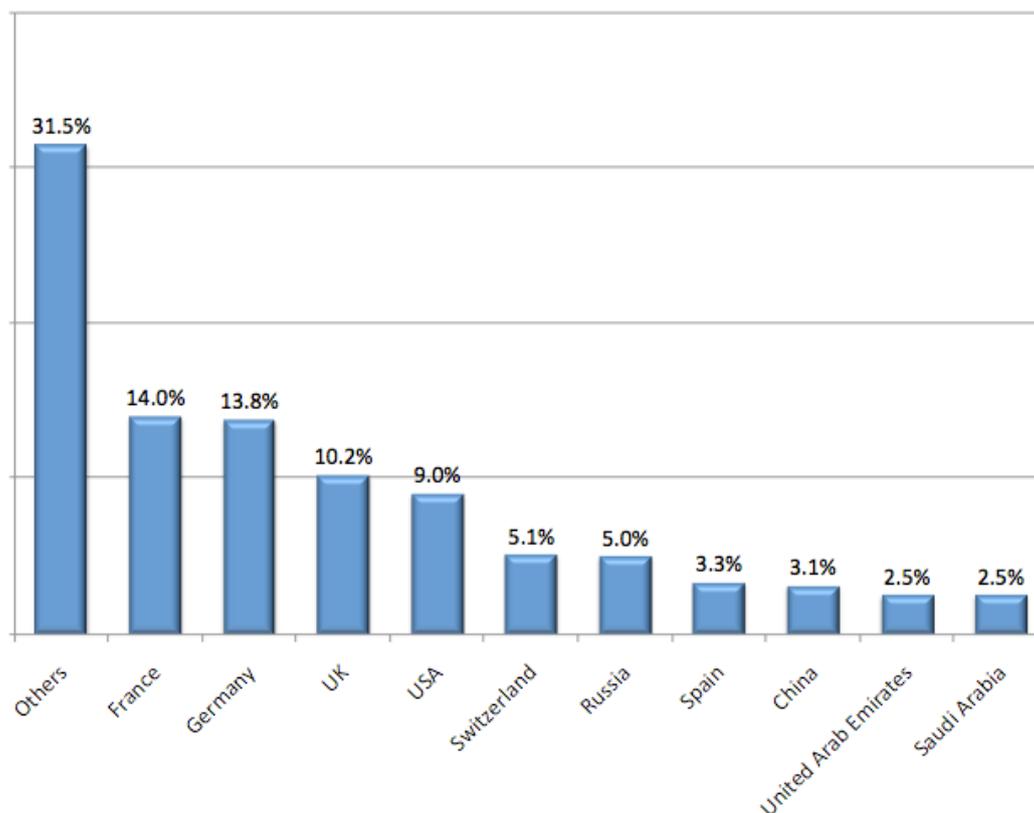
Tab. 4.2 - Exports of the Furniture Sector (values in millions of euros and percentage variation)

<b>Subsectors</b>	<b>Exports in millions of euro</b>	<b>Exports % var. 2015-2016</b>
<i>Children's room</i>	442	-1.8%
<i>Office furniture</i>	568	-5.8%
<i>Furniture components</i>	1,843	-0,7%
<i>Professional furniture</i>	1,458	+4.4%
<i>Upholstered furniture</i>	1,739	+4.6%
<i>Bathroom furniture</i>	1,261	-2.1%
<i>Chairs</i>	579	+1.7%
<i>Furnishing accessories</i>	777	+1.7%
<i>Kitchens</i>	754	+4.6%
<i>Living area</i>	566	-1.4%
<i>Semi-finished products</i>	476	+10.0%
<i>Other furniture</i>	1,503	-2.9%

Source: own elaboration on FederLegnoArreda data (2017)

Looking more in detail (see Figure 4.1), Italian exports are mainly directed towards the European Union, with a 56.3% share to the EU28 and the remaining 46.7% to the rest of the world. Among the countries most attracted by Made in Italy furniture, is France in the first place (14%), followed by Germany (13.8%) and the United Kingdom (10.2%). The United States has a share of 9%, Switzerland of 5.1%, Russia of 5%, Spain of 3.3%, China of 3.1%, the United Arab Emirates of 2.5%, and, in the end, Saudi Arabia has a 2.5% share.

Fig. 4.1 - Italian exports: main destination countries



Source: own elaboration on FederLegnoArreda data (2017)

Characteristic aspects of the sector are the high intensity of the work, the craft origin, the creativity and the design that find maximum expression in Italy. The sector, one of the avant-garde expressions of design, now also specialized in quality serial production, has long been a world leader in the ability to export Italian brands and products in all the world's geo-economic realities.

In recent years, this capability to export of the SMEs has also been encouraged by the introduction of the Internet in companies. According to the latest ISTAT data available, with reference to the year 2014, 96.8% of small-sized Italian companies have an Internet connection, of which 95% via fixed or mobile broadband. Of these companies, 69.2% have a website. Only 31.8%, on the other hand, use social media. Among these, the most widespread tools in companies are social networks (29.3%), such as a company profile on Facebook, and

websites for sharing multimedia content (for example, YouTube, Flickr, Picasa, SlideShare), widespread in 10.3% of companies.

### **4.3 The furniture district of Pesaro**

The furniture district of Pesaro is made up of 1,139 companies involved in the realization of both the finished product and intermediate processing, which employ about 13,900 employees. The production value made within the district amounts to about € 2.5 billion in 2016, of which around € 600 million related to exports<sup>2</sup>.

The location of the enterprises is arranged as follows:

- 27 municipalities in the province of Pesaro-Urbino: Belforte all'Isauro, Carpegna, Cartoceto, Colli al Metauro, Fano, Fermignano, Fossombrone, Frontino, Isola del Piano, Lunano, Mercatino Conca, Mombaroccio, Montecalvo in Foglia, Monteciccardo, Montefelcino, Montegrimano, Montelabbate, Pesaro, Petriano, Piandimeleto, San Costanzo, Sant'Ippolito, Sassofeltrio, Tavoleto, Tavullia, Urbino, Vallefoglia;
- 9 municipalities in the province of Rimini: Gemmano, Mondaino, Monte Colombo, Montefiore Conca, Montegridolfo, Montescudo, Morciano di Romagna, Saludecio, San Clemente;
- 1 municipality in the province of Arezzo: Sestino.

The prevailing juridical form denotes a small-entrepreneurial characterization, with 34.8% of companies represented by sole proprietorships, over one third by partnerships (35.2%) and 29.9% constituted by capital companies.

The average size of the companies is 12.2 employees, increasing compared to previous decades. Almost all the companies in the district (92%) employ less than fifty employees, with a strong concentration of micro-enterprises.

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<sup>2</sup> Source: Confindustria Marche data (2017).

The types of products produced mainly concern furniture for home furnishings (kitchens, bedrooms, living rooms, dining rooms, accessories), but there are also manufacturers of office and shop furniture.

The birth and the development of furniture production in the Pesaro area mirrors, with its particular characteristics, the typical dynamics of Italian industrial districts whose growth, especially during the seventies, has stimulated numerous interpretative efforts tending to focus on the socio-economic aspects of the phenomenon, the strategic and organizational characteristics of the entrepreneurial subjects involved, the system of intra-district relationships.

The area of Pesaro, in particular, originated in the post-World War II era, in correspondence with the reconstruction period and the initial development of the Italian economy, but it is mainly at the turn of the 1950s and 1960s that emerges as one of the areas specialized in furniture production. The production of Pesaro area, initially found its market outlets in the central and southern regions of Italy, gaining shares in areas that in those years lived a strong expansion and where the competition of other domestic producers was less strong. The production was aimed at satisfying the demand of the middle-lower income class with a product that identified itself with a type of furniture tending to a popular idea of elegance and modernity (Musso, 2004).

Also in Pesaro, as in the rest of Italy, the development of the sector in this period originates a dynamic of horizontal decentralization of capacity, which sees the companies reproduce without differentiating and without division of roles, each preserving a substantially integrated production cycle. Following the pace of growth of the sector, in fact, the entrepreneurial choices of the employees of the sector who decide to start their own business on the basis of the experience acquired are multiplied.

The birth of the Pesaro district is, therefore, “spontaneous” thanks to particular combinations of socio-economic elements, such as:

- a. the medium-small or even very small size of the single production unit;

- b. the disposition of activities on the territory correlated with the pre-existing urban settlement structure;
- c. the existence of an agricultural and tertiary sector developed alongside an industrial sector;
- d. the formation of highly specialized areas, in which the flexibility of the small dimension is combined with a high degree of division of labor and integration among companies in such a way as to offer significant aggregation economies;
- e. the general economic situation, which sees expanding markets and increasing demand.

Therefore, the sixties are those of greater development for the sector. In the Seventies, the turbulence of international concern, the prolonged crisis and the accentuated trade union conflict in labor relations, restrain the development of the sector and lead companies to encourage the use of semi-finished subcontracting as an alternative to in-house production. This stimulates the vertical decentralization of production and the specialization by stages of processing, which allow companies to reduce the incidence of fixed costs, faster to adapt production to quantitative variations in demand and to bear less conflicts in labor relations.

In the eighties and nineties, the tendency towards vertical decentralization is consolidated. Furthermore, the types of companies which taking part in the various phases of the production cycle are outlined. The prevailing types, identified according to the phases of the process in which they are involved, the type of attitudes and the degree of rationality in the company conduct, can be defined as follows:

- “traditional” lead companies;
- “brand” lead companies;
- subcontractors;
- third-party manufacturers.

The “traditional” lead companies are final manufacturers that retain the distinctive characteristics of the companies in the district. In fact, they are small or medium-size, with no more than 100 employees, specialized in the production of living rooms, bedrooms, dining rooms or furnishing components; they carry out few phases of the production cycle in-house and in some cases only the assembly.

The “brand” leading companies are characterized by a more advanced management model, with more defined and balanced corporate functions and an outlook that deviates from the short-term to make room for greater planning.

Subcontractors are manufacturers of components (panels, doors, drawers, etc.) intended for final manufacturers. At the end of the Eighties, some of these companies reached dimensions that were greater than those of their clients, while most of them remained anchored to much smaller dimensions.

Most of the third-party manufacturers are micro-enterprises, which are also the result of the proliferation generated by the economic phenomenon of the seventies. In the nineties, the third-party manufacturers retain their marginal position towards the entire district, limiting themselves to performing phase productions. Their strength is flexibility, but they suffer from the lack of contractual capacity towards all the interlocutors of the sector.

The relationships that develop among the companies of the district over the years, assume different levels of aggregation and effectiveness: more or less intense and more or less lasting relationships, with greater or lesser effectiveness in learning mechanisms, and willingness to collaborate, passive attitudes, but also strategic capabilities expressed within certain supply chains, generally by the lead companies.

The start of the export activity of the companies’ district dates back to the beginning of the Seventies, similar to what happened for the entire sector at the national level. The producers of the Pesaro district began exporting to the major European countries at that time, but in the second half of the decade, the

growing spending power of the Middle Eastern countries led the companies of Pesaro to specialize in the Arab markets.

Subsequently, the succession of periodic crises in the domestic market (in particular in 1984) and the contraction of the Arab markets, led to a slowdown in the export flows of the district.

In the Nineties, the major recipients of furniture exports in the Pesaro area were the countries of Western Europe (Germany, United Kingdom, and France), Saudi Arabia, the countries of North America (the USA and Canada) and Japan, strongly interested in Italian furniture.

Since the 2000s, favoured by the opening of the markets due to globalization and thanks to the increasing diffusion of the Internet, the companies of the district have begun to widen their borders also towards more distant markets - not only in terms of geographical distance, but also in terms of cultural distance - like the countries of Eastern Europe, Asian and African countries, and South America.

#### **4.4 Introduction of case studies**

In this section, a brief explanation of the six companies studied is described, in order to provide the reader with background information on their history and internationalization process. All companies included in the sample belong to the furniture district of Pesaro, in which three of them play the role of manufacturers, while the other three play the role of subcontractors. It is important to emphasize that companies have been selected on the basis of their ability to provide detailed descriptions of their history of internationalization and internetization. However, only one of the six companies has made itself available to make their data public. Since the remaining five companies have explicitly asked to remain anonymous, the following descriptions are set in such a way that the reader can not trace the companies name.

## **4.5 Case study #A**

The history of the company #A began in 1976, when the current owner decided to resign from the company where he worked as a sales agent and found his own company. Thanks to his experience in the furniture industry he decided to start producing bathroom furniture, which was at that time a subsector in which the level of competition was very low.

The young entrepreneur, who in previous years had had the opportunity to play his role in France, took advantage of the contacts he had acquired in the French market to start exporting his products to the European country in the following year, in 1977.

The company was successful in a short time. It offered medium-high quality products, producing most of the product in-house and outsourcing only some phases of production.

The Italian market of the company was growing and the owner was able to exploit the positive wave thanks to his great interpersonal skills with which, on the one hand, he managed to have a strong contractual power with his suppliers, and on the other hand, he reported constantly in the company new orders continuing to play his natural role as a sales agent, and by going personally to national and international trade fairs.

He was an enterprising and determined entrepreneur, who knew his job well and knew how to play with relationships in the market. His strategy was to centralize power. All business strategies and final decisions depended solely on his will.

In the eighties and nineties the company was constantly growing, even in the foreign market. In fact, following excellent relations with some French sales agents, the company opened the way to the German and Dutch markets, which will become, after France, the main foreign markets of reference for the company .

The Italian market continued to be stable, the brand was now known in the industry. However, the company was growing more and more in foreign countries where the entrepreneur continued to direct his attention by seizing the opportunities they offered. In fact, unlike the domestic market, these markets paid for products within 20 days of delivery. This allowed the company to invest in cutting-edge new machinery and to hire new staff.

In those years, the company was in constant growth, especially in the countries of the euro zone.

Growth halted partially in 2010, when in Italy the global economic-financial crisis coincided with a strong crisis in the construction sector. However, the entrepreneur, did not give up and decided to differentiate the products, adapting them to new foreign markets where up to now the company was not present.

Today the company, with 47 employees and a turnover of almost 13 million euros (2016), exports to 34 countries. The percentage of exports on sales exceeds 50%, of which the majority comes from European markets, followed by non-EU countries, and the rest of the world. In particular, the countries served today are: Algeria, Armenia, Australia, Austria, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Denmark, France, Georgia, Germany, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta, Mexico, Montenegro, Netherlands, New Zealand, Norway, Poland, Republic of Panama, Russia, Singapore, Slovenia, Sweden, Switzerland, UK, Ukraine, USA.

This expansion of geographical boundaries saw its boom when the young sons of the owner entered the company, in the late nineties, pushing their father to introduce new information technology tools for communication. Therefore, in 2001, the company turned to a communication agency to develop a company website and manage its contents in constant comparison with the company staff. With the spread of the Internet and computers in all the houses around the world, the company took the opportunity to become more and more known.

Thus, the company decided to flank to the industry fairs - until now the only instrument for internationalization but mainly addressed to the employees of the sector - the website tool.

A few years later, again on the advice of the sons, the entrepreneur gave his approval to set up a new profile on social media. Although the young sons had been pushing for a long time, the father's decision came only in late 2008 with the setting up of a profile on Facebook. The sons say that it was not easy to convince the father, who was tied to the old way of entertaining relationships, to face the markets with this new tool, even though it was at no cost.

The new generation entered the company, albeit with some difficulties towards a "traditionalist" father, has slowly managed to win the trust of the entrepreneur and to get selected some personnel to attend a training course focused on new digital tools communication, in order to implement and manage social profiles independently. In fact, after Facebook, the company has set up new profiles on LinkedIn, Twitter and YouTube.

Given the scepticism of the entrepreneur, initially these tools were presented only as a showcase. In fact, he was convinced that it was necessary to be present on the web to avoid being cut off from the market: *«Everyone is on the web. If you're not there, you do not exist!... but nothing more»*.

The generation change has been under way for some years, but the entrepreneur continues to be present in the company and to influence, albeit to a lesser extent than in the past, in corporate strategies.

Things changed when the sons demonstrated to the father the results that the Internet was able to offer the company. The eldest son, in fact, together with the communication agency and some employees, focused on the analysis of the data obtained from the website and social media and implemented them in corporate strategies, winning new foreign customers that otherwise would have been unthinkable to reach.

The elderly entrepreneur, was surprised by the results obtained. Especially because the costs of the investment in communication, compared to those he supported before the Internet, were in proportion significantly reduced.

At the end of the interview, therefore, the entrepreneur admitted: *«I have long been anchored in my traditionalist way of thinking. I should have given way to the far-sighted thinking of my children about the enormous potential of the Internet to acquire new foreign customers. But you know ... I have always been a nostalgic of the suitcase in my hand, and of the talking to each other looking into each other's eyes... even if this meant for me to stay away from home for a long time... and for my company it meant to spend millions of lire and give up some new investment. But I have to admit it, no one can hear us, today everything is easier for my company!».*

#### **4.6 Case study #B**

The company #B was established in 1985 by three partners. The idea was born of one of the three, who returning to his town after several years of work in Milan, involved his two best friends in the foundation of a home furniture firm.

The company started its production by employing few employees and initially selling only in the Central and Southern Italy markets.

A short time later, during a pleasure trip abroad, one of the three partners met by chance a German sales agent on holiday in the same place. Therefore, in 1988, thanks to a friendship born by chance, he began a stable working relationship that allowed the company to start exporting its products in Germany.

The company was still small and the competition in Italy was fierce. However, in Germany the Made in Italy was in great demand and the three partners, by mutual agreement, decided to invest also in other foreign markets that offered higher revenues than the domestic market.

In the nineties the company increased its sales in Italy, expanding to the North, especially in cities bordering France and Switzerland. This, together with the international fairs to which the company began to participate, offered new opportunities for development towards foreign markets. Thus, after Germany in which success had already been established, the company began exporting to other European countries: France, Switzerland, the United Kingdom and Spain, in particular.

The brand began to be known and highly sought-after abroad. Especially in large-scale retail trade, a channel in which the company obtained its best results so as to reach, in a few years, the size of a medium-sized company, constantly taking new staff.

With the advent of globalization and the opening up of markets, in the first years of the 21st century the challenge became tough for the three business partners. Foreign competition was very strong and a new strategy had to be found to survive in an increasingly competitive market.

In 2000 the company management decided to take advantage of the Internet to be known in countries further away geographically. The company management contacted a communications agency and together they implemented the company website which was initially only in Italian and English.

Among the new hires of the last year, there was a boy who had just graduated in Computer Science. The company management decided to entrust him with the management of the company website, as a marginal activity to his main job as an administrative employee.

Over the course of a few years, thanks to the skills of the company staff, the website was modified introducing also other foreign languages, such as German, French and Spanish. This allowed the company to acquire new contacts in countries not yet reached, like the countries of Latin America.

To make matters worse, however, a few years later, the global economic and financial crisis presented itself, slowing the number of orders and slowing

the pace of production, mainly on the Italian and Spanish markets. France, Germany and the United Kingdom, on the other hand, still maintained a high pace and gave the company - which in the meantime had reached almost 200 employees - some respite.

In those years, relations with Russia and the Middle East were also developed. These countries were attracted by the design and quality of Made in Italy, even if in some cases customized modifications were requested to some products. For this reason, the company management decided to rethink its products by studying and producing lines entirely designed for the peculiarities of some foreign markets.

During this period, following the American wave, the use of social media began to spread among Italian companies and the three partners agreed that this was a great opportunity. Through personal studies, they understood that the company's presence on the main social networks was an element that should not be underestimated.

In 2008, therefore, they again contacted the communications agency that had developed the company website and agreed to implement new profiles on Facebook, Pinterest and YouTube.

In the meantime, a training course on digital communication was paid to three employees of the marketing department, so that they could support the external agency in corporate communication strategies. Subsequently, in order to maintain high visibility (with the Middle East in particular), Twitter, Instagram and LinkedIn were also implemented.

Today, the company has over 200 employees and a turnover of over 90 million euros (2016). After starting its internationalization process in European countries for reasons of geographical and cultural proximity, today it exports to almost the whole world except for African countries, and foreign turnover accounts for well over 50% of total turnover.

The company management has strongly believed and continues to believe in the use of the Internet (intended as a website and social media) as a tool for internationalization strategies. They claim that the digital world has allowed them to acquire new customers by cancelling the distances with other countries; to be known even in places that before would never have thought to achieve; to better understand the tastes and needs of customers and to design for them special product lines, all at very low costs if not almost zero.

In addition, these tools have also provided them with more information on competition by offering them the opportunity to be competitive through benchmarking actions.

#### **4.7 Case study #C**

The company #C, founded in 1993, is a family-owned firm that produces living and sleeping area furniture.

The head of the family was the son of a craftsman, who grew up in a carpenter's shop. He decided to invest the savings of the family in the purchase of second-hand machinery for furniture manufacture, following the closure of a company in its territory of residence. That company, which had closed due to health problems of the owner, had also ceded part of its employees and its know-how. In a short time, the production, initially focused exclusively on the living area, grew at a surprising pace thanks to the experience of the employees and the managerial skills of the new entrepreneurial family.

A year later, in 1994, the company #C began its first exports to France, a flourishing market fascinated by Made in Italy. In the following years, the exports continued in the European countries of the EU zone - thanks to European measures that facilitated the exchange of goods within the countries of the Union -, in particular, in Germany and Belgium.

At the beginning of the 2000s, following the participation at an international fair, the company management began to study the Russian market

and to make the first contacts with some Russian sales agents. They were very interested in the products of the company but the demand also extended on the sleeping area furniture.

The family gathered to discuss: the Russian market was particularly fascinated by Made in Italy. It was a growing country despite the huge gap between social classes. The target was high and required a high-quality. At the end, the family decided to invest again and launch a new product line, initially designed specifically for the Russian market.

The agreement with Russia marked a turning point for the company, which, although with some difficulty, definitively expanded its product range. At the same time, the globalization and the opening up markets increased the level of competition and company management understood that it was necessary to make brand known further.

The company website was already active since 2000 but it was a static website, only in Italian language and almost “abandoned”. In 2003, the entrepreneurs decided to renew it and to add foreign languages, so they turned to the communication agency that had made it three years before, and together they established the best communication strategy.

Thanks to the “contacts” section of the website, a few years later the company received a request for information from the Middle East. Initially, company management did not have much confidence in online contact. It was still a novelty. However, following a trip by the manager to the Middle East, some time later, the first sales contract was realized.

The company continued to grow and succeed, concentrating its communication on Made in Italy, on design and on the certified quality of the products that it was able to communicate thanks to the Internet, quickly and at almost no cost.

On the wave of success, also facilitated by online communication, at the end of 2008, the company created its first social profile on Facebook thanks to the help of the communication agency that was entrusted with the website.

The company Facebook profile was initially born as a showcase where photos of the products were published weekly. To the first “likes”, were added after a short time even some comments in which users asked the prices of the products. The company knew it could not sell directly to private individuals, and in its replies it addressed contacts to the store closest to their area of residence, then, separately, it involved the Italian sales network in the digital communication strategy. However, there was still no foreign contact, so the company decided to start the same strategy with the foreign sales network, also publishing English post that were then shared by the company profiles of the foreign sellers.

The social network, managed together with the communication agency, began to be so successful that the company soon decided to invest in other social media such as YouTube, Instagram and Pinterest, where the photographic images and videos were able to stir up emotions.

According to entrepreneurs, this choice made in unsuspecting times has been the company's lifeline. In fact, in the global economic-financial crisis period, the company has suffered less from other companies, while maintaining a good turnover thanks to foreign markets, - and among these, in particular, thanks to the Middle East.

Today, the company has over 60 employees and has a turnover of around 18 million euros (2016), of which almost 50% derives from foreign markets. Entrepreneurs state that without the Internet the company would not have achieved the success it has on the national and international market.

## **4.8 Case study #D**

The story of the company #D began in 1981, when two brothers decided to start a craft business of furniture accessories.

The manufacturing companies of the District of Pesaro were growing and the two brothers, thanks to their entrepreneurial skills, became part of the network through subcontracting with the main companies.

The numerous companies of the District were, for many years, the only customers of the company #D, which initially, in addition to the two brothers, had only 5 employees. In the mid-nineties, the company decided to expand by promoting and selling its products in the rest of Italy.

In 2004, thanks to an Italian client, the company came into contact with a new French customer. Thus, it began to export sporadically in France, creating customized products for some small French companies.

In 2006, following some solicitations from Italian customers, the company decided to contact a communication agency for the construction and management of the company website. The entrepreneurs, however, did not consider this tool very useful and decided to invest only a few money in a static website, with few functions and the minimum necessary. The communication agency convinced them of the usefulness of creating the website at least in English language, to give users a serious company image. In fact, a few months later, some requests arrived through the website from Belgium and Germany (later, they will become loyal customers). Therefore, only a few years before the economic-financial crisis, when the production was increased, the company management had decided to hire new staff.

Indeed, that instrument in which the two brothers did not believe and in which they had invested very little, was actually effective. It allowed them to be present in the large digital network and to be reachable by anyone, anywhere in the world.

However, the management of the website was left completely to the communication agency that made changes and/or added products only a few times a year without ever confronting the entrepreneurs about the study of the data. The two brothers, in fact, had refused the option of the communication agency regarding the analysis of data deriving from the website. They believed that for their role as subcontractors, the analysis and use of data was not necessary.

When in 2009, again at the suggestion of some customers, the entrepreneurs decided to start a company's Facebook profile, the investment was zero. Among the latest hires in the company, in fact, there was a girl passionate about social media marketing and was left to her the total autonomy of managing the profile. The employee was enterprising and decided to publish posts in some foreign languages, thanks to which the company received requests for information in the private chat.

The crisis had already arrived and the manufacturing companies of the district, like other Italian companies, felt the decline in orders from the Italian market, which, in turn, also affected the company #D that was forced to ask the temporary lay-off for some its employees.

Instead, the foreign market remained strong, in particular the German market, with which relations were already consolidated. In the meantime, thanks to the social network, some new small contacts came from the other European Union countries. Contacts were occasional and intermittent, but they allowed the company to have a little breathing space.

Today, the company has about 13 employees, and has a turnover of over 2 million euros (2016), of which just over 8% is foreign sales.

Entrepreneurs state they have never believed in the Internet as a business tool for subcontracting companies. In spite of their history has shown that this tool is able to provide new contacts, the owners are very tied to traditions and certain that word of mouth and human relations face to face are

much more effective. They admit to having survived the crisis thanks to their relations with European markets, but they are not interested in growing and expanding beyond.

The company website and the Facebook profile were created following solicitations from some customers, and the entrepreneurs reacted positively only in the belief that *«It is important to be on web because everyone is there. In short, it's just a nice showcase to let users know that we exist too!»*.

#### **4.9 Case study #E**

The company #E, a subcontractor of furniture accessories, was established in 1970, when the Pesaro Furniture District was at the peak of its growth. The company immediately reached the medium-sized and positioned itself among the main subcontractors of the companies in the district, even exceeding the size of some of its customers.

The internationalization process began in 1985. In addition to the district, the company served at that time the main Italian furniture manufacturers and, together with some of these, chose to participate in an international furniture fair. On that occasion, the company #E took the first contacts with some Northern European countries: Germany, Denmark and the Netherlands among the first, at which over the years followed France, United Kingdom, Sweden, Belgium, Switzerland, Austria, Romania , Latvia and Estonia.

The company strategy was to leverage the Made in Italy and the certified quality products. A few years later, anticipating the times, the company began to promote the sustainability of its productions.

In 2001, the company management contacted a communication agency to create the company website and managing its contents for the first initial months. In fact, subsequently, the company decided to manage the website internally, publishing news on a monthly basis and inserting the new product

catalogue every year. The website offered the company the opportunity to make itself known outside Europe, where the brand was already consolidated.

In a short time, new markets were acquired including some countries of Latin America and Asia. Exports were not occasional. On the contrary, the brand was more and more established in foreign countries and relations were stable and lasting.

In 2008, the company chose to create its own company profile on some social media. Although the implementation of these social networks was rather simple and intuitive, the company decided to turn to a communication agency to better set up the characteristics of its profiles. The first ones were LinkedIn and YouTube, followed by Pinterest and Twitter. The management of the social, mainly external, was flanked by the company management who decided the strategies in common agreement with the communication agency. The company also decided to analyze the data obtained both from the website and from the social media, and to process such data in order to develop strategies adapted to the needs of the customers.

The Internet turned out to be a fundamental tool in which to invest and in which company management strongly believed.

The economic-financial crisis even seems do not invest the company, already well-know in international markets from which derives most of the turnover. Against all expectations, in fact, the company continued to grow, surpassing the 200 employees and a turnover of over 70 million euros (2016), of which over 60% foreign.

Moreover, in recent years, in addition to continuous participation in the major international furniture fairs, thanks to the Internet the company has also acquired new customers in South Africa and in some North African countries bordering the Mediterranean.

Entrepreneurs state that: «*The success of our company in foreign markets is also due to the continuous investments in process and product innovation.*

*These innovations are possible thanks to the knowledge of international markets acquired via the Internet, as well as the study of markets directly on the territories. Evidently, the information generated by the Internet has proved to be much less expensive and sometimes even more reliable than the local ones. Understanding the needs of customers and the strategies of competitors, in fact, allows us to always be a step ahead of others and in this, the Internet offers enormous help!».*

#### **4.10 Case study #F**

The history of the company #F began in 1976, when a skilled factory worker resigned from a Pesaro furniture company, and decided to found his furniture components business. Thus, he started the subcontracting activity for manufacturing companies in the area of Pesaro District.

The entrepreneur, flanked by 4 employees, was the “handyman”: he got up early in the morning to go to open the factory door and turn on the machineries; he worked the wood carefully; he kept in touch with the customers; he answered the phone; and often he stayed in the company until late in the evening to make ends meet.

For a long time, a large part of his customers were located in the Pesaro district.

At the end of the eighties, the entrepreneur decided to let his firstborn, who had just finished his studies, enter the company. He taught him the trade but kept centralizing decision-making in his hands.

The company was small and artisanal, reliable and serious. The entrepreneur was satisfied with the company trend but the son had a broader vision and wanted to grow the company.

In the late nineties, the son decided to take a break from work and live an experience abroad. Thus, he moved for a few months to the United Kingdom, where he perfected the English language and met new people. On his return to

Italy, he told his father about a country completely different from Italy and technologically much more advanced.

In 1999, thanks to some contacts acquired by the son of the entrepreneur, the company began its slow process of internationalization, exporting occasionally to the United Kingdom.

The company grew and the entrepreneur hired new employees. Once again, the company showed its seriousness and the quality of its products that appealed to the British manufacturers. Some time later, through a customer, the company began to export to Germany, but always in an occasional way.

In 2004, after much insistence by his son, the entrepreneur decided to contact a communication agency and entrust to it the creation and management of the company website. The website was minimal, with essential characteristics and little else, but unlike other similar Italian competitors, it was also in English, a fundamental aspect to acquire contacts and maintain relations with foreign markets. The management was totally entrusted to the communication agency, which limited to updating the website every six months.

When the economic and financial crisis arrived, the company began to suffer for the setback in the domestic market, and the businessman was forced to ask for the lay-off for some of his employees. The entrepreneur, who was close to retirement, suffered a heavy blow but did not want to see lost everything he had built in his life.

In 2010, the work was low and the company's production continued at a very low pace. The son of the entrepreneur, slowly began to take over his father, and he decided to set up a profile on Instagram and Facebook, publishing in Italian and English every two or three weeks. Through Facebook, the company received some requests for information, many of which turned out to be false. Among these, however, one was real and it came from a French firm, with which for five years the company #F entered into several sales contracts.

Today, the company has 24 employees and a turnover of over 5 million euros (2016), most of which comes from the domestic market. Exports continue to be occasional in some cases, and more solid and constant in other cases, with a turnover of 6%.

The son of the entrepreneur, meanwhile, has changed jobs. Instead, the entrepreneur, despite his age, continues to manage his own business. He claims that his company, due to its size and the role of subcontractor, does not need to invest a lot of money in the Internet.

He admits that it was an important tool to acquire new customers, but he is certain that they would have been acquired also through traditional methods. The expansion of the markets started thanks to the broad views of the son, and it has stabilized after his exit from the company. The father claims that: *«There were too many disagreement between my son and me regarding the company project view. The human relationship in working relationships with customers can not be replaced by computers. Yes, I allowed my son to set up the website and social networks but only in order to let customers know that we are there, too... because everyone is online and we can not be absent! But I prefer to spend my money rewarding my employees rather than investing them in the Internet.»*

#### **4.11 Findings and discussion**

As mentioned above, a total of 6 furniture companies were interviewed in the first qualitative research phase. All firms belong to the Furniture District of Pesaro. The companies #A, #B and #C are furniture manufacturers, and the companies #D, #E and #F are furniture subcontractors. The number of employees ranges from 13 to over 200. Annual turnover (2016) is between over 2 and over 90 million euros. The export sales range from 6 to over 60 per cent. As shown in Table 4.3, even if the annual turnover of companies #B and #E exceeds 50 million, it was decided to include these firms and consider them as medium-sized enterprises because they have a workforce of less than 250 (cf. Chapter Two).

Similarly, even if the annual turnover of company #A exceed 10 million, it was decided to include this firm and consider it as a small-sized business because it has a workforce of less than 50 (cf. Chapter Two).

Tab. 4.3 - *Enterprises' profile*

	<b>Enterprise role in the District</b>	<b>Employees</b>	<b>Annual turnover</b>	<b>Enterprise category</b>	<b>Foreign turnover (%)</b>
<b>#A</b>	Manufacturer	<50	≤€50 million	small	over 50%
<b>#B</b>	Manufacturer	<250	>€50 million	medium	over 50%
<b>#C</b>	Manufacturer	<250	≤€50 million	medium	around 50%
<b>#D</b>	Subcontractor	<50	≤€10 million	small	8%
<b>#E</b>	Subcontractor	<250	>€50 million	medium	over 60%
<b>#F</b>	Subcontractor	<50	≤€10 million	small	6%

The six firms were founded between 1970 and 1993 and they began their international expansion between 1977 and 2004.

As shown in Table 4.4, with reference to internationalization, it is interesting to highlight that all manufacturer companies began their export activities within three years of their foundation, while all subcontractors companies started their foreign sales between 15 and 23 years later.

Furthermore, all companies claim to have started to export for the first time in a European country. According with Johanson and Wiedersheim-Paul (1975), the firm's perceived risks lead companies to begin their internationalization process to nearby markets - markets in close geographic proximity, with cultural, political, and legal systems that resemble those found in the home country - and only later do they search for more distant markets. In fact, with the exception of the #D and #F companies - small-sized subcontractors - all other companies have subsequently expanded their geographical boundaries

to more distant countries, with cultural differences. Therefore, the size of companies and their role within the district and in the foreign markets seem to affect the strategies of internationalization.

Tab. 4.4 - *Enterprises' export activities*

	<b>Date of foundation (a)</b>	<b>Date of start export (b)</b>	<b>Difference (b) - (a)</b>	<b>Foreign markets</b>
<b>#A</b>	1976	1977	1	Europe Rest of the world
<b>#B</b>	1985	1988	3	Europe Rest of the world
<b>#C</b>	1993	1994	1	Europe Rest of the world
<b>#D</b>	1981	2004	23	Europe
<b>#E</b>	1970	1985	15	Europe Rest of the world
<b>#F</b>	1976	1999	23	Europe

Regarding the adoption of the company website, all companies have turned to a communication agency between 2000 and 2006 (see Table 4.5). The manufacturers, regardless of their size, are the first ones to create the website, while among the subcontractors the small-size leads companies to adopt the website lagging behind other businesses.

Likewise, the first social media profile of the companies surveyed was carried out between 2008 and 2010 (Table 4.5). In this case too, the manufacturers and the medium-sized subcontractor used social media in advance of the two small-sized subcontractors but, however, late with respect to America in which the phenomenon was born.

Tab. 4.5 - *Company website and social media profile: date of adoption*

	<i>Company website</i>	<i>Social media profile</i>
<b>#A</b>	2001	2008
<b>#B</b>	2000	2008
<b>#C</b>	2003	2008
<b>#D</b>	2006	2009
<b>#E</b>	2003	2008
<b>#F</b>	2004	2010

With regard to the company website, in the literature many researches have studied the website adoption by small and medium-sized enterprises (Gossain and Kenworthy, 2000; Rao, Metts and Mora Monge, 2003; Gemino, Mackay and Reich, 2006; Darabi, Caruana and Zegordi, 2007; Simmons, Armstrong and Durkin, 2009; Daryanto, Khan, Matlay and Chakrabarti, 2013). Daryanto et al. (2013) investigated factors affecting the adoption of country-specific business websites within small businesses, by analyzing the usefulness and the ease of use perceived by customers. Simmons et al. (2009) proposed a model of what determines the adoption of a website by small businesses, through the analysis of a series of factors like instigators, decision area, influencers operating within an industry, managers' marketing ability, entrepreneurship, and information technologies (ITs) level. Darabi, Caruana and Zegordi (2007) looked into the nature of market relationships, by considering market orientation, company performance and website adoption. They analyzed website adopters and non-adopters from a sample from Iranian SMEs. The results of a research conducted by Gemino et al. (2006) indicated that perceived benefits (strategic and informative), organizational readiness (IT resources) and internal pressure directly affect SMEs managers/entrepreneurs' willingness to adopt a website.

Other scholars proposed multiple-phase models of website adoption (Gossain and Kenworthy, 2000; Rao, Metts and Mora Monge, 2003). In particular, Rao, Metts and Mora Monge (2003) suggested a model based on the following four stages: 1) presence, 2) portals, 3) transactions integration, and 4) enterprises integration. The authors defined each stage as a set of descriptors that characterize the evolutionary nature of the website. The descriptors are, for example, brochureware, on-line catalogues, contact information, one-way and two-way communication, linking information, on-line financial transactions, etc. In each later stage of the model, costs, technological demands and complexity increase. In the end, they identified what factors promote (facilitators) and what factors inhibit or retard (barriers) the website development and implementation at a particular level by the enterprise.

In this research, the statements of the interviewees highlight that the decision to adopt the companies website has mainly depended on globalization. In fact, following the American wave that had experienced the phenomenon a few years earlier than Italy, the website adoption in the businesses was an imperative to survive in the global market. Moreover, the static or dynamic nature of the company website as well as its characteristics (such as the number of foreign languages) were due to the size of the companies, their role within the district and the mentality of entrepreneurs. In fact, in some companies interviewed, such as the company #A and #F, the entry into the company of the second generation (the children of the entrepreneur) has influenced the decision to adopt the company website to achieve the international markets.

Similarly, in the last years also social media have been increasingly adopted in enterprises. In particular, enterprises engage social media for purposes of marketing, customer relationship and reputation management, recruitment, and product/service innovation (Parveen, 2012).

Most of the literature focused on larger companies' social media adoption. In fact, SMEs often are behind larger companies regarding the

adoption of innovative technologies (Musso and Risso, 2012). The reasons for this backwardness of SMEs are, for example, a limited ability to realize risky investments and a greater attention on core business activities, which are aimed at increasing the company's profit. Given their limited resources and capabilities, SMEs need to make well-considered decisions about adopting new technologies such as social media applications. Therefore, knowledge of key success factors as well as potential impediments significantly improve their ability to make informed decisions on whether or not to adopt social media (Meske and Stieglitz, 2013).

Stieglitz and Dang-Xuan (2011) stated that social media adoption is associated with primarily non-technical barriers and challenges. These mainly include "soft" factors (such as management attitude and employee acceptance), rather than "hard" factors (cost and technical issues). Thus, it is fundamental for SMEs to take the "soft" factors into account when they consider a social media adoption (Meske and Stieglitz, 2013). Furthermore, literature has shown that the personality of firm owners and their attitude to do business considerably influence decision-making processes in SMEs (Levy and Powell, 2005).

In this research emerges that the decision to adopt a social media profile is different for the companies based on their size and the role they play within the district and in the foreign markets. In fact, in medium-sized companies, management attitudes were immediately decisive in the choice of adopting a social media profile. On the contrary, in small-sized companies, the adoption of a social media profile as a tool for internationalization strategies was achieved only where the second generation intervened. Moreover, the remaining companies, have chosen to create a social media profile for the sole reason not to be excluded from foreign markets.

An interesting fact is also offered regarding the concrete realization of the company website and its management (Table 4.6). In particular, with regard to

the creation of the website, all companies, regardless of their size and the role they play in the market, claimed to have contacted a communications agency.

Tab. 4.6 - *Company website creation and management based on size and role*

	<b>Size</b>	<b>Role</b>	<b>Website creation</b>	<b>Website management</b>
<b>#A</b>	<i>small</i>	<i>manufacturer</i>	<i>outsourced</i>	<i>outsourced</i>
<b>#B</b>	<i>medium</i>	<i>manufacturer</i>	<i>outsourced</i>	<i>internalized</i>
<b>#C</b>	<i>medium</i>	<i>manufacturer</i>	<i>outsourced</i>	<i>outsourced</i>
<b>#D</b>	<i>small</i>	<i>subcontractor</i>	<i>outsourced</i>	<i>outsourced</i>
<b>#E</b>	<i>medium</i>	<i>subcontractor</i>	<i>outsourced</i>	<i>internalized</i>
<b>#F</b>	<i>small</i>	<i>subcontractor</i>	<i>outsourced</i>	<i>outsourced</i>

The post-creation management is also mainly entrusted to the communication agency, with the exception of the medium-sized subcontractor (#E) and one of the two medium-sized manufacturers (#B) who have declared they prefer to manage the corporate website in-house. The choice was based on the fact that these two companies have employees able to carry out this activity. In contrast, among the remaining companies, the choice was based on different motivations. On the one hand, companies that strongly believe in the website as a key tool for internationalization, prefer to rely on external service providers for their professionalism (manufacturers #A and #C); on the other hand, companies that believe that the website is exclusively a showcase forced by the market (subcontractors #D and #F), rely on external service providers only sporadically, with low costs and without investing in the skills of their employees.

With regard to the realization and management of the social media profiles of companies, the influence of size and role of companies becomes more evident (Table 4.7).

Tab. 4.7 - *Social media profile (SMP) creation and management based on size and role*

	<b>Size</b>	<b>Role</b>	<b>SMP creation</b>	<b>SMP management</b>
<b>#A</b>	<i>small</i>	<i>manufacturer</i>	<i>internalized</i>	<i>internalized</i>
<b>#B</b>	<i>medium</i>	<i>manufacturer</i>	<i>outsourced</i>	<i>outsourced</i>
<b>#C</b>	<i>medium</i>	<i>manufacturer</i>	<i>outsourced</i>	<i>outsourced</i>
<b>#D</b>	<i>small</i>	<i>subcontractor</i>	<i>internalized</i>	<i>internalized</i>
<b>#E</b>	<i>medium</i>	<i>subcontractor</i>	<i>outsourced</i>	<i>outsourced</i>
<b>#F</b>	<i>small</i>	<i>subcontractor</i>	<i>internalized</i>	<i>internalized</i>

In fact, for the creation of the company profile, the three medium-sized companies relied on the external service provider, while the three small companies created social profiles internally. Regarding the management of social media profiles, the three medium-sized companies, regardless of their role, prefer to maintain the relationship with the service provider. In contrast, the three small companies prefer to manage the profiles internally. However, the motivations of this choice are very different depending on the role played by the firm. In fact, among the companies that choose to manage social profiles internally, the management of the manufacturer invests in a training course for its employees, while the two subcontractors firms owe their success in acquisition of new customers through social profiles to the resourcefulness of its employees. Totally different are the motivations of companies that choose to entrust management to the communication agency. These, in fact, believe that social profiles should not be limited to being a mere showcase but an instrument in which to invest. Therefore, they strongly believe in the social media tool and attach great value to the know-how and professionalism of the service provider. However, the communication agency is not left to itself but is continually

supported in communication strategies by firms' workers, and by their in-depth knowledge of the company and its products. Therefore, the two parties constantly collaborate with each other with the aim of defining the best strategy to acquire new customers.

Another very interesting aspect concerns the analysis of data and the use of such data in internationalization strategies (Table 4.8).

Tab. 4.8 - *Analysis and use of data*

	<b>Size</b>	<b>Role</b>	<b>Analysis of data</b>	<b>Use of data</b>
<b>#A</b>	<i>small</i>	<i>manufacturer</i>	<i>yes</i>	<i>yes</i>
<b>#B</b>	<i>medium</i>	<i>manufacturer</i>	<i>yes</i>	<i>yes</i>
<b>#C</b>	<i>medium</i>	<i>manufacturer</i>	<i>yes</i>	<i>yes</i>
<b>#D</b>	<i>small</i>	<i>subcontractor</i>	<i>no</i>	<i>no</i>
<b>#E</b>	<i>medium</i>	<i>subcontractor</i>	<i>yes</i>	<i>yes</i>
<b>#F</b>	<i>small</i>	<i>subcontractor</i>	<i>no</i>	<i>no</i>

All three manufacturers claim to analyze the data emerging from their website and social media profiles, and in particular the tastes and needs of consumers. Furthermore, they state that the Internet facilitates the study and imitation of the strategies of their market-leading competitors.

Subsequently, the results that emerge from the analysis of the Internet tools, are used by these companies in their internationalization strategies. Obviously, where the management is entrusted to the communication agency, the analysis is carried out jointly by the two parties.

As for subcontractors, however, the company size - and everything related to it - greatly influences the decision to analyze or not the data deriving from the website and social media profiles. In fact, the small subcontractors (#D, #F) are not interested in data analysis or their use in internationalization

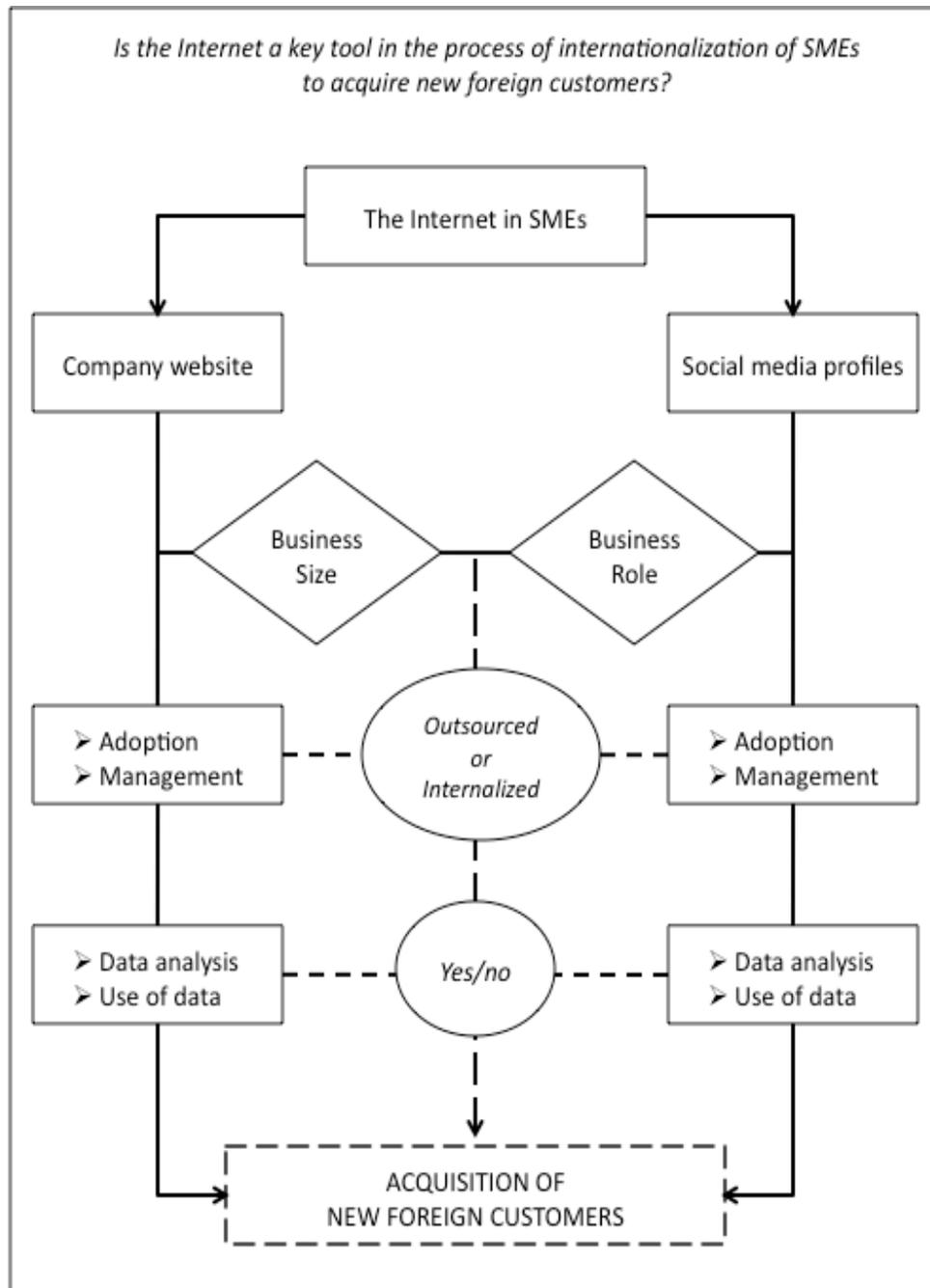
strategies because they consider the website and social media just a showcase. Instead, the medium-sized subcontractor #E, which strongly believes in these tools to acquire new customers in foreign markets, analyzes the data both internally and together with the communication agency. The aim is to use them in its new internationalization strategies, both to consolidate the foreign markets in which the company is already present, and to enter a specific new market.

At the end of the interviews, all six companies declared to have acquired new foreign customers thanks to the website and to the social media profiles. Surprisingly, this is true both for companies that believe in these tools, investing more and interacting with communication professionals, and for companies that have chosen to adopt these tools only as a showcase. However, in the first case, the Internet can be defined as a real tool that becomes part of the internationalization strategies. In the second case, instead, internationalization through the Internet is mostly occasional.

In conclusion, therefore, the role that the company plays in the market (manufacturer or subcontractor) as well as the business size (small or medium) seem to influence strongly in considering or not the Internet as a tool in the SMEs' internationalization strategies. However, the results show that the Internet is a key tool in the process of internationalization of SMEs to acquire new foreign customers.

The framework showed in Figure 4.2 summarize all concepts aforementioned.

Fig. 4.2 - Conceptual model



## **4.12 Summary**

After a focus on the Italian furniture sector and the furniture district of Pesaro, this Chapter showed and discussed the findings of the first research phase, using the case study analysis methods deepened in Chapter Three.

In order to test the results obtained extending them to a significantly representative sample, this section allowed to produce a basis to realize a questionnaire for the quantitative research phase, illustrated in Chapter Five.

## **CHAPTER 5**

# **Is the Internet a Key Tool in the Process of Internationalization of SMEs to Acquire New Foreign Customers? A Quantitative Research.**

### **5.1 Introduction**

In Chapter Five the data of the quantitative research phase are analyzed, and the findings are discussed.

The purpose of this second empirical research is to generalize the results obtained in the first explorative research phase (see Chapter Four).

Data were collected by administering a specific questionnaire to a significantly representative sample of SMEs.

After a description of the sample profile, statistical analyzes such as Frequency Distribution, Bivariate Analysis, Factor Analysis and Regression Analysis, and Latent Class Analysis, are presented. Statistical analyzes were performed using Excel, SPSS and LatentGOLD®.

### **5.2 Sample profile**

As mentioned in Chapter Three, 982 firms belonging to the Pesaro furniture district were contacted by e-mail and were asked them to fill in the online questionnaire. 248 companies were available to participate in the survey. Of these, 65 (26.2%) companies weren't internationalized and were not taken into consideration. Therefore, the sample is composed of 183 companies, that is a high response rate of 18.64% on the total.

The 183 responding companies can be categorized in different ways, depending on the role played in the market (manufacturers or subcontractors) and their size (small or medium).

The classification of the role was expressed directly by the respondents through a closed-ended question in the questionnaire. Their size, on the other hand, was codified through the analysis of two closed-ended questions concerning the number of employees and the annual turnover, as defined by the European Commission in 2005 and explained in Chapter Two.

In Table 5.1, the frequency distribution of responding companies is illustrated.

Tab. 5.1 - *Contingency table of the classification of sample*

		<b>Size</b>		<b>Total</b>
		<i>Small</i>	<i>Medium</i>	
<b>Role</b>	<i>Manufacturers</i>	36	26	62
	<i>Subcontractors</i>	93	28	121
<b>Total</b>		129	54	183

The contingency table (Table 5.1), is a special type of frequency distribution table that allows to show two (or more) categorical variables simultaneously. As shown, the manufacturers are 62 (33.88% on total of 183), divide into 36 small enterprises and 26 medium-sized enterprises. The subcontractors are 121 (66.12% on total of 183), divide into 93 small enterprises and 28 medium-sized enterprises (see Figure 5.1).

Fig. 5.1 - Classification of sample

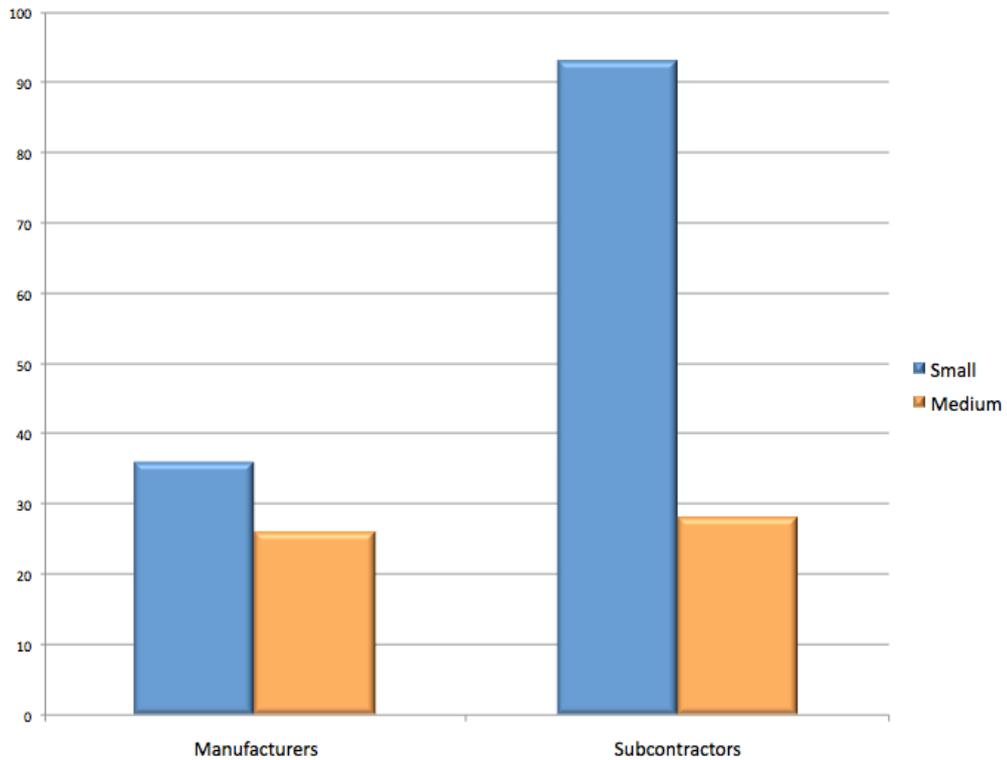


Table 5.2 shows the descriptive statistics regarding the date of foundation and the date of internationalization. The 183 companies interviewed were founded between 1970 (minimum) and 1994 (maximum), and started their internationalization process between 1974 (minimum) and 2004 (maximum).

Moreover, the central tendency values, median and mode, are presented. The statistical median is the middle number in a sequence of numbers. Median is 1982 for the variable "Foundation Date", and 1989 for the variable "Internationalization Date". The mode is the number that occurs most often. Mode is 1976 for the variable "Foundation Date", and 1989 for the variable "Internationalization Date".

Tab. 5.2 - Descriptive statistics: date of foundation and internationalization

Foundation Date	Frequency	%	Cum. %	International. Date	Frequency	%	Cum. %
1970	2	1.1	1.1	1974	1	0.5	0.5
1971	10	5.5	6.6	1975	3	1.6	2.2
1972	5	2.7	9.3	1976	3	1.6	3.8
1973	15	8.2	17.5	1977	1	0.5	4.4
1974	7	3.8	21.3	1978	5	2.7	7.1
1975	3	1.6	23	1979	4	2.2	9.3
1976	18	9.8	32.8	1980	2	1.1	10.4
1977	2	1.1	33.9	1981	4	2.2	12.6
1978	3	1.6	35.5	1982	6	3.3	15.8
1979	3	1.6	37.2	1983	6	3.3	19.1
1980	12	6.6	43.7	1984	6	3.3	22.4
1981	11	6	49.7	1985	7	3.8	26.2
1982	15	8.2	57.9	1986	11	6	32.2
1983	12	6.6	64.5	1987	12	6.6	38.8
1984	5	2.7	67.2	1988	7	3.8	42.6
1985	8	4.4	71.6	1989	17	9.3	51.9
1986	7	3.8	75.4	1990	11	6	57.9
1987	16	8.7	84.2	1991	5	2.7	60.7
1988	10	5.5	89.6	1992	8	4.4	65
1989	7	3.8	93.4	1993	8	4.4	69.4
1990	2	1.1	94.5	1994	7	3.8	73.2
1991	6	3.3	97.8	1995	1	0.5	73.8
1992	1	0.5	98.4	1996	6	3.3	77
1993	2	1.1	99.5	1997	3	1.6	78.7
1994	1	0.5	100	1998	8	4.4	83.1
				1999	12	6.6	89.6
				2000	7	3.8	93.4
				2001	6	3.3	96.7
				2002	1	0.5	97.3
				2003	4	2.2	99.5
				2004	1	0.5	100
<b>Total (N)</b>	183	100			183	100	
<b>Median</b>	1982				1989		
<b>Mode</b>	1976				1989		
<b>Minimum</b>	1970				1974		
<b>Maximum</b>	1994				2004		

Analyzing more in detail, Table 5.3 shows the difference between manufacturers and subcontractors as for the start date of their export activities.

Through Excel, in a new column the date of foundation was subtracted from the date of internationalization, obtaining the number of years distinguished according to the role of the companies. Subsequently, the minimum value, the maximum value and the mode were calculated.

Tab. 5.3 - *Firms' export activities*

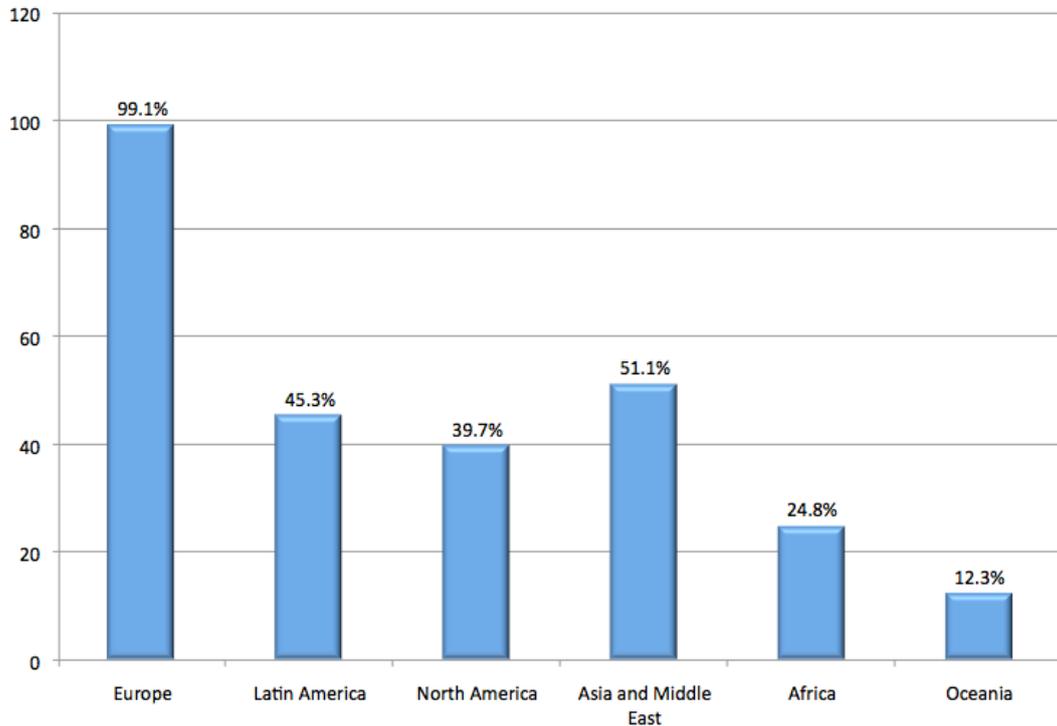
	<b>Minimum</b>	<b>Maximum</b>	<b>Mode</b>
<i>Manufacturers</i>	0	3	1
<i>Subcontractors</i>	3	29	11

It is interesting to note that the manufacturers started their export activities between 0 and 3 years after their foundation, with a mode of 1. This means that most of these firms, started their internationalization process one year after their birth. On the contrary, subcontractors were internationalized between 3 and 29 years later, with a mode of 11. In this case, the majority started their export sales 11 years after their foundation.

With reference to the foreign markets served by companies, Figure 5.2 shows that the main market area is Europe (99.1%), followed by Asia and Middle East (51.1%), Latin America (45.3%), North America (39.7%), Africa (24.8%), and Oceania (12.3%). The total percentage exceeds 100% because the total number of answer choices selected for the question was greater than one per respondent.

Moreover, 178 companies out of 183 declared that Europe was the first market area in which they began to export, and in particular for many small subcontractors it is still the only market area of reference.

Fig. 5.2 - Foreign market areas served by companies



### 5.3 Characteristics of the Internet in the companies interviewed: a frequency distribution analysis

As already mentioned above, in this Thesis the term “Internet” refers to website and social media profile(s).

The results relating to the frequency distribution analysis of the company website and social media profile are shown below.

In several cases, data analysis was performed using the contingency tables, a special type of frequency distribution table that allows to show two or more categorical variables simultaneously.

#### 5.3.1 Company website

The companies interviewed have adopted the company website between 2000 (minimum) and 2004 (maximum). The median, which is the value separating the higher half from the lower half of a data distribution, is 2002. The

mode, namely the number that occurs most often, is 2001. In that year, in fact, 50 companies out of 183 have adopted their own company website (Table 5.4).

Tab. 5.4 - *Date of adoption of the company website*

<b>Website Adoption</b>	<b>Frequency</b>	<b>%</b>	<b>Cum. %</b>
2000	32	17.5	17.5
2001	50	27.3	44.8
2002	45	24.6	69.4
2003	44	24.0	93.4
2004	12	6.6	100
<b>Total (N)</b>	183	100	
<b>Median</b>	2002		
<b>Mode</b>	2001		
<b>Minimum</b>	2000		
<b>Maximum</b>	2004		

Regarding how the website was implemented in the company, 173 firms stated they had turned to an external service provider, while 10 companies created their own website in-house. Among these latter ones, 4 are manufacturers (2 small, and 2 medium-sized), and 6 are small subcontractors (Table 5.5).

Tab. 5.5 - *Adoption of the website: implementation methods*

		<i>Website Adoption</i>	
		Outsourced	Internalized
<i>Manufacturers</i>	Small	34	2
	Medium	24	2
<i>Subcontractors</i>	Small	87	6
	Medium	28	0
<b>Total</b>		<b>173</b>	<b>10</b>

Therefore, almost the whole of the sample has entrusted the service externally due to the complexity of the creation of the website. It is assumed that the 10 companies that implemented the website independently, had qualified employees able to create a basic website (Etemad et al., 2010). The assumption derives from the fact that the questionnaire provided for an opened-ended question regarding the motivations, to which, however, several companies did not respond accurately.

Tab. 5.6 - *Website management methods*

		<i>Website Management</i>	
		Outsourced	Internalized
<i>Manufacturers</i>	Small	36	0
	Medium	21	5
<i>Subcontractors</i>	Small	91	2
	Medium	27	1
<b>Total</b>		<b>175</b>	<b>8</b>

Table 5.6 shows the management methods of the website: divided into “outsourced management” and “internalized management”.

It is interesting to note that most of the 173 companies that have implemented the website through the support of an external service provider have continued this relationship for the management of the website.

Surprisingly, as regards the management of the website, among the companies that previously had declared to have entrusted the implementation of the website in outsourcing, the number of small companies that manage the website in outsourcing increases (+2 manufacturers, + 4 subcontractors). While, for medium-sized companies, the number of companies decreases (manufacturers from 24 to 21; subcontractors from 28 to 27).

It is important to underline that to the open-ended question concerning the motivations of this choice, companies have responded differently according to their size.

Among the companies that have internalized the management, those of medium-sized stated they have preferred to manage the website through their employees with computer skills because, compared to external service providers, they know better the characteristics of the company.

In contrast, small-sized companies stated that they do not want to invest in outsourcing because their target is the B2B market, so the skills of their employees are sufficient.

On the other hand, with regard to the companies that have chosen to manage the website in outsourcing, most of them stated they preferred the professionalism of a communication agency, while still maintaining a constant dialogue and discussion with employees.

A minor part, mainly found among small manufacturers and subcontractors, affirmed that the relationship with the communication agency is sporadic, the minimum necessary in order to keep website management costs low.

### **5.3.2 Social media profile**

Table 5.7 shows that the firms interviewed have adopted their first social media profile between 2007 (minimum) and 2011 (maximum). The median, which is the value separating the higher half from the lower half of a data distribution, is 2009. The mode, that is the number that occurs most often, is 2009. In that year, in fact, 62 companies out of 183 have adopted their first social media profile.

Tab. 5.7 - Date of adoption of the social media profile

<b>Social Media Profile Adoption</b>	<b>Frequency</b>	<b>%</b>	<b>Cum. %</b>
2007	14	7.7	7.7
2008	39	21.3	29
2009	62	33.9	62.8
2010	60	32.8	95.6
2011	8	4.4	100
<b>Total (N)</b>	183	100	
<b>Median</b>	2009		
<b>Mode</b>	2009		
<b>Minimum</b>	2007		
<b>Maximum</b>	2011		

Regarding how the first social media profile was implemented in the company, Table 5.8 shows that 44 firms had turned to an external service provider, while 139 companies created their own first social media profile internally.

It is interesting to note that all small subcontractors have internalized the creation of their profile on social media. Similarly, also the majority of small manufacturers did it too (34 out of 36). In contrast, most of medium-sized companies preferred to outsource the creation of a social media profile.

Tab. 5.8 - Adoption of the first social media profile: implementation methods

		<i>Social Media Profile Adoption</i>	
		Outsourced	Internalized
<i>Manufacturers</i>	Small	2	34
	Medium	19	7
<i>Subcontractors</i>	Small	0	93
	Medium	23	5
<b>Total</b>		<b>44</b>	<b>139</b>

With reference to the reasons for this choice, the companies that have internalized affirmed that creating a new profile is too easy to entrust this task to a communication agency. While, the companies that have chosen to outsource the creation of the profile, stated this is primarily due to the strong previous relationship with a service provider.

Table 5.9 shows the management methods of the social media profile: divided into “outsourced management” and “internalized management”.

Tab. 5.9 - *Social media profile management methods*

		<i>Social Media Profile Management</i>	
		Outsourced	Internalized
<i>Manufacturers</i>	Small	5	31
	Medium	20	6
<i>Subcontractors</i>	Small	17	76
	Medium	25	3
<b>Total</b>		<b>67</b>	<b>116</b>

Unexpectedly, the number of companies that internally manage their social media profile(s) has decreased compared to those who implemented it internally, from 139 to 116 with a difference of 23. Among these 23 firms, the number has increased significantly for small subcontractors, from 0 to 17.

Furthermore, in the “Outsourced” column, the number of medium-sized manufacturers have increased by +1, while medium-sized subcontractors by +2, and small manufacturers by +3.

However, the majority of companies continues to prefer to manage the social media profile(s) in-house.

The reasons of the choice between managing in outsourcing or in-house are different. Among the companies that manage social media profile(s) in-house, the reasons mainly concern ease of use and low costs. On the contrary,

the primarily reasons for companies that decided to invest in an outsourced management concern: an offer from the service provider for a package including website and social media; a conscious intention to invest in communication by the company management; the unavailability of qualified employees in content marketing.

### 5.3.3 Data analysis and their use in internationalization strategies

After analyzing the behavior of companies regarding the adoption and management of the company website and the social media profile, this section focuses on the analysis of data emerged from the Internet and their use in internationalization strategies.

Thus, regarding this part, in the questionnaire the company website and the social media profile merged into the term “Internet”.

Companies that analyze Internet data are shown in Table 5.10.

Most companies, 105 out of 183, carry out data analysis. However, by dividing companies by role and size, it is interesting to highlight that the majority of small subcontractors do not perform data analysis.

Tab. 5.10 - *Data analysis*

		<i>Data analysis</i>	
		no	yes
<i>Manufacturers</i>	Small	5	31
	Medium	2	24
<i>Subcontractors</i>	Small	59	34
	Medium	12	16
<b>Total</b>		<b>78</b>	<b>105</b>

In particular, in most cases, the reason why companies do not perform data analysis is because the Internet is considered only a showcase.

In contrast, among companies that perform data analysis, most are interested in knowing the results to use them in internationalization strategies. Instead, for the remaining part, data analysis is an end in itself. In this last case, in fact, the respondents stated to perform data analysis just out of curiosity.

As shown in Table 5.11, companies using the data previously analyzed in their internationalization strategies are 98 out of 105. Of these, all medium-sized manufacturers use them, while for the remaining companies, the difference is -2 for small manufacturers and small subcontractors, and -3 for medium-sized subcontractors.

Tab. 5.11 - *Use of data in internationalization strategies*

		<i>Use of data</i>	
		no	yes
<i>Manufacturers</i>	Small	7	29
	Medium	2	24
<i>Subcontractors</i>	Small	61	32
	Medium	15	13
<b>Total</b>		<b>85</b>	<b>98</b>

In order to analyze even more in detail, a 5-variable contingency table can be used.

Table 5.12 e Table 5.13 are 2x3 tables, in which in the rows are arranged the variables “Enterprises role” and “Enterprises size”, while in the columns are arranged the variables “Data analysis”, “Use of data in internationalization strategies”, and “Website/Social Media management”.

By crossing the variables on the columns, it is possible to identify the following types of companies:

- do not perform data analysis, do not use data, outsourcing management of company website/social media profile;

- do not perform data analysis, do not use data, in-house management of company website/social media profile;
- do not perform data analysis, use data, outsourcing management of company website/social media profile;
- do not perform data analysis, use data, in-house management of company website/social media profile;
- perform data analysis, do not use data, outsourcing management of company website/social media profile;
- perform data analysis, do not use data, in-house management of company website/social media profile;
- perform data analysis, use data, outsourcing management of company website/social media profile;
- perform data analysis, use data, in-house management of company website/social media profile.

As expected, the cells about “do not perform data analysis, use data, outsourcing management of company website/social media profile” and “do not perform data analysis, use data, in-house management of company website/social media profile” are empty.

In more detail, as regards the company website, in Table 5.12 some numbers are more evident than others. In particular, it is interesting to note that:

- 29 small manufacturers (out of 36) who have entrusted the management of their own company website to a service provider, perform data analysis and use data in internationalization strategies;
- 20 medium-sized manufacturers (out of 26) who have entrusted the management of their own company website to a service provider, perform data analysis and use data in internationalization strategies;
- 59 small subcontractors (out of 93) do not perform data analysis and do not use data in internationalization strategies, even though they have

entrusted the management of their own company website to a service provider;

- medium-sized subcontractors, on the other hand, are almost equally distributed (12 for “do not perform data analysis, do not use data, outsourcing management of company website/social media profile” and 12 for “perform data analysis, use data, outsourcing management of company website/social media profile”).

In total, 78 companies do not perform data analysis and do not use data in internationalization strategies, while, on the contrary, 98 companies analyze and use data. However, of these, 77 companies out of 78 in the first case, and 91 companies out of 98 in the second case, all entrust the management of their website to a communication agency.

Instead, only 7 companies analyze data but do not use them in internationalization strategies.

Tab. 5.12 - Data analysis, use of data in internationalization strategies and company website management

		Data analysis					
		no			yes		
		Use of data			Use of data		
		no	yes		no	yes	
		Website management		Website management		Website management	
		Outsourced	Internalized	Outsourced	Internalized	Outsourced	Internalized
<i>Manufacturers</i>	Small	5	0	0	0	2	0
	Medium	1	1	0	0	0	4
<i>Subcontractors</i>	Small	59	0	0	0	2	2
	Medium	12	0	0	0	3	1
<b>Total</b>		<b>77</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>7</b>

For what concerns the social media profile (Table 5.13), the overall picture of the situation is almost similar, although some differences are evident:

- 24 small manufacturers (out of 36) who manage their social media profile(s) in-house, perform data analysis and use data in internationalization strategies;
- 20 medium-sized manufacturers (out of 26) who have entrusted the management of their social media profile(s) to a service provider, perform data analysis and use data in internationalization strategies;
- 46 small subcontractors (out of 93) who manage in-house their social media profile(s), do not perform data analysis and do not use them in internationalization strategies;
- medium-sized subcontractors continue to be almost equally distributed, even if the bigger number is represented by the 13 companies (out of 28) who have entrusted the management of their social media profile(s) to a service provider and perform data analysis and use them in internationalization strategies.

Therefore, the difference between manufacturers and subcontractors is particularly evident.

The manufacturers analyze data and use them in internationalization strategies, while the subcontractors tend not to analyze and not to use data in their strategies. In fact, as seen above, most of the subcontractors stated they consider the Internet primarily as a showcase only. However, it is complicated to try to position the medium-sized subcontractors clearly, since they are arranged almost equally in different types.

Likewise, among the companies who perform data analysis and use these data in internationalization strategies, the distribution of the companies between “outsourced management” (42) and “internalized management” (56) is almost equal or not as clear as the others.

Tab. 5.13 - Data analysis, use of data in internationalization strategies and social media profile management

		Data analysis							
		no			yes				
		Use of data			Use of data				
		no	yes		no	yes			
		Social Media management							
		Outsourced	Internalized	Outsourced	Internalized	Outsourced	Internalized		
Manufacturers	Small	0	5	0	0	0	2	5	24
	Medium	0	2	0	0	0	0	20	4
Subcontractors	Small	13	46	0	0	0	2	4	28
	Medium	10	2	0	0	0	1	13	0
Total		23	55	0	0	0	5	42	56

Regarding the acquisition of new foreign customers through the Internet tool, the majority of companies (126 out of 183) affirmed they started new relationships with foreign customers (Table 5.14). In more detail:

- 58.3% of small manufacturers;
- 76.9% of medium-sized manufacturers;
- 69.9% of small subcontractors;
- 71.4% of medium-sized subcontractors.

Thus, all types of companies exceed 50%, and among these, medium-sized companies have a higher percentage.

By differentiating companies according to their size, the percentage of the acquisition of new foreign customers through the Internet is 66.6% for small companies (out of the total small companies) and 74.1% for medium-sized companies (out of the total medium-sized companies). While, by differentiating companies according to their role, the acquisition of new foreign customers through the Internet is confirmed by 66.1% of manufacturers (out of the total manufacturers) and by 70.2% of the subcontractors (out of the total of subcontractors).

Tab. 5.14 - *The Internet for the acquisition of new foreign customers*

		<i>Acquisition of new foreign customers</i>	
		no	yes
<i>Manufacturers</i>	Small	15	21
	Medium	6	20
<i>Subcontractors</i>	Small	28	65
	Medium	8	20
<b>Total</b>		<b>57</b>	<b>126</b>



Table 5.15 shows the results of the acquisition of new foreign customers by companies, divided by data analysis and use of data in internationalization strategies.

Among the 126 companies who affirmed to have acquired new foreign customers through the Internet:

- 67 companies analyze the data of the website and the social media profile, and use them in internationalization strategies;
- 55 companies do not analyze the data of the website and the social media profile, and do not use them in internationalization strategies;
- 4 companies analyze the data of the website and the social media profile, but do not use them in internationalization strategies.

On the other hand, among 57 companies who affirmed not to have acquired new foreign customers through the Internet:

- 31 companies analyze the data of the website and the social media profile, and use them in internationalization strategies;
- 23 companies do not analyze the data of the website and the social media profile, and do not use them in internationalization strategies;
- 3 companies analyze the data of the website and the social media profile, but do not use them in internationalization strategies.

Analyzing the rows in Table 5.15, it is interesting to note that the highest number for each type of companies is situated in the column “Acquisition of new foreign customers - yes”, and in more detail, as follows:

- 16 small manufacturers, 18 medium-sized manufacturers and 12 medium-sized subcontractors who have to acquired new foreign customers through the Internet perform data analysis and use data in internationalization strategies;
- 42 small subcontractors do not perform data analysis and do not use data in internationalization strategies. Despite this, they acquire new foreign customers.

Therefore, from the first results emerged, one can say that the Internet allows SMEs to acquire new foreign customers and so it can be considered a key tool in the process of internationalization.

Furthermore, based on the results of the frequency distribution analysis, a relationship between the considered variables seems to exist. For this reason, in the next paragraph, the bivariate analysis is presented.

#### **5.4 Bivariate analysis**

In this section, in order to find out if there is a relationship between two sets of values, the bivariate analysis is performed.

In fact, the bivariate analysis analyzes the relationships between two variables: description of the intensity and the sign of the relationship, and inferential test to verify the significance of the relationship. Based on the type of variables analyzed (qualitative or quantitative) different bivariate techniques are used. In this case, the variables are all qualitative.

To analyze two qualitative variables, it is possible to calculate a cross-tab (or contingency table) in which the cross-frequencies of two variables are represented. It is also possible to verify if there is a significant association between the two variables, that is if certain modalities of the first variable tend to occur more frequently in correspondence with certain modalities of the second variable.

The inferential test of the significance of the relationship between two qualitative variables involves the comparison between the observed cross-tab and the independence (or expected) cross-tab (association = 0). The greater the distance between these two cross-tabs, the stronger the association between the two variables will be.

The test used is the chi-square ( $\chi^2$ ), which represents a distance measure of the contingency table observed (O) from the independence (E) contingency table:

$$\chi^2 = \sum_{ij} \frac{(\text{FrequenciesO}_{ij} - \text{FrequenciesE}_{ij})^2}{\text{FrequenciesE}_{ij}}$$

where the hypotheses of association are:

H<sub>1</sub>: there is a significant association between the two qualitative variables:  $\chi^2 \neq 0$

H<sub>0</sub>: there is no significant association between the two qualitative variables  $\chi^2 = 0$

The calculated chi-square is compared to the corresponding chi-square value with degrees of freedom (df) = (#rows - 1 \* #columns - 1).

If  $\chi^2_{\text{calculated}} > \chi^2_{df}$ , and therefore the p-value is less than .05, H<sub>0</sub> is rejected and there is a significant association between the two variables (H<sub>1</sub> is verified).

If  $\chi^2_{\text{calculated}} < \chi^2_{df}$ , and therefore the p-value is greater than .05, H<sub>0</sub> is accepted and there is no significant association between the two variables (H<sub>1</sub> is rejected).

Chi-square says if there is a significant relationship between variables, but it does not say just how significant and important this is. Phi and Cramer's V are the post-test to give this additional information.

Where the table is 2x2 and both variables are dichotomous, Phi ( $\Phi$ ) is used.

$$\phi^2 = \frac{\chi^2}{n}$$

Phi varies between -1 and 1. Close to 0 it shows little association between variables. Close to 1, it indicates a strong positive association. Close to -1 it shows a strong negative correlation.

Where tables are larger, Cramer's V (V) is used.

$$V = \sqrt{\frac{\chi^2}{n(k-1)}}$$

Cramer's V varies between 0 and 1. Close to 0 it shows little association between variables. Close to 1, it indicates a strong association.

The results of the bivariate analysis performed with SPSS are shown below.

#### 5.4.1 Size and company website adoption

In order to analyze the relationship between the variable “enterprises size” (named “size”) and the variable “adoption of the company website” (named “Company website adoption”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between size and company website adoption

H<sub>0</sub>: there is no significant association between size and company website adoption

Tab. 5.16 - *Bivariate analysis: size and company website adoption*

		Company Website Adoption		Total	
		<i>outsourced</i>	<i>internalized</i>		
Size	<i>Small</i>	Count	121	8	129
		Expected Count	122.0	7.0	129.0
	<i>Medium</i>	Count	52	2	54
		Expected Count	51.0	3.0	54.0
Total			173	10	183

#### Chi-Square Tests

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	.460 <sup>a</sup>	1	.498		
<i>Continuity Correction<sup>b</sup></i>	.103	1	.748		
<i>Likelihood Ratio</i>	.494	1	.482	.726	.391
<i>Fisher's Exact Test</i>					
<i>Linear-by-Linear Association</i>	.457	1	.499		
<i>N of Valid Cases</i>	183				

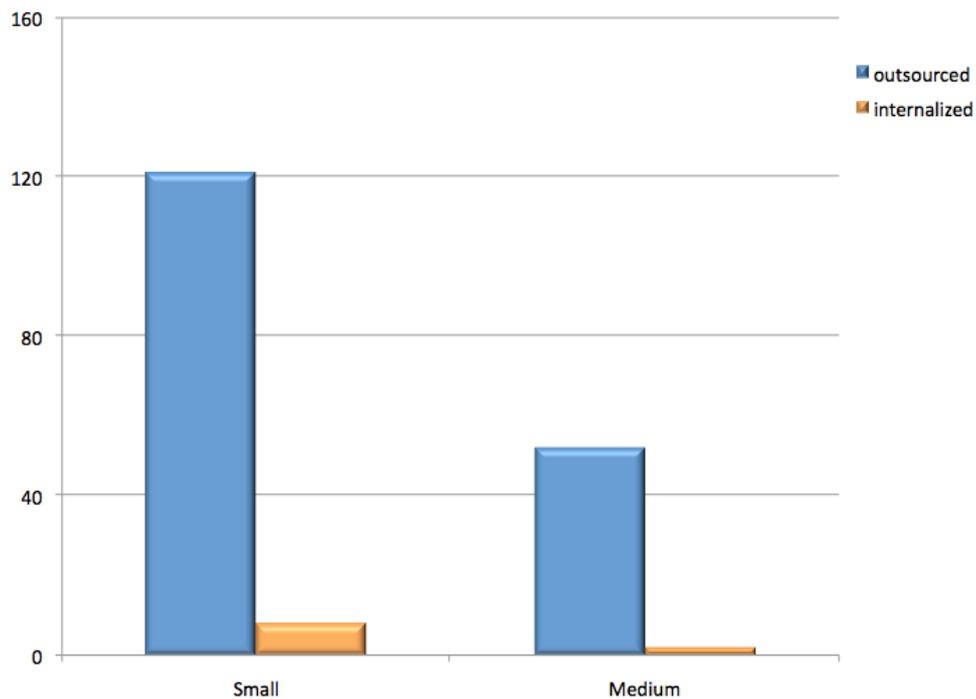
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.95.

b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is .460 with 1 df and the p-value is .498 ( $p > .05$ ), therefore  $H_1$  is rejected and  $H_0$  is accepted. This means that there is no significant association between these two variables.

The result is observable in the clustered bar chart too (Fig. 5.3).

Fig. 5.3 - Clustered bar chart: size and company website adoption



This result could be imagined because almost all the interviewees said they had created the company website through an external service provider.

#### 5.4.2 Role and company website adoption

In order to analyze the relationship between the variable “enterprises role” (named “role”) and the variable “adoption of the company website” (named “Company website adoption”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between role and company website adoption

H<sub>0</sub>: there is no significant association between role and company website adoption

Tab. 5.17 - *Bivariate analysis: role and company website adoption*

			Company Website Adoption		Total
			<i>outsourced</i>	<i>internalized</i>	
Role	<i>Manufacturers</i>	Count	58	4	62
		Expected Count	58.6	3.4	62.0
	<i>Subcontractors</i>	Count	115	6	121
		Expected Count	114.4	6.6	121.0
Total			173	10	183

**Chi-Square Tests**

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	.177 <sup>a</sup>	1	.674	.736	.456
<i>Continuity Correction<sup>b</sup></i>	.006	1	.939		
<i>Likelihood Ratio</i>	.173	1	.678		
<i>Fisher's Exact Test</i>					
<i>Linear-by-Linear Association</i>	.176	1	.675		
<i>N of Valid Cases</i>	183				

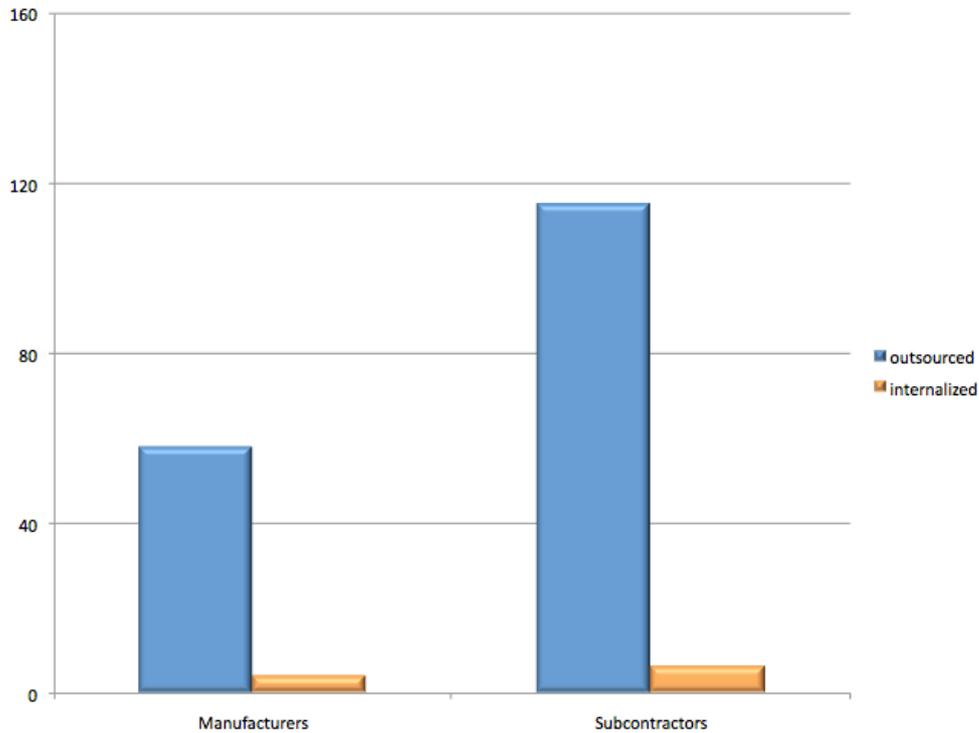
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.39.

b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is .177 with 1 df and the p-value is .674 ( $p > .05$ ), therefore H<sub>1</sub> is rejected and H<sub>0</sub> is accepted. This means that there is no significant association between these two variables.

The result is observable in the clustered bar chart too (Fig. 5.4).

Fig. 5.4 - Clustered bar chart: role and company website adoption



This result could be imagined because almost all the interviewees said they had created the company website through an external service provider.

### 5.4.3 Size and company website management

In order to analyze the relationship between the variable “enterprises size” (named “size”) and the variable “management of the company website” (named “Company website management”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

$H_1$ : there is a significant association between size and company website management

$H_0$ : there is no significant association between size and company website management

Tab. 5.18 - Bivariate analysis: size and company website management

			Company Website Management		Total
			<i>outsourced</i>	<i>internalized</i>	
Size	<i>Small</i>	Count	127	2	129
		Expected Count	123.4	5.6	129.0
	<i>Medium</i>	Count	48	6	54
		Expected Count	51.6	2.4	54.0
Total			173	8	183

**Chi-Square Tests**

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	8.323 <sup>a</sup>	1	.004	.009	.009
<i>Continuity Correction<sup>b</sup></i>	6.193	1	.013		
<i>Likelihood Ratio</i>	7.416	1	.006		
<i>Fisher's Exact Test</i>					
<i>Linear-by-Linear Association</i>	8.278	1	.004		
<i>N of Valid Cases</i>	183				
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.36.					
b. Computed only for a 2x2 table.					

The value of Pearson Chi-Square is 8.323 with 1 df and the p-value is .004 ( $p < .01$ ), therefore  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a significant association between these two variables.

As mentioned above, Chi-square says that there is a significant relationship between variables, but it does not say just how significant and important this is.

Phi and Cramer's V are the post-test to give this additional information (Table 5.19).

Tab. 5.19 - *Symmetric Measures: size and company website management*

		Value	Approx. Sig.
<i>Nominal by Nominal</i>	<i>Phi</i>	.213	.004
	<i>Cramer's V</i>	.213	.004
<i>N of Valid Cases</i>		183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation. The value of this index is .213, and it indicates a positive association.

#### 5.4.4 Role and company website management

In order to analyze the relationship between the variable “enterprises role” (named “role”) and the variable “management of the company website” (named “Company website management”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between role and company website management

H<sub>0</sub>: there is no significant association between role and company website management

The value of Pearson Chi-Square (see Table 5.20) is 3.059 with 1 df and the p-value is .080 ( $p < .05$ ). However, it is preferable to reject the null hypothesis, and accept H<sub>1</sub> with p-value  $< .10$ . Therefore H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. This means that there is a significant association between these two variables.

Tab. 5.20 - Bivariate analysis: Role and Company website management

			Company Website Management		Total
			<i>outsourced</i>	<i>internalized</i>	
Role	<i>Manufacturers</i>	Count	57	5	62
		Expected Count	59.3	2.7	62.0
	<i>Subcontractors</i>	Count	118	3	121
		Expected Count	115.7	5.3	121.0
Total			175	8	183

Chi-Square Tests

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	3.059 <sup>a</sup>	1	.080	.123	.089
<i>Continuity Correction<sup>b</sup></i>	1.869	1	.172		
<i>Likelihood Ratio</i>	2.855	1	.091		
<i>Fisher's Exact Test</i>					
<i>Linear-by-Linear Association</i>	3.042	1	.081		
<i>N of Valid Cases</i>	183				
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.36.					
b. Computed only for a 2x2 table.					

Tab. 5.21 - Symmetric Measures: role and company website management

		Value	Approx. Sig.
<i>Nominal by Nominal</i>	<i>Phi</i>	-.129	.080
	<i>Cramer's V</i>	.129	.080
<i>N of Valid Cases</i>		183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.21). The value of this index is -.129, and it indicates a marginally negative association.

### 5.4.5 Size and social media profile adoption

In order to analyze the relationship between the variable “enterprises size” (named “size”) and the variable “adoption of the social media profile” (named “social media profile adoption”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between size and social media profile adoption

H<sub>0</sub>: there is no significant association between size and social media profile adoption

Tab. 5.22 - *Bivariate analysis: size and social media profile adoption*

		Social Media Profile Adoption		Total	
		<i>outsourced</i>	<i>internalized</i>		
Size	<i>Small</i>	Count	2	127	129
		Expected Count	31.0	98.0	129.0
	<i>Medium</i>	Count	42	12	54
		Expected Count	13.0	41.0	54.0
Total		44	139	183	

#### Chi-Square Tests

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	121.113 <sup>a</sup>	1	.000		
<i>Continuity Correction<sup>b</sup></i>	116.975	1	.000		
<i>Likelihood Ratio</i>	124.036	1	.000		
<i>Fisher's Exact Test</i>				.000	.000
<i>Linear-by-Linear Association</i>	120.451	1	.000		
<i>N of Valid Cases</i>	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.98.  
b. Computed only for a 2x2 table.

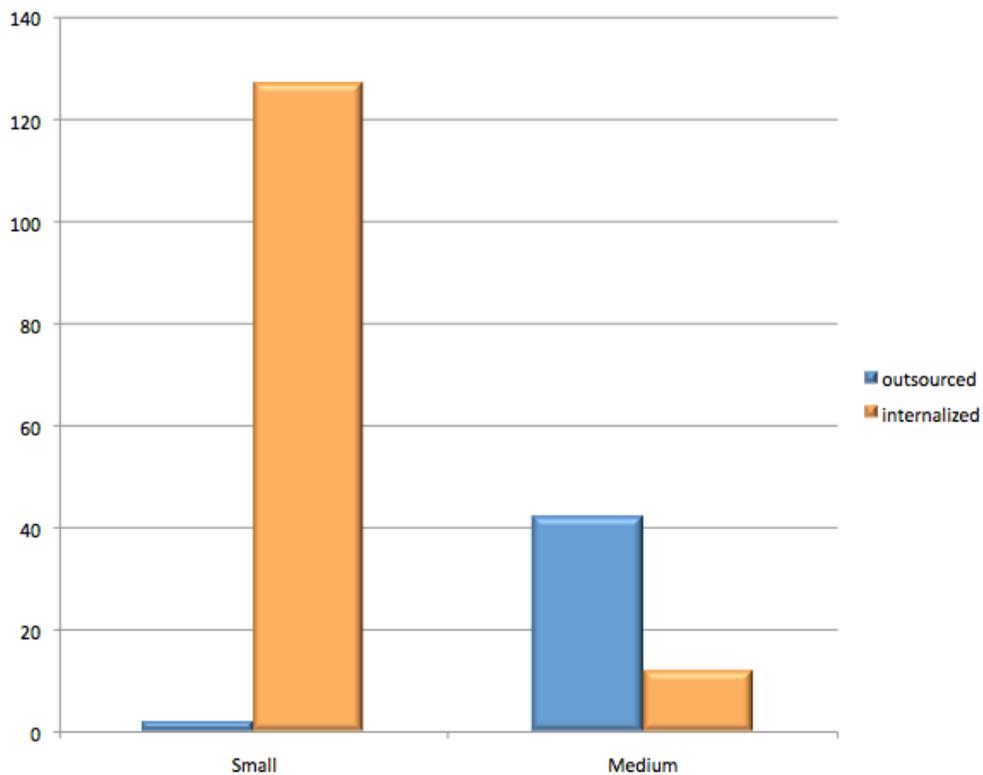
The value of Pearson Chi-Square is 121.113 with 1 df and the p-value is .000 ( $p < .01$ ), therefore H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. This means that there is a very significant association between these two variables.

Tab. 5.23 - Symmetric Measures: size and size and social media profile adoption

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.814	.000
	Cramer's V	.814	.000
N of Valid Cases		183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.23). The value of this index is -.814, and it indicates a strong negative association (see Fig. 5.5).

Fig. 5.5 - Clustered bar chart: size and social media profile adoption



#### 5.4.6 Role and social media profile adoption

In order to analyze the relationship between the variable “enterprises role” (named “role”) and the variable “adoption of the social media profile”

(named “Social media profile adoption”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between role and social media profile adoption

H<sub>0</sub>: there is no significant association between role and social media profile adoption

Tab. 5.24 - Bivariate analysis: Role and social media profile adoption

			Social Media Profile Adoption		Total
			<i>outsourced</i>	<i>internalized</i>	
Role	<i>Manufacturers</i>	Count	21	41	62
		Expected Count	14.9	47.1	62.0
	<i>Subcontractors</i>	Count	23	98	121
		Expected Count	29.1	91.9	121.0
Total			44	139	183

**Chi-Square Tests**

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	4.959 <sup>a</sup>	1	.026		
<i>Continuity Correction<sup>b</sup></i>	4.178	1	.041		
<i>Likelihood Ratio</i>	4.803	1	.028		
<i>Fisher’s Exact Test</i>				.030	.022
<i>Linear-by-Linear Association</i>	4.931	1	.026		
<i>N of Valid Cases</i>	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.91.

b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is 4.959 with 1 df and the p-value is .026 ( $p < .05$ ), therefore  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a significant association between these two variables.

Tab. 5.25 - *Symmetric Measures: role and social media profile adoption*

		Value	Approx. Sig.
<i>Nominal by Nominal</i>	<i>Phi</i>	.165	.026
	<i>Cramer's V</i>	.165	.026
<i>N of Valid Cases</i>		183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.25). The value of this index is .165, and it indicates a positive association.

#### **5.4.7 Size and social media profile management**

In order to analyze the relationship between the variable “enterprises size” (named “size”) and the variable “management of the social media profile” (named “Social media profile management”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

$H_1$ : there is a significant association between size and social media profile management

$H_0$ : there is no significant association between size and social media profile management

Tab. 5.26 - Bivariate analysis: Size and Social media profile management

			Social Media Profile Management		Total
			<i>outsourced</i>	<i>internalized</i>	
Size	<i>Small</i>	Count	22	107	129
		Expected Count	47.2	81.8	129.0
	<i>Medium</i>	Count	45	9	54
		Expected Count	19.8	34.2	54.0
Total			67	116	183

**Chi-Square Tests**

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	72.053 <sup>a</sup>	1	.000		
<i>Continuity Correction<sup>b</sup></i>	69.226	1	.000		
<i>Likelihood Ratio</i>	73.909	1	.000		
<i>Fisher's Exact Test</i>				.000	.000
<i>Linear-by-Linear Association</i>	71.660	1	.000		
<i>N of Valid Cases</i>	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.77.

b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is 72.053 with 1 df and the p-value is .000 ( $p < .01$ ), therefore  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a very significant association between these two variables.

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.27).

Tab. 5.27 - Symmetric Measures: size and social media profile management

		Value	Approx. Sig.
<i>Nominal by Nominal</i>	<i>Phi</i>	-.627	.000
	<i>Cramer's V</i>	.627	.000
<i>N of Valid Cases</i>		183	

The value of Phi is -.627, and it indicates a strong negative association.

### 5.4.8 Role and social media profile management

In order to analyze the relationship between the variable “enterprises role” (named “role”) and the variable “management of the social media profile” (named “Social media profile management”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between role and social media profile management

H<sub>0</sub>: there is no significant association between role and social media profile management

Tab. 5.28 - Bivariate analysis: role and social media profile management

			Social Media Profile Management		Total
			<i>outsourced</i>	<i>internalized</i>	
Role	<i>Manufacturers</i>	Count	25	37	62
		Expected Count	22.7	39.3	62.0
	<i>Subcontractors</i>	Count	42	79	121
		Expected Count	44.3	76.7	121.0
Total			67	76.7	183

#### Chi-Square Tests

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	.556 <sup>a</sup>	1	.456		
<i>Continuity Correction<sup>b</sup></i>	.341	1	.559		
<i>Likelihood Ratio</i>	.553	1	.457		
<i>Fisher's Exact Test</i>				.517	.279
<i>Linear-by-Linear Association</i>	.553	1	.457		
<i>N of Valid Cases</i>	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.70.

b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is .566 with 1 df and the p-value is .456 ( $p > .05$ ), therefore  $H_0$  is accepted and  $H_1$  is rejected. This means that there is no significant association between these two variables.

#### 5.4.9 Size and data analysis

In order to analyze the relationship between the variable “enterprises size” (named “size”) and the variable “data analysis”, a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

$H_1$ : there is a significant association between size and data analysis

$H_0$ : there is no significant association between size and data analysis

Tab. 5.29 - *Bivariate analysis: size and data analysis*

			Data Analysis		Total
			<i>no</i>	<i>yes</i>	
Size	<i>Small</i>	Count	64	65	129
		Expected Count	55.0	74.0	129.0
	<i>Medium</i>	Count	14	40	54
		Expected Count	23.0	31.0	54.0
Total			78	105	183

#### Chi-Square Tests

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	8.733 <sup>a</sup>	1	.003		
<i>Continuity Correction<sup>b</sup></i>	7.791	1	.005		
<i>Likelihood Ratio</i>	9.063	1	.003		
<i>Fisher’s Exact Test</i>				.003	.002
<i>Linear-by-Linear Association</i>	8.685	1	.003		
<i>N of Valid Cases</i>	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.02.

b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is 8.733 with 1 df and the p-value is .003 ( $p < .01$ ), therefore  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a very significant association between these two variables.

Tab. 5.30 - *Symmetric Measures: size and data analysis*

		Value	Approx. Sig.
<i>Nominal by Nominal</i>	<i>Phi</i>	.218	.003
	<i>Cramer's V</i>	.218	.003
<i>N of Valid Cases</i>		183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.30). The value of this index is .218, and it indicates a strong positive association.

#### 5.4.10 Role and data analysis

In order to analyze the relationship between the variable “enterprises role” (named “role”) and the variable “data analysis”, a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

$H_1$ : there is a significant association between role and data analysis

$H_0$ : there is no significant association between role and data analysis

Tab. 5.31 - *Bivariate analysis: role and data analysis*

			Data Analysis		Total
			<i>no</i>	<i>yes</i>	
Role	<i>Manufacturers</i>	Count	7	55	62
		Expected Count	26.4	35.6	62.0
	<i>Subcontractors</i>	Count	71	50	121
		Expected Count	51.6	69.6	121.0
Total			78	105	183

**Chi-Square Tests**

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	37.642 <sup>a</sup>	1	.000		
<i>Continuity Correction<sup>b</sup></i>	35.729	1	.000		
<i>Likelihood Ratio</i>	41.900	1	.000		
<i>Fisher's Exact Test</i>				.000	.000
<i>Linear-by-Linear Association</i>	37.436	1	.000		
<i>N of Valid Cases</i>	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.43.  
 b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is 37.642 with 1 df and the p-value is .000 ( $p < .01$ ), therefore  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a very significant association between these two variables.

Tab. 5.32 - *Symmetric Measures: role and data analysis*

	Value	Approx. Sig.
<i>Nominal by Nominal</i> <i>Phi</i>	-.454	.000
<i>Cramer's V</i>	.454	.000
<i>N of Valid Cases</i>	183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.32). The value of this index is -.454, and it indicates a strong negative association.

**5.4.11 Size and use of data in internationalization strategies**

In order to analyze the relationship between the variable “enterprises size” (named “size”) and the variable “use of data in internationalization strategies” (named “use of data”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between size and use of data

H<sub>0</sub>: there is no significant association between size and use of data

Tab. 5.33 - *Bivariate analysis: size and use of data*

		Use of data		Total	
		<i>no</i>	<i>yes</i>		
Size	<i>Small</i>	Count	68	61	129
		Expected Count	59.9	59.1	129.0
	<i>Medium</i>	Count	17	37	54
		Expected Count	25.1	28.9	54.0
Total		85	98	183	

**Chi-Square Tests**

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	6.899 <sup>a</sup>	1	.009	.010	.007
<i>Continuity Correction<sup>b</sup></i>	6.071	1	.014		
<i>Likelihood Ratio</i>	7.043	1	.008		
<i>Fisher's Exact Test</i>					
<i>Linear-by-Linear Association</i>	6.861	1	.009		
<i>N of Valid Cases</i>	183				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 25.08.					
b. Computed only for a 2x2 table.					

The value of Pearson Chi-Square is 6.899 with 1 df and the p-value is .009 ( $p < .01$ ), therefore H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. This means that there is a very significant association between these two variables.

Tab. 5.34 - *Symmetric Measures: size and use of data*

		Value	Approx. Sig.
<i>Nominal by Nominal</i>	<i>Phi</i>	.194	.009
	<i>Cramer's V</i>	.194	.009
<i>N of Valid Cases</i>		183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.34). The value of this index is .194, and it indicates a positive association.

#### 5.4.12 Role and use of data in internationalization strategies

In order to analyze the relationship between the variable “enterprises role” (named “role”) and the variable “use of data in internationalization strategies” (named “use of data”), a cross-tab and the Chi-square are calculated.

The hypothesis of association is:

H<sub>1</sub>: there is a significant association between role and use of data

H<sub>0</sub>: there is no significant association between role and use of data

Tab. 5.35 - *Bivariate analysis: role and use of data*

			Use of data		Total
			<i>no</i>	<i>yes</i>	
Role	<i>Manufacturers</i>	Count	9	53	62
		Expected Count	28.8	33.2	62.0
	<i>Subcontractors</i>	Count	76	45	121
		Expected Count	56.2	64.8	121.0
Total			85	98	183

#### Chi-Square Tests

	Value	df	Asympt. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<i>Pearson Chi-Square</i>	38.438 <sup>a</sup>	1	.000		
<i>Continuity Correction<sup>b</sup></i>	36.521	1	.000		
<i>Likelihood Ratio</i>	41.694	1	.000		
<i>Fisher’s Exact Test</i>				.000	.000
<i>Linear-by-Linear Association</i>	38.228	1	.000		
<i>N of Valid Cases</i>	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28.80.

b. Computed only for a 2x2 table.

The value of Pearson Chi-Square is 38.438 with 1 df and the p-value is .000 ( $p < .01$ ), therefore  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a very significant association between these two variables.

Tab. 5.36 - *Symmetric Measures: role and use of data*

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.458	.000
	Cramer's V	.458	.000
N of Valid Cases		183	

In this case, being a 2x2 table, it is necessary to observe the Phi correlation (Table 5.36). The value of this index is -.458, and it indicates a strong negative association. In Table 5.37, the results of the hypotheses of association are summarized.

Tab. 5.37 - *Summary: hypotheses of association*

Variables	p-value	$H_0$ rejected $H_1$ accepted	$H_0$ accepted $H_1$ rejected	Phi
size company website adoption	.498		√	
role company website adoption	.177		√	
size company website management	.004	√		pos.
role company website management	.080	√		neg.
size social media profile adoption	.000	√		neg.
role social media profile adoption	.026	√		pos.
size social media profile management	.000	√		neg.
role social media profile management	.456		√	
size data analysis	.003	√		pos.
role data analysis	.000	√		neg.
size use of data	.009	√		pos.
role use of data	.000	√		neg.

## 5.5 Factor analysis and regression analysis

As seen in the previous paragraph, the bivariate analysis shows an association between the majority of the proposed variables. In this sense, although falling outside the proposed Research Question, it is interesting to verify through a regression analysis whether the variable “Acquisition of new foreign customers” (through the Internet) is influenced (or not) by the independent variables mentioned above.

Before performing the regression analysis, it is necessary to perform factor analysis.

Factor analysis is a statistical method that is used to reduce a large number of similar variables into fewer factors. This method extracts maximum common variance from all variables and puts them into a common score. Factor analysis is part of general linear model (GLM) and this method also assumes several assumptions: there is linear relationship, there is no multicollinearity, it includes relevant variables into analysis, and there is true correlation between variables and factors (Gorsuch, 1983).

Several methods are available, but Principal Component Analysis (PCA) is used most commonly.

When data are categorical, different techniques can be used: Multiple Correspondence Analysis (MCA), Categorical Principal Component Analysis (CATPCA) or Principal Component Analysis (PCA).

In this case, as all variables are dichotomous, the result of MCA and CATPCA is equal to the result of standard PCA (Linting and Van der Kooij, 2012). In fact, a line fitted on two points will always be a straight line, so the transformations are linear, no matter the scaling level. Thus, in SPSS using factor of CATPCA they will give the same results.

After having performed and verified the equal results of the 3 techniques, it was decided to illustrate PCA in this Thesis.

### 5.5.1 Principal Component Analysis

Principal Component Analysis consists in the calculation of  $p$  linear combinations (components) of the  $m$  analyzed variables, able to synthesise these latter in an efficient way ( $p < m$ , minimizing information loss). Moreover:

- it analyzes the total variance of the observed variables;
- it is based on an algebraic procedure applied on the correlation matrix, aimed at the identification of eigenvalues and eigenvectors;
- it does not require assumptions on the distribution of variables;
- main objective: data reduction.

The PCA is expressed in the matrix formula as follows:

$$C = WX$$
$$\begin{pmatrix} c_1 \\ c_2 \\ \dots \\ c_p \end{pmatrix} = \begin{pmatrix} w_{11} & w_{12} & \dots & \dots & w_{1m} \\ w_{21} & w_{22} & \dots & \dots & \dots \\ \dots & \dots & \dots & \dots & \dots \\ w_{p1} & \dots & \dots & \dots & w_{pm} \end{pmatrix} \begin{pmatrix} x_1 \\ x_2 \\ \dots \\ x_m \end{pmatrix}$$

and the factor loadings calculation method derives from the decomposition of the correlation matrix through the eigenvector-eigenvalue procedure.

The Principal Component Analysis is presented below.

#### *a) KMO and Bartlett's Test*

The KMO (or MSA - Measure Sampling Adequacy) measures the sampling adequacy, determining if the responses given with the sample are adequate or not.

The KMO formula is:

$$KMO (MSA) = \frac{\sum_{j \neq k} r_{jk}^2}{\sum_{j \neq k} r_{jk}^2 + \sum_{j \neq k} q_{jk}^2}$$

where:

$r_{jk}$  = represents the elements out of the diagonal in the correlation matrix

$q_{jk}$  = represents the elements outside the diagonal in the anti-image correlation matrix (errors)

KMO should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommend 0.5 (value for KMO) as minimum acceptable, values between 0.7 - 0.8 acceptable, and values above 0.9 are superb.

Looking at the Table 5.38, the KMO measure is .528, therefore can be accepted.

Tab. 5.38 - *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.528
Bartlett's Test of Sphericity	Approx. Chi-Square	496.392
	df	15
	Sig.	.000

Bartlett's test is another indication of the strength of the relationship among variables.

$$Bartlett's Test of Sphericity = - \left[ (N - 1) - \frac{(2m + 5)}{6} \right] \times \ln|R| \approx \chi_{df}^2 = \frac{(m^2 - m)}{2}$$

where:

$m$  = is the number of variables involved in the correlation matrix R

$\ln |R|$  = is the natural logarithm of the determinant R

This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and all off diagonal elements are close to 0. We want to reject the null hypothesis:

$H_0$  = correlation matrix is not an identity matrix  $\Rightarrow$  at least one correlation  $\neq 0$

$H_1$  = correlation matrix is an identity matrix  $\Rightarrow$  all correlations = 0

If Bartlett's test  $> \chi^2_{df}$  (p-value  $< .05$ ) null hypothesis is reject.

From the same table (Table 5.38), the Bartlett's Test of Sphericity is significant (.000) and  $H_1$  is accepted. This means that correlation matrix is not an identity matrix.

These two tests provide the minimum standard which should be passed before a Principal Components Analysis should be conducted. Thus, in this case, the PCA can be conducted.

#### b) Communalities

The table of communalities (Table 5.39) shows how much of the variance in the variables has been accounted for by the extracted components. In other words, this is the proportion of each variable's variance that can be explained by the principal components.

The communality value should be more than 0.4 to be considered.

Tab. 5.39 - *Communalities*

	Initial	Extraction
Website Adoption	1.000	.756
Website Management	1.000	.442
Social Media Adoption	1.000	.830
Social Media Management	1.000	.859
Data Analysis	1.000	.931
Use of data in internationalization strategies	1.000	.940
<i>Extraction Method: Principal Component Analysis</i>		

Table 5.39 shows initial values and extraction values.

By definition, the initial value of the communality in a Principal Components Analysis is 1.

Regarding the extraction values, the table shows that over 90% of the variance in “Data Analysis” (93.1%) and “Use of data in internationalization strategies” (94%) is explained. These are followed by “Social Media Management” (85.9%), “Social Media Adoption” (83%), “Website Adoption” (75.6%), and “Website Management” (44.2%).

### *c) Total Variance Explained*

The Table 5.40 “Total Variance Explained” is divided into three sub-sections: Initial Eigenvalues, Extracted Sums of Squared Loadings and Rotation of Sums of Squared Loadings.

For analysis and interpretation purpose we are only concerned with Extracted Sums of Squared Loadings.

In the column “Component” there are as many components extracted during a principal components analysis as there are variables that are put into.

In the column “Initial Eigenvalues” there are the eigenvalues, that are the variances of the principal components. Because we conducted our principal components analysis on the correlation matrix, the variables are standardized, which means that the each variable has a variance of 1, and the total variance is equal to the number of variables used in the analysis. In this case, 6.

The column “Total” contains the eigenvalues. The eigenvalues are calculated for each component and show the variance explained. The sum of the eigenvalues equals the number of observed variables:

$$\sum_i \lambda_i = \# m$$

The eigenvalue of the  $j$  component divided by the sum of the eigenvalues indicates the proportion of variance explained by the component  $j$ :

$$\frac{\lambda_j}{\sum_i \lambda_i} = \text{proportion of variance explained by the component } j$$

The column “% of Variance” contains the percent of variance accounted for by each principal component. While, the column “Cumulative %” contains the cumulative percentage of variance accounted for by the current and all preceding principal components.

As mentioned above, we concerned in column “Extraction Sums of Squared Loadings”. The three columns of this half of the table exactly reproduce the values given on the same row on the left side of the table. The number of rows reproduced on the right side of the table is determined by the number of principal components whose eigenvalues are 1 or greater (Kaiser’s rule criterion: to drop all components with eigenvalues under 1.0 – this being the eigenvalue equal to the information accounted for by an average single item).

In Table 5.40, one should note that the first component accounts for 36.949% of the variance, the second 25.062% and the third 17.296%.

In other words, the first three components explain 79.307% of the total variance.

All remaining components are not significant.

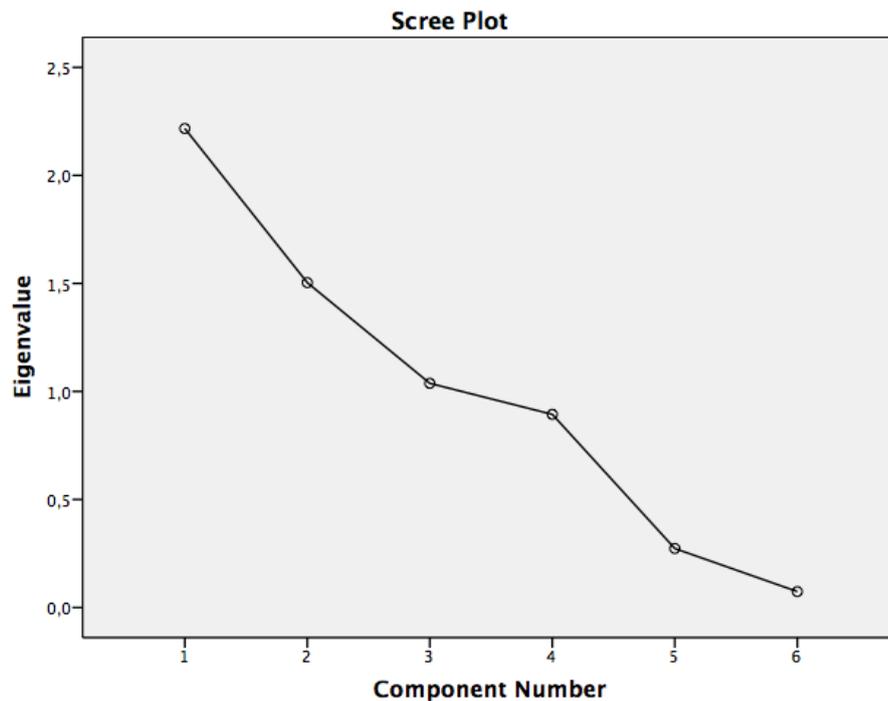
Tab. 5.40 - Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.217	36.949	36.949	2.217	36.949	36.949	1.971	32.852	35.852
2	1.504	25.062	62.011	1.504	25.062	62.011	1.736	28.927	61.780
3	1.038	17.296	79.307	1.038	17.296	79.307	1.052	17.528	79.307
4	.894	14.901	94.209						
5	.273	4.557	98.766						
6	.074	1.234	100.000						
Extraction Method: Principal Component Analysis									

d) *Scree Plot*

The scree plot (Figure 5.6) graphs the eigenvalue against the component number. The graph is useful for determining how many components to retain.

Fig. 5.6 - *Scree Plot*



The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between components 3 and 4, meaning the each successive component is accounting for smaller and smaller amounts of the total variance.

As explained above, in general we are interested in keeping only those principal components whose eigenvalues are greater than 1. Components with an eigenvalue of less than 1 account for less variance than did the original variable (which had a variance of 1), and so are of little use. Hence, one can see that the point of Principal Components Analysis is to redistribute the variance in

the correlation matrix (using the method of eigenvalue decomposition) to redistribute the variance to first components extracted.

Thus, noting also that from the fourth component on, the eigenvalues are of less than 1, only three components have been retained.

*e) Component Matrix*

Table 5.41 contains component loadings, which are the correlations between the variable and the component.

Because these are correlations, possible values range from -1 to +1.

On the /format subcommand, we used the option blank(.30), which tells SPSS not to print any of the correlations that are .3 or less.

This makes the output easier to read by removing the clutter of low correlations that are probably not meaningful anyway.

Tab. 5.41 - *Component Matrix*

	Component <sup>a</sup>		
	1	2	3
Use of data in internationalization strategies	.857	.447	
Data Analysis	.848	.455	
Social Media Adoption	-.656	.628	
Social Media Management	-.559	.739	
Website Adoption			.866
Website Management		.390	-.518
<i>Extraction Method: Principal Component Analysis</i>			
<sup>a</sup> 3 components extracted.			

*f) Rotated Component Matrix*

The idea of rotation is to reduce the number of components on which the variables under investigation have high loadings.

Rotation does not actually change anything but makes the interpretation of the analysis easier.

Tab. 5.42 - *Rotated Component Matrix*

	Component <sup>a</sup>		
	1	2	3
Use of data in internationalization strategies	.962		
Data Analysis	.958		
Social Media Adoption		.925	
Social Media Management		.894	
Website Adoption			.845
Website Management			-.577
<i>Extraction Method: Principal Component Analysis</i> <i>Rotation Method: Varimax with Kaiser Normalization.</i> <sup>a</sup> <i>Rotation converged in 4 iterations.</i>			

Looking at the Table 5.42, it can see that “Use of data in internationalization strategies” and “Data Analysis” are loaded on Component 1. They compose a new variable that will be named “Data Management”.

The variables “Social Media Adoption” and “Social Media Management” are loaded on Component 2. The new variable will be named "Social Media Profile Usage".

While the variables “Website Adoption” and “Website Management” are loaded on Component 3, and they compose the new variable called “Company Website Usage”.

Lastly, in Table 5.43, the original component loadings are transformed to the rotated loadings by postmultiplying the matrix of original loadings by the transformation matrix.

Tab. 5.43 - Component Transformation Matrix

Component	1	2	3
1	.816	-.574	-.059
2	.562	.814	-.144
3	.131	.085	.988
<i>Extraction Method: Principal Component Analysis</i>			
<i>Rotation Method: Varimax with Kaiser Normalization.</i>			

The values in the transformation matrix are functions of the angle of rotation of the components.

Now, these components can be used as new variables in regression analysis.

### 5.5.2 Logistic Regression

Logistic regression is the appropriate regression analysis to be conducted when the dependent variable is dichotomous. In this case, the dependent variable to investigate is "Acquisition of new foreign customers" (yes/no).

Logistic regression is a predictive analysis and it is used to describe data and to explain the relationship between a dependent binary variable and one or more independent variables (nominal, ordinal, interval, or ratio).

The purpose of logistic regression analysis is to estimate the log probabilities of an event. In mathematical terms, logistic regression estimates a multiple linear regression function defined as:

$$= \log \left( \frac{p(y = 1)}{1 - (p = 1)} \right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_p x_m$$

In Table 5.44 (Block 0) and in Table 5.45 (Block 1) the output of the logistic regression analysis, performed with SPSS, is illustrated.

Tab. 5.44 - Logistic regression. Block 0 : Beginning Block

Classification Table<sup>a,b</sup>

Observed			Predicted		
			Acquisition of new foreign customers		Percentage Correct
			yes	no	
Step 0	Acquisition of new foreign customers	yes	126	0	100.0
		no	57	0	.0
Overall Percentage					68.9

a. Constant is included in the Model

b. The cut value is .700

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.793	.160	24.694	1	.000	.452

Variables not in Equation

			Score	df	Sig.
Step 0	Variables	DataManagement	.002	1	.967
		SocialMediaUsage	.117	1	.732
		WebsiteUsage	.161	1	.688
Overall Statistics			.280	3	.964

The *Block 0* output is for a model that includes only the intercept (which SPSS calls the constant). Given the base rates of the two options (126/183 = 68.9% acquired new foreign customers, 31.1% did not acquire new foreign customers), and no other information, the best strategy is to predict, for every case, that the subject will acquire new foreign customers. Using that strategy, the result would be correct 68.9% of the time.

The *Variables in the Equation* shows that the intercept-only model is  $\ln(\text{odds}) = -.793$ . If we exponentiate both sides of this expression we find that our predicted odds  $[\text{Exp}(B)] = .452$ . That is, the predicted odds of not acquiring new

foreign customers is .452. Since 57 of our subjects have not acquire new foreign customers and 126 have acquired, our observed odds are  $57/126 = .452$ .

The addition of explanatory variables could increase the percentage of correct classification significantly.

Tab. 5.45 - *Logistic regression. Block 1 : Method = Enter*

Omnibus Test of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.277	3	.964
	Block	.277	3	.964
	Model	.277	3	.964

Model Summary

Step	-2 Log likelihood	Cox and Snell R square	Nagelkerke R square
1	226.744 <sup>a</sup>	.002	.002

<sup>a</sup>Estimation terminated at iteration number 3 because parameter estimates changed by less than .001

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	8.364	6	.213

Contingency Table for Hosmer and Lemeshow Test

		Acquisition of new foreign customers = yes		Acquisition of new foreign customers = no		Total
		Observed	Expected	Observed	Expected	
Step 1	1	8	5.726	0	2.274	8
	2	22	20.577	7	8.423	29
	3	15	14.745	6	6.255	21
	4	8	9.023	5	3.977	13
	5	26	31.410	20	14.590	46
	6	4	3.412	1	1.588	5
	7	35	34.772	16	16.228	51
	8	8	6.337	2	3.663	10

Classification Table<sup>a</sup>

Observed			Predicted		
			Acquisition of new foreign customers		Percentage Correct
			yes	no	
Step 1	Acquisition of new foreign customers	yes	126	0	100.0
		no	57	0	.0
Overall Percentage					68.9

a. The cut value is .700

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	DataManagement	.007	.160	.002	1	.964	1.007
	SocialMediaUsage	-.055	.162	.115	1	.734	.947
	WebsiteUsage	-.063	.157	.159	1	.690	.939
	Constant	-.795	.160	24.714	1	.000	.452

a. Variable(s) entered on the step 1: DataManagement, SocialMediaUsage, WebsiteUsage

Block 1 shows the results after the addition of the explanatory variables selected.

In the SPSS software, the variables “DataManagement”, “SocialMediaUsage” and “WebSiteUsage” have been added as predictors.

The *Omnibus Tests of Model Coefficients* table gives the result of the Likelihood Ratio (LR) test which indicates whether the inclusion of this block of variables contributes significantly to model fit. A p-value (Sig.) of less than 0.05 for block means that the Block 1 model is a significant improvement to the Block 0 model. A p-value (Sig.) of more than 0.05 for block means that the Block 1 model is not a significant improvement to the Block 0.

In this case, the Chi-square is .277 on 3 df, and p-value is .964 ( $p > 0.05$ ), therefore the Block 1 model is not a significant improvement to the Block 0.

Moreover, while in standard regression the coefficient of determination ( $R^2$ ) value gives an indication of how much variation in  $y$  is explained by the model, this cannot be calculated for logistic regression. However, the *Model*

*Summary* table gives the values for two pseudo  $R^2$  values which try to measure something similar: Cox & Snell  $R^2$  and Nagelkerke  $R^2$ . From the table above, we can conclude that only 0.002 of the variation in survival can be explained by the model in Block 1. This result confirms that there is not a significant improvement to the Block 0.

For this reason, therefore, it seems useless to comment beyond the remaining results. The independent variables considered do not affect the dependent variable.

## 5.6 Latent Class Analysis

Following the statistical analyzes illustrated up to now, it is now interesting to identify, within the sample interviewed, groups of companies whose “strategic behavior” makes them homogeneous within them and heterogeneous among themselves, based on the variables illustrated above.

Latent class analysis (LCA) is a multivariate technique that can be applied for this cluster purpose.

LCA is a framework based on notions of probability and on the Bayes’ theorem, and allows the study of associations between subjects and variables of different nature (qualitative and quantitative).

Using the LCA it is possible to identify latent classes with respect to the variables of interest. Each of the classes will follow a distribution described by specific parameters (mixture of distributions).

Given a series of alternatives  $A_1, A_2, \dots, A_n$ , Bayes’ theorem calls  $p(A_1|B)$  the conditional probability of  $A_1$  occurring given that B occurs and compute it using the formula:

$$p(A_1|B) = \frac{p(B|A_1)p(A_1)}{p(B)} = \frac{p(B|A_1)p(A_1)}{\sum_{i=1}^n p(B|A_i)p(A_i)}$$

In the Latent Class Analysis, applying the Bayes' rule, the posterior probability of belonging to a latent class is estimated for each observation:

$$p(i \in s) = \frac{\pi_s f_s(y_i | \theta_s)}{\sum_s \pi_s f_s(y_i | \theta_s)} \quad \text{with} \quad \sum_s \pi_s = 1 \quad \pi_s \geq 0$$

Therefore, each observation can be classified in the latent class with respect to which it will show the highest probability of belonging, given the values of the grouping variables.

The model admits a certain degree of uncertainty, expressed by the probability values for each observation of belonging to the other latent classes.

The parameters are estimated, for each class, through Maximum Likelihood (ML) algorithms, and through iterative procedures (EM, Newton-Raphson). The iterative procedures (EM, Newton-Raphson) applied in the estimation process look for the set of parameters that maximizes the log-likelihood function:

$$L(\theta; y) = \prod f(y_i | \theta)$$

$$LL(\theta; y) = \sum_i \ln(f(y_i | \theta))$$

Each model with  $n$  latent classes offers the classification information of the observations.

*Standard classification:*

*"Profile"*: average values (for continuous variables) or percentages (for nominal variables) of each indicator in each latent class;

*"ProbMeans"*: the probabilities that subjects that show certain values of the indicators belong to the various latent classes.

Furthermore, each model with  $n$  latent classes can be evaluated with respect to the information criteria (the lower the better):

- AIC =  $-2LL + 2k$
- BIC =  $-2LL + \ln(N)k$

- $CAIC = -2LL + (\ln(N) + 1)k$
- $AIC3 = -2LL + 3k$

The most common are BIC and CAIC. Between these two, researchers generally prefer BIC as it is the fairest model.

Using LatentGold software, the variables “Role” (ROLE), “Size” (SIZE), “Website Management” (WS\_M), “Social Media Management” (SM\_M), “Data Analysis” (ANALYSIS), “Use of the data in internationalization strategies” (USE\_DATA), and “Acquisition of new foreign customers” (NFC), were selected, and four LC cluster models were estimated (Tab. 5.46).

Tab. 5.46 - Model fit based on BIC and CAIC

Model	#Cluster	Log Likelihood	Number of parameters	BIC	CAIC
Model 1	2-Cluster	-616.4996	15	1311.1415	1326.1415
Model 2	3-Cluster	-582.2027	23	1284.2236	1307.2236
Model 3	4-Cluster	-566.8463	31	1295.1866	1326.1866
Model 4	5-Cluster	-555.351	39	1313.8721	1352.8721

One of the criteria for determining the number of clusters is to observe the values in the “log-likelihood”, “BIC” and “CAIC” columns.

The model with the highest log-likelihood value, and the lowest BIC and CAIC values, should be selected.

Using these criteria, the best model is given by Model 2, the 3-Cluster model (LL = -582.2027; BIC = 1284.2236; CAIC = 1307.2236).

Tables 5.47 and 5.48 show the parameters output of Latent GOLD®. The first one, shows the Wald Test; the second one shows the Z-Statistic.

Tab. 5.47 - Models for indicators: Wald Test

	Cluster1	Cluster2	Cluster3	Wald	p-value	R <sup>2</sup>
<b>ROLE</b>						
subcontractor	0.8360	-0.2789	-0.5571	31.7814	1.30E-07	0.2288
manufacturer	-0.8360	0.2789	0.5571			
<b>SIZE</b>						
medium	0.0785	-2.2444	2.1659	6.4767	0.039	0.6066
small	-0.0785	2.2444	-2.1659			
<b>WS_M</b>						
internalized	-0.5637	-0.0752	0.6389	5.7838	0.055	0.0445
outsourced	0.5637	0.0752	-0.6389			
<b>SM_M</b>						
internalized	0.3006	0.8740	-1.1746	31.4694	1.50E-07	0.3627
outsourced	-0.3006	-0.8740	1.1746			
<b>ANALYSIS</b>						
yes	-3.0137	1.6134	1.4004	18.8732	8.00E-05	0.9273
no	3.0137	-1.6134	-1.4004			
<b>USE_DATA</b>						
yes	-3.0624	1.5202	1.5422	13.8597	0.00098	0.9032
no	3.0624	-1.5202	-1.5422			
<b>NFC</b>						
yes	0.0131	-0.2177	0.2045	3.3278	0.09	0.0207
no	-0.0131	0.2177	-0.2045			

The latent class measurement model shows Wald Test significant for ROLE, SIZE, WS\_M, SM\_M, ANALYSIS, USE\_DATA, and NFC ( $p < .05$ ). In particular, WS\_M and NFC with  $p < .10$ . Therefore, the values of the parameters are different from each other and it is possible to reject the null hypothesis.

With regard to R<sup>2</sup>, the results show values in some cases acceptable (R<sup>2</sup> ROLE = .2288; R<sup>2</sup> SIZE = .6066; R<sup>2</sup> SM\_M = .3627; R<sup>2</sup> ANALYSIS = .9273; R<sup>2</sup> USE\_DATA = .9032), but also less satisfactory evidence (R<sup>2</sup> WS\_M = .0445; R<sup>2</sup> NFC = .0207).

Tab. 5.48 - *Models for indicators: Z-Statistic*

	<b>Cluster1</b>	<b>z-value</b>	<b>Cluster2</b>	<b>z-value</b>	<b>Cluster3</b>	<b>z-value</b>
<b>ROLE</b>						
subcontractor	0.836	5.6013	-0.2789	-2.2401	-0.5571	-4.016
manufacturer	-0.836	-5.6013	0.2789	2.2401	0.5571	4.016
<b>SIZE</b>						
medium	0.0785	0.1241	-2.2444	-2.0068	2.1659	2.5395
small	-0.0785	-0.1241	2.2444	2.0068	-2.1659	-2.5395
<b>WS_M</b>						
internalized	-0.5637	-1.5442	-0.0752	-0.2433	0.6389	2.3922
outsourced	0.5637	1.5442	0.0752	0.2433	-0.6389	-2.3922
<b>SM_M</b>						
internalized	0.3006	1.8023	0.874	3.4585	-1.1746	-5.5051
outsourced	-0.3006	-1.8023	-0.874	-3.4585	1.1746	5.5051
<b>ANALYSIS</b>						
yes	-3.0137	-4.3428	1.6134	1.6087	1.4004	1.3963
no	3.0137	4.3428	-1.6134	-1.6087	-1.4004	-1.3963
<b>USE_DATA</b>						
yes	-3.0624	-3.7107	1.5202	3.0755	1.5422	2.8596
no	3.0624	3.7107	-1.5202	-3.0755	-1.5422	-2.8596
<b>NFC</b>						
yes	0.0131	1.9742	-0.2177	-2.7387	0.2045	1.9575
no	-0.0131	-1.9742	0.2177	2.7387	-0.2045	-1.9575

In Table 5.48 one can observe the Z-value for each parameter in each cluster. Z-statistic is significant when  $p > 1.96$  (in absolute value).

Furthermore, as mentioned above, Latent GOLD® shows two different outputs:

- the Profile output (indicates the percentages of each indicator in each latent class);
- the ProbMeans output (given a certain answer, it indicates the probability that a new interviewee belongs to a specific cluster, based on the answer the interviewee will give).

The Profile output allows to view the parameters re-expressed as conditional probabilities (Table 5.49).

Tab. 5.49 - Profile output

	<b>Cluster1</b>	<b>Cluster2</b>	<b>Cluster3</b>
<i>Cluster Size</i>	0.4414	0.3350	0.2236
<i>Indicators</i>			
<u>ROLE</u>			
subcontractor	0.9096	0.5197	0.3828
manufacturer	0.0904	0.4803	0.6172
<u>SIZE</u>			
medium	0.1912	0.0023	0.9389
small	0.8088	0.9977	0.0611
<u>WS_M</u>			
internalized	0.0124	0.0324	0.1225
outsourced	0.9876	0.9676	0.8775
<u>SM_M</u>			
internalized	0.7080	0.8842	0.1126
outsourced	0.2920	0.1158	0.8874
<u>ANALYSIS</u>			
yes	0.0380	0.9976	0.9963
no	0.9620	0.0024	0.0037
<u>USE_DATA</u>			
yes	0.0023	0.9561	0.9579
no	0.9977	0.0439	0.0421
<u>NFC</u>			
yes	0.7070	0.6033	0.7797
no	0.2930	0.3967	0.2203

Overall, Cluster 1 contains 44% of the cases, Cluster 2 contains 34% and the remaining 22% are in Cluster 3. The conditional probabilities show the differences in companies' behavior patterns that distinguish the clusters. For example, the companies belonging to Cluster 1 are small subcontractors, which outsource the management of the web site and manage the social media profile(s) in-house. These companies do not perform data analysis and do not use data in internationalization strategies. However, they acquire new foreign

customers thanks to the Internet. Cluster 2 is similar to Cluster 1. However, it also includes manufacturers and it is clearly differentiated in data analysis and their usage. Finally, Cluster 3 is characterized by manufacturers who manage the website and the social media profile in outsourcing. These companies perform data analysis and use data in internationalization strategies.

As mentioned above, the ProbMeans output re-expresses the parameters in terms of row percentages rather than column percentages (Table 5.50) and indicates the probabilities that a new respondent belongs to a specific cluster or not.

Tab. 5.50 - *ProbMeans output*

	<b>Cluster1</b>	<b>Cluster2</b>	<b>Cluster3</b>
<i>Overall Probability</i>	0.4414	0.3350	0.2236
<i>Indicators</i>			
<b>ROLE</b>			
subcontractor	0.6082	0.2631	0.1288
manufacturer	0.1163	0.4753	0.4084
<b>SIZE</b>			
medium	0.2849	0.0008	0.7143
small	0.5070	0.4753	0.0177
<b>WS_M</b>			
internalized	0.1241	0.2473	0.6287
outsourced	0.4559	0.3391	0.205
<b>SM_M</b>			
internalized	0.4935	0.4683	0.0382
outsourced	0.3513	0.1047	0.5440
<b>ANALYSIS</b>			
yes	0.0275	0.5833	0.3892
no	0.9998	0.0001	0.0001
<b>USE_DATA</b>			
yes	0.0001	0.5990	0.4010
no	0.9513	0.0300	0.0186
<b>NFC</b>			
yes	0.4533	0.2933	0.2534
no	0.4151	0.4272	0.1576

Finally, Latent GOLD® offers a Standard Classification output that shows the probabilities for each ID subject to belong to a specific cluster (see column “*Modal*” in Table 5.51).

Tab. 5.51 - Standard Classification output

<b>ROLE</b>	<b>SIZE</b>	<b>WS_M</b>	<b>SM_M</b>	<b>ANALYSIS</b>	<b>USE_DATA</b>	<b>NFC</b>	<b>Modal</b>	<b>Cluster1</b>	<b>Cluster2</b>	<b>Cluster3</b>
subcontractor	small	outsourced	internalized	yes	yes	yes	3	0.0002	0.0045	<b>0.9953</b>
subcontractor	small	outsourced	internalized	yes	yes	no	2	0.0001	<b>0.9980</b>	0.0019
subcontractor	small	outsourced	internalized	no	no	yes	1	<b>0.9999</b>	0.0001	0
manufacturer	small	outsourced	internalized	yes	yes	yes	3	0	0.0078	<b>0.9922</b>
manufacturer	medium	outsourced	outsourced	yes	yes	yes	3	0	0.0003	<b>0.9997</b>
manufacturer	medium	outsourced	outsourced	yes	yes	no	2	0	<b>0.9993</b>	0.0007
subcontractor	medium	outsourced	internalized	yes	no	yes	1	<b>0.8429</b>	0.0052	0.1519
subcontractor	medium	outsourced	outsourced	yes	yes	yes	3	0	0.0006	<b>0.9994</b>
subcontractor	small	internalized	internalized	yes	yes	yes	3	0.0001	0.0184	<b>0.9815</b>
subcontractor	small	outsourced	internalized	yes	no	yes	1	<b>0.6070</b>	0.3913	0.0017
subcontractor	small	outsourced	outsourced	yes	yes	yes	3	0.0004	0.2128	<b>0.7868</b>
manufacturer	medium	internalized	internalized	yes	yes	yes	3	0	0.0045	<b>0.9955</b>
manufacturer	medium	internalized	internalized	no	no	yes	1	<b>0.9953</b>	0	0.0047
manufacturer	medium	outsourced	internalized	no	no	yes	1	<b>0.9996</b>	0	0.0004
manufacturer	small	outsourced	internalized	yes	yes	no	2	0	<b>0.9966</b>	0.0034
manufacturer	small	outsourced	internalized	yes	no	yes	1	<b>0.8515</b>	0.1421	0.0064
manufacturer	small	outsourced	internalized	no	no	yes	1	<b>0.9994</b>	0.0006	0
manufacturer	small	outsourced	outsourced	yes	yes	yes	3	0	0.3205	<b>0.6795</b>
manufacturer	small	outsourced	outsourced	yes	yes	no	2	0	<b>0.8314</b>	0.1686
subcontractor	medium	internalized	outsourced	yes	yes	yes	3	0	0.0001	<b>0.9999</b>
subcontractor	medium	outsourced	outsourced	yes	yes	no	2	0	<b>0.9987</b>	0.0013

In conclusion, as shown by the results in the previous tables, it is possible identifies the following 3 clusters:

1) Cluster 1 - *“the lucky passive companies”*. These companies do not invest resources in managing the Internet. They do not analyze data and do not use them in internationalization strategies. However, these companies can be considered “lucky” because, despite adopting a passive behavior, they acquire new foreign customers thanks to the Internet.

2) Cluster 2 - *“the ineffective active companies”*. These companies invest resources in Internet management, perform data analysis and use data to define internationalization strategies. However, despite their active behavior, they do not acquire new foreign customers through the Internet. Therefore, all the efforts put in place by the companies are useless because they are ineffective.

3) Cluster 3 - *“the good active companies”*. These companies invest resources in managing the Internet. They perform data analysis and use data with awareness in order to improve internationalization strategies. Their good active behavior is rewarded by the acquisition of new foreign customers through the Internet.

## **5.7 Summary**

Chapter Five described and discussed the results of the second phase of this Thesis. To test and generalize the results obtained in the first exploratory research (see qualitative research in Chapter Four) a quantitative survey was conducted and statistical analyzes were performed.

## CHAPTER 6

### Conclusions, implications, limits and future research

#### 6.1 Introduction

As mentioned in Chapter One, the purpose of this Thesis is to obtain a better understanding of the process of Internationalization of Small and Medium-Sized Enterprises (SMEs) following globalization and the advent of the Internet.

Chapter Two focused on the development of the Theories related to the process of internationalization of SMEs from the 60s to the present. In particular, the recent literature highlighted the importance of the Internet in the process of internationalization of SMEs but, given the constant and rapid evolution of the phenomenon, it is still lacking in some perspectives.

The lack in the recent literature gave rise to the Research Question “Is the Internet a Key Tool in the Process of Internationalization of SMEs to Acquire New Foreign Customers?”. To answer this question, after illustrating the research methodology in Chapter Three, an empirical research divided into two phases was presented in Chapter Four and Chapter Five.

In particular, Chapter Four initially offered an overview of the Italian furniture sector and the furniture district of Pesaro, and presented the findings of the qualitative research phase, obtained thanks to six company case studies. In order to test the results obtained extending them to a significantly representative sample of SMEs, this section allowed to produce a basis to realize a questionnaire for the quantitative research phase, illustrated in Chapter Five.

In more detail, Chapter Five presented a description of the sample profile and statistical analyzes such as frequency distribution, bivariate analysis, factor analysis and regression analysis, and latent class analysis.

Finally, this Chapter presents the key conclusions of the research providing a summary of the findings of the two research phases, the implications for practitioners, followed by the limits of this Thesis that provide some suggestions for future researches.

## **6.2 Conclusions of the research phases**

This Thesis adopted a mixed method approach, that is the combination of qualitative and quantitative research.

In the first research phase, an interpretivist approach was adopted, in which qualitative data were collected from six case studies. The results obtained in this explorative research phase permitted to produce a basis to realize a questionnaire for the quantitative research phase.

In the second research phase, a positivist approach was adopted, in which the previous results were tested empirically. The survey was conducted using a sample of SMEs belonging to the furniture district of Pesaro, with a response rate of 18.64% (183 companies).

From the six in-depth interviews carried out during the first phase, some crucial factors (variables) regarding the process of Internetization of SMEs emerged:

1. mode of adoption of the company website;
2. mode of adoption of the social media profile;
3. mode of management of the company website;
4. mode of management of the social media profile;
5. Internet data analysis;
6. use of data in internationalization strategies.

*Mode of adoption (1 and 2)*: in this first research phase, the statements of the interviewees highlight that the decision to adopt the companies website and the social media profile(s) has mainly depended on globalization. In fact, following the American wave that had experienced the phenomenon a few years

earlier than Italy, the Internet adoption in the companies was an imperative to survive in the global market. Moreover, the static or dynamic nature of the company website and the characteristics of social media profile, as well as the mode of adoption these tools, were due to the size of the companies, their role within the district and the mentality of entrepreneurs.

However, analyzing in more detail, almost the whole of the sample has entrusted the service externally due to the complexity of the creation of the website, whereas few companies that had qualified employees able to create a basic website, implemented the website independently. On the contrary, companies that believe that creating a new social media profile is too easy to entrust this task to a communications agency have internalized the service. While, companies that had a strong previous relationship with a service provider, preferred to outsource the creation of the social media profile.

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*Mode of management (3 and 4):* among the companies that have internalized the management of the website, those of medium-sized stated they have preferred to manage the website through their employees with computer skills because, compared to external service providers, they know better the characteristics of the company. In contrast, small-sized companies stated that they do not want to invest in outsourcing because their target is the B2B market, so the skills of their employees are sufficient.

On the other hand, with regard to the companies that have chosen to manage the website in outsourcing, most of them stated they preferred the professionalism of a communication agency, while still maintaining a constant dialogue and discussion with employees.

A minor part, mainly found among small manufacturers and subcontractors, affirmed that the relationship with the communication agency is sporadic, the minimum necessary in order to keep website management costs low.

Regarding the management of social media profiles, the three medium-sized companies prefer to maintain the relationship with the service provider. In contrast, the three small companies prefer to manage the profiles internally. However, the motivations of this choice are very different depending on the role played by the firm. In fact, among the companies that choose to manage social profiles internally, the management of the manufacturer invests in a training course for its employees, while the two subcontractors firms owe their success in acquisition of new customers through social profiles to the resourcefulness of its employees.

Totally different are the motivations of companies that choose to entrust management to the communication agency. These, in fact, believe that social profiles should not be limited to being a mere showcase but an instrument in which to invest. Therefore, they strongly believe in the social media tool and attach great value to the know-how and professionalism of the service provider. However, the communication agency is not left to itself but is continually supported in communication strategies by firms' workers, and by their in-depth knowledge of the company and its products. Therefore, the two parties constantly collaborate with each other with the aim of defining the best strategy to acquire new customers.

Internet data analysis and use of data in internationalization strategies (5 and 6): all manufacturers claim to analyze the data emerging from their website and social media profiles, and in particular the tastes and needs of consumers. Furthermore, they state that the Internet facilitates the study and imitation of the strategies of their market-leading competitors.

Subsequently, the results that emerge from the analysis of the Internet tools, are used by these companies in their internationalization strategies. Obviously, where the management is entrusted to the communication agency, the analysis is carried out jointly by the two parties.

As for subcontractors, however, the company size - and everything related to it - greatly influences the decision to analyze or not the data deriving from the website and social media profiles. In fact, the small subcontractors are not interested in data analysis or their use in internationalization strategies because they consider the website and social media just a showcase. Instead, the medium-sized subcontractor, which strongly believes in these tools to acquire new customers in foreign markets, analyzes the data both internally and together with the communication agency. The aim is to use them in its new internationalization strategies, both to consolidate the foreign markets in which the company is already present, and to enter a specific new market.

At the end of the interviews, all six companies declared to have acquired new foreign customers thanks to the website and to the social media profiles. Surprisingly, this is true both for companies that believe in these tools, investing more and interacting with communication professionals, and for companies that have chosen to adopt these tools only as a showcase. However, in the first case, the Internet can be defined as a real tool that becomes part of the internationalization strategies. In the second case, instead, internationalization through the Internet is mostly occasional.

In conclusion, therefore, the role that the company plays in the market (manufacturer or subcontractor) as well as the business size (small or medium) seem to influence strongly in considering or not the Internet as a tool in the SMEs' internationalization strategies. However, the results show that the Internet is a key tool in the process of internationalization of SMEs to acquire new foreign customers.

In the second research phase, the frequency distribution analysis confirmed the results of qualitative research. Furthermore, based on these findings, a relationship between the considered variables seemed to exist. For this reason, the bivariate analysis was performed.

The bivariate analysis showed an association between the majority of the proposed variables. In this sense, although falling outside the proposed Research Question, it was interesting to verify through a regression analysis whether the variable “Acquisition of new foreign customers” (through the Internet) was influenced (or not) by the independent variables mentioned above.

Before performing the regression analysis, it was necessary to perform factor analysis (Principal Component Analysis - PCA) to eliminate the correlation between variables. PCA results showed a reduction of the number of variables from six to three:

1. Data Management;
2. Social Media Profile Usage;
3. Company Website Usage.

Since the dependent variable was dichotomous (“Acquisition of new foreign customer” - yes/no), a logistic regression was the appropriate regression analysis to be conducted. The result indicated that the independent variables considered did not affect the dependent variable. Therefore, even logistic regression showed that the Internet is a key tool in the process of internationalization of SMEs because it allows to acquire new foreign customers regardless of investment efforts.

Following the statistical analyzes performed, it was interesting to identify through the latent class analysis (LCA), within the sample interviewed, groups of companies whose “strategic behavior” made them homogeneous within them and heterogeneous among themselves, based on the variables illustrated above.

LCA results identified 3 clusters:

1) Cluster 1 - *“the lucky passive companies”*. These companies do not invest resources in managing the Internet. They do not analyze data and do not use them in internationalization strategies. However, these companies can be considered “lucky” because, despite adopting a passive behavior, they acquire new foreign customers thanks to the Internet.

2) Cluster 2 - *“the ineffective active companies”*. These companies invest resources in Internet management, perform data analysis and use data to define internationalization strategies. However, despite their active behavior, they do not acquire new foreign customers through the Internet. Therefore, all the efforts put in place by the companies are useless because they are ineffective.

3) Cluster 3 - *“the good active companies”*. These companies invest resources in managing the Internet. They perform data analysis and use data with awareness in order to improve internationalization strategies. Their good active behavior is rewarded by the acquisition of new foreign customers through the Internet.

### **6.3 Implications for management**

The findings of this research shows that the Internet is a key tool in the process of internationalization of SMEs because allow them to acquire new foreign customers (about 70% of respondents).

However, despite the widespread use of the Internet, many SMEs still today do not use the website and the social media profile to internationalize.

In an increasingly global competitive environment it is essential that these companies embark on a “internetization path” to survive both in domestic and in foreign markets.

Furthermore, the clusters identified by the latent class analysis, suggest some implications: on one hand, the “lucky passive companies” should pay more attention to their strategic decisions as their “luck” could end and they could be push out of the market by competition. Furthermore, if these companies engage

actively, they could increase their competitive advantage with minimal effort. On the other hand, the “ineffective active companies” should frequently monitor their goals and results and identify errors in the strategies adopted. In fact, if as shown, some companies succeed in obtaining positive results even if they behave passively, the active companies should obtain better results than the passive ones. Thus, these companies need to review their strategies with a view of optimization and improvement.

#### **6.4 Limits and future research**

This Thesis has some limits that provide some suggestions for future research.

The first limit of this research is that the sample’s SMEs are located in a specific Italian geographical area, represented by the municipalities belonging to the furniture district of Pesaro. Future researches might test these results in other areas and in other countries.

The second limit concerns the selection of a specific sector. Future studies could investigate the same aspects of this research in other industrial sectors in order to extend the theoretical generalisability of these results.

The third limit relates the term “Internet”, which is here understood as the set of website and social media profile. This meaning, little used in the existing literature that mainly tends to separate the study related to the website from the one related to social media, has been strongly wanted because, as has been shown, both tools represent a possibility for SMEs to acquire new foreign customers. However, given the different characteristics of the two instruments, both in the academic world and in the business world there is still no perception of how much the two instruments share the final result of acquiring new foreign customers.

Inevitably, however, investigating two instruments that have very broad characteristics means sacrificing some aspects of one and the other. In fact, as is

known, in order to obtain the largest possible number of answers, the questionnaire must be structured in a simple and rapid way to complete. Therefore, this translates into a difficult choice regarding the most interesting aspects to be investigated and the selection of the number of questions.

Finally, the results obtained from this research suggest a further new space for future research. Following the identification of the three clusters (“the lucky passive companies”, “the ineffective active companies” and “the good active companies”), it would be interesting to quantify the relationship between the investment efforts and the return in terms of the number of customers and/or turnover.

## REFERENCES

- Acs, Z.J., Yeung, B., (1999). Entrepreneurial discovery and the global economy. *Glob Focus*, 11(3), 63-71.
- Alreck, P.B., Settle, R.B., (1995). *The Survey Research Handbook*. Chicago: Richard D. Irwin.
- Andersen, O., (1993). On the internationalization process of the firm: A critical analysis, *Journal of International Business Studies*, 24, 209-231.
- Anderson, C., (2010). Presenting and Evaluating Qualitative Research. *American Journal of Pharmaceutical Education*, 74(8), 141.
- Angioni, M., Musso, F., (2018). Website Adoption for Agritourism Companies. Key Features and Perceptions of Customers. *International Journal of Applied Behavioral Economics (IJABE)*, 7(4), 54-69.
- Babbie, E.R., (2010). *The Practice of Social Research*. 12th ed. Belmont, CA: Wadsworth Cengage.
- Barnes, D., Clear, F., Harindranath, G., Dyerson, R., Harris, L., Rea, A. (2012). Web 2.0 and micro-businesses: an exploratory investigation. *Journal of Small Business and Enterprise Development*, 19(4), 687-711.
- Bartlett, C.A., Ghoshal, S., (1989). *Managing across borders: the transnational solution*. Harvard Business School Press, Boston.
- Bartlett, M.S., (1954). A note on multiplying factors for various chi-squared approximations. *Journal of the Royal Statistical Society, Series B* 16, 296–298.

- Beamish, P.W., (1990). The internationalisation process for smaller Ontario firms: a research agenda, in *Research in global strategic management - International Business Research for the twenty-first century*, A. Rugman, Ed. Greenwich: JAI Press.
- Becattini, G., (1989). Riflessioni sul distretto industriale marshalliano come concetto socio- economico. *Stato e mercato*, 25.
- Becattini, G., Rullani, E., (1993). Sistema locale e mercato globale, Milano, Bocconi University, 12-13 november.
- Benbasat, I., Goldstein, D.K., Mead, M., (1987). The case research strategy in studies of information systems. *MIS quarterly*, 11 (3), 369-86.
- Bilkey, W.J., Tesar, G., (1977). The export behaviour of smaller Wisconsin manufacturing firms. *Journal of International Business Studies*, 9 (Spring/Summer), 93-98.
- Blumer, H., (1969). *Symbolic Interactionism. Perspective and Method*. Englewood Cliffs, Prentice Hall.
- Bordonaba-Juste, V., Lucia-Palacios, L., Polo-Redondo, Y., (2012). The influence of organizational factors on e-business use: analysis of firm size. *Marketing Intelligence & Planning*, 30(2), 212-229.
- Buckley P.J., Casson M.C., (1976). *The future of multinational enterprises*, London, Macmillan.
- Calof, J.L., Beamish, P.W., (1995). Adapting to Foreign Markets: Explaining Internationalization. *International Business Review*, 4(2), 115- 31.
- Cavusgil, S.T., (1980). On the internationalization of firms. *Eur Res*, 8, 272-281.

- Cavusgil, S.T., (1994). A quiet revolution in Australian exporters, *Marketing News*, 28(11), 18-21.
- Chiarvesio, M., Di Maria, E., Grandinetti, R., (2005). *Le ICT a supporto dell'innovazione aziendale. Filiere e distretti industriali nella provincia di Pordenone*, Milano, FrancoAngeli.
- Chong, S., Pervan, G., (2007). Factors influencing the extent of deployment of electronic commerce for small and medium-sized enterprises. *Journal of Electronic Commerce in Organizations*, 5(1), 1-29.
- Conti, G., Menghinello, S., (2003). Sistemi di piccola impresa e esportazioni: i fattori di competitività dell'industria italiana, in Garofoli G.. *Impresa e territorio* Eds, Bologna, Il Mulino.
- Corbetta, P., (2014). *Metodologie e tecniche della ricerca sociale*. Seconda edizione. Bologna, Il Mulino.
- Coviello, N.E., Munro, H.J., (1995). Growing the entrepreneurial firm. Networking for international market development. *European Journal of Marketing*, 29(7), 49-61.
- Creswell, J.W., (2014). *Research Design. Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed. Thousand Oaks, CA: SAGE Publications.
- Creswell, J.W., Plano Clark, V.L., (2011). *Designing and Conducting Mixed Methods Research*, 2nd ed. Thousand Oaks, CA: SAGE Publications.
- Dana L.P., (1999). *Entrepreneurship in Pacific Asia: past present & future*. World Scientific, Singapore.

- Darabi, Y., Caruana, A., Zegordi, S.H., (2007). The impact of market orientation on business performance and website adoption: A study among Iranian SMEs. *ladis International Journal on www/Internet*, 5(2), 26-39.
- Daryanto, A., Khan, H., Matlay, H., Chakrabarti, R., (2013). Adoption of country-specific business websites. The case of UK small businesses entering the Chinese market. *Journal of Small Business and Enterprise Development*, 20(3), 650-60.
- Deelmann, T., Loos, P., (2002). Trust Economy: Aspects of Reputation and Trust Building for SMEs in eBusiness. 8th Americas Conference on Information Systems, 9-11 August, Dallas, Texas, USA: 2213-21.
- Denzin, N.K., Lincoln, Y.S., (1994). *Handbook of Qualitative Research*, 2nd ed., Thousand Oaks: Sage.
- Dilthey, W., (1883). *Introduction to the Human Sciences*. Selected Works. Volume I. Princeton, New Jersey: Princeton University Press.
- Dudovskiy, J., (2016). *The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance*. New York: SAGE Publications.
- Dunning J.H., (1988). The Eclectic Paradigm of International Production: A Restatement and some Possible Extensions. *Journal of International Business Studies*, 19(1), 1-31.
- Dyer, J.R., Gibb, W., Wilkins, A., (1991). Better stories, not better constructs, to generate better theory: a rejoinder to Eisenhardt. *Academy of Management Review*, 16(3), 613-19.
- Eisenhardt, K.M., (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14 (4), 532-50.

- Eriksson, L., Hultman, J., Naldi, L., (2008). Small business e-commerce development in Sweden: an empirical survey. *Journal of Small Business and Enterprise Development*, 15(3), 555-70.
- Eriksson, P., Kovalainen, A., (2008). *Qualitative Methods in Business Research*. London: Sage.
- Etemad H., (2004), Internationalization of small and medium-sized enterprises: a grounded theoretical framework and an overview. *Canadian Journal of Administrative Sciences*, 21(1), 1-21.
- Etemad H., (2007), The fastest growing SMEs in Canada: their strategies, e-commerce and network practices, chapter 7. In: Susman G (ed) *Small and medium-sized enterprises and the global economy*. Elgar, New York, pp 103-124.
- Etemad H., Wilkinson I., Dana L.P. (2010), Internetization as the necessary condition for internationalization in the newly emerging economy. *Journal of International Entrepreneurship*, 8, 319-342.
- Fina E., Rugman, A.M., (1996). A Test of Internalization Theory and Internationalization Theory: The Upjohn Company. *Management International Review*, 36(3), 199-213.
- Galloway, L., (2007). Can broadband access rescue the rural economy? *Journal of Small Business and Enterprise Development*, 14(4), 641-653.
- Gemino, A., Mackay, N., Reich, B.H., (2006). Executive Decisions about Website Adoption in Small and Medium- Sized Enterprises. *Journal of Information Technology Management*, 17(1), 34-50.
- Giddings, L.S., Grant, B.M., (2007). A Trojan Horse for positivism? A critique of mixed-methods research. *Advances in Nursing Science*, 30, 52-60.

- Gillham, B., (2001). *Case Study Research Methods*. London, New York: Continuum.
- Gilmore, A., Carson, D., O'Donnell, A., (2004). Small business owners and their attitude to risk. *Market Intelligence & Planning*, 22(3), 349-360.
- Glaser, B.G., Strauss, A.L., (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York, Aldine.
- Gligorijevic, B., Leong, B., (2011). Trust, Reputation and the Small Firm: Building Online Brand Reputation for SMEs. In *Proceedings of the Fifth International AAIL Conference on on Weblogs and Social Media*, 494-497.
- Glückler, J., (2006). A relational assessment of international market entry in management consulting. *Journal of Economic Geography*, 6, 369-393.
- Goffman, E., (1959). *The Presentation of Self in Everyday Life*. New York, Doubleday.
- Goffman, E., (1967). *Interaction Ritual*. New York, Doubleday.
- Gorsuch, R.L., (1983). *Factor Analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gossain, S., Kenworthy, R., (2000). *Winning the Third Wave of E-Business - Beyond Net Markets*. NerveWire.
- Grandinetti, R., (2001). I distretti industriali e l'economia globale, in Diamanti I., Marini D., Nord Est 2001. *Rapporto sulla società e l'economia* Eds., Venezia, Fondazione Nord Est.
- Grandinetti, R., Rullani, E., (1992). Internazionalizzazione e piccole imprese: elogio della verità, *Piccola Impresa/Small Business*, 3, 3-43.

- Groves, R.M., Fowler, F.J., Couper, M.P., Lepkowski, J.M., Singer, E., Tourangeau, R., (2004). *Survey Methodology*. New Jersey: John Wiley and Sons.
- Guba, E.G., (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development*, 29, 75-91.
- Guba, E.G., Lincoln, Y.S., (1994). Competing Paradigms in Qualitative Research, in *Handbook of Qualitative Research*, edited by N.K. Denzin and Y.S. Lincoln, Newbury Park, Sage.
- Hamill, J., Gregory, K., (1997). Internet Marketing in the Internationalisation of UK SMEs. *Journal of Marketing Management*, 13(1/3), 9-28.
- Haralambos, M., Holborn, M., (2013). *Sociology Themes and Perspectives*. Eighth Edition, Collins.
- Hill, J., (2001). A multidimensional study of the key determinants of effective SME marketing activity: Part 2. *International Journal of Entrepreneurial Behaviour & Research*, 7(6), 211-235.
- Johanson, J., Mattsson, L.G., (1988). Internationalization in Industrial Systems - A Network Approach, in Buckley P.J and Ghauri, P.N. (Eds) *The Internationalization of the Firm: A Reader*, 303-21. Academic Press, London.
- Johanson, J., Vahlne, J.E., (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23-32.
- Johanson, J., Wiedersheim-Paul, F., (1975). The internationalization of the firm: Four Swedish cases. *Journal of Management Studies*, 12(3), 305-22.

- Johansson, R., (2003). Case Study Methodology. *Key note speech at the International Conference "Methodologies in Housing Research" organised by the Royal Institute of Technology in cooperation with the International Association of People–Environment Studies, Stockholm, 22–24 September.*
- Johnson, R.B., Onwuegbuzie, A.J., Turner, L.A. (2011). Towards a definition of Mixed Methods Research. *Journal of Mixed Method Research*, 1(2), 112-33.
- Jolly, V.K., Alahunta, M., Jeannet, J.P., (1992). Challenging the incubements: how high technology start-ups compete globally. *Journal of Strategic Change*, 1, 71-82.
- Kaiser, H. F., (1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36.
- Kaplan, A.M., Haenlein, M., (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.
- Karjaluoto, H., Huhtamäki, M., (2010). The role of electronic channels in micro-sized brick-and-mortar firms. *Journal of Small Business and Entrepreneurship*, 23(1), 17-38.
- Karlsen, S.M., (2000). *The Internationalization Process of SMEs: A Relationship Approach.* Foundation for Research in Economics and Business Administration Bergen.
- Kaynak, E., Tatoglu, E., Kula, V., (2005). An analysis of the factors affecting the adoption of electronic commerce by SMEs. *International Marketing Review*, 22(6), 623-40.
- Khun, T.S., (1962). *The Structure of Scientific Revolutions.* Chicago, University of Chicago Press.

- Kirzner, I.M., (1997). Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach. *Journal of Economic Literature*, 35(1), 60-85.
- Knight, G.A., Cavusgil, S.T., (1996). The born global firm: a challenge to traditional internationalization theory. *Advances in International Marketing*, 8, 11-26.
- Knight, G.A., Cavusgil, S.T., (2004). Innovation, Organizational Capabilities and the Born Global Firm. *Journal of International Business Studies*, 35(2), 124-141.
- Lehtinen, U., Penttinen, H., (1999). Definition of the internationalization of the firm, in *Perspectives on Internationalization*, U. Lehtinen and H. Seristoe, Eds. Helsinki: Helsinki School of Economics and Business Administration.
- Levy, M., Powell, P., (2005). Strategies for Growth in SMEs - The Role of Information and Information Systems. *Information Systems Series*. Elsevier, Oxford.
- Lincoln, Y.S., Guba, E.G., (1985). *Naturalistic inquiry*. Newbury Park, California, USA: Sage.
- Linting, M., Van der Kooij, A., (2012). Non linear Principal Component Analysis with CATPCA: a Tutorial. *Journal of Personality Assessment*, 94(1), 12-25.
- Lituchy, T.R., Rail, A., (2000). Bed and Breakfasts, Small Inns, and the Internet: The Impact of Technology on the Globalization of Small Businesses. *Journal of International Marketing*, 8(2), 86-97.
- Loane, S., (2005). The role of the internet in the internationalisation of small and medium sized companies. *Journal of International Entrepreneurship*, 3(4), 263-77.

- Loecher, U., (2000). Small and medium-sized enterprises delimitation and the European definition in the area of industrial business. *European Business Review*, 12(5), 261-64.
- Lohrke, F., Franklin, G., Frownfelter-Lohrke, C., (2006). The internet as an information conduit: a transaction cost analysis model of US SME internet use. *International Small Business Journal*, 24(2), 159-78.
- Madsen, T.K., Servais, P., (1997). The internationalization of born globals: an evolutionary perspective. *International Business Review*, 6(6), 561-583.
- Marini, S., Bordignon, F., Turato, F., (2003). La nuova collocazione delle imprese nei mercati internazionali. Strategie e orientamenti degli imprenditori del Nord-Est, *Quaderni FNE, Collana Panel*, 6.
- Marschan-Piekkari, R., Welch, C., (2004). *Handbook of Qualitative Research Methods for International Business*. Cheltenham, Glos, UK: Edward Elgar.
- Marshall, A., (1919). *Industry and Trade*, London, McMillan.
- Meske, C., Stieglitz, S., (2013). Adoption and Use of Social Media in Small and Medium-Sized Enterprises. In: Harmsen F., Proper, H.A., (eds) *Practice-Driven Research on Enterprise Transformation. PRET 2013. Lecture Notes in Business Information Processing*, vol 151. Springer, Berlin, Heidelberg.
- Miesenbock, K.J., (1988). Small Businesses and Exporting: A Literature Review. *International Small Business Journal: Researching Entrepreneurship*, 6(2), 42-61.
- Miles, M.B., Huberman, A.M., (1994). *Qualitative Data Analysis*. Thousand Oaks: Sage.

- Miller, R., Lammas, N., (2010). Social media and its implications for viral marketing. *Asia Pacific Public Relations Journal*, 11, 1-9.
- Milliken, J., (2001). Qualitative research and marketing management. *Management Decision*, 39(1), 71-78.
- Moore, C.M., (2001). "The Internationalisation of Foreign Fashion Retailers into the UK - Identifying the Motives, Methods and Operational Challenges", University of Stirling.
- Morrow, J.F., (1988). "International entrepreneurship: A new growth opportunity". *New Management*, 3, 59-61.
- Muijs, D., (2010). *Doing Quantitative Research in Education with SPSS*. 2nd edition. London: SAGE Publications.
- Muntinga, D.G., Moorman, M., Smit, E.G., (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising*, 30(1), 13-46.
- Musso, F., (2004). Le relazioni con i mercati esteri delle imprese produttrici di mobili. Sistemi distrettuali e canali distributivi. Edizioni Goliardiche, Trieste.
- Musso, F., (2006). "Strategie di internazionalizzazione fra economie distrettuali e filiere estese", *Sinergie*, 69 (Gennaio-Aprile), 61-85.
- Musso, F., (2013). Strategie e competitività internazionale delle piccole e medie imprese. Un'analisi sul settore della meccanica, Lavis, Cedam.
- Musso, F., Risso, M., (2012). ICT Innovation for Buyer-Seller Relationship in International Supply Chains, Driving the Economy through Innovation and

Entrepreneurship. Emerging Agenda for Technology Management, Springer India, ISBN: 9788132207450, DOI: 10.1007/9788132207467\_56

Newbould, G.D., Buckley, P.J., Thurwell, J.C., (1978). Going international - the enterprise of smaller companies overseas. Wiley, New York.

Onwuegbuzie, A.J., Leech, N.L., (2005). On becoming a pragmatic researcher: the importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology: Theory and Practice*. 8, 375-87.

Oviatt, B., McDougall, P., (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1), 45-64.

Oviatt, B., McDougall, P., (1995). Global start-ups: entrepreneurs on a worldwide stage. *Academy of Management Executive*, 9(2), 30-44.

Oviatt, B., McDougall, P., (1997). Challenges for internationalization process theory: the case of international new ventures. *Manage International Review*, 37, 85-99.

Parry, S., Jones, R., Rowley, J., Kupiec-Teahan, B., (2012). Marketing for survival: a comparative case study of SME software firms. *Journal of Global Information Management*, 19(4), 712-728.

Parveen, F., (2012). Impact of Social Media Usage on Organizations. In: *Proceedings of PACIS 2012*, paper 192.

Patton, E., Appelbaum, S.H., (2003). The Case for Case Studies in Management Research. *Management Research News*, 26(5), 60-71.

Pentina, I., Koh, A. C., Le, T.T., (2012). Adoption of social networks marketing by SMEs: exploring the role of social influences and experience in technology

- acceptance. *International Journal of Internet Marketing and Advertising*, 7(1), 65-82.
- Pepe, C., (2000). Il doppio sistema distretto-canale nei percorsi internazionali delle imprese minori, in Musso F., *Economie distrettuali e canali di distribuzione all'estero*, Genova, Ins-Edit.
- Pepe, C., Musso, F., (2003). "The International Opening of Small District Firms. Flexibility Vs. Consolidation in Channel Relations", Conference on Clusters, Industrial Districts and Firms: The Challenge of Globalization, Modena, September 12-13. ISBN: 88-89427-00-0.
- Perry, C., (1998). Processes of a case study methodology for postgraduate research in marketing. *European Journal of Marketing*, 32(9/10), 785-802.
- Piercy, N., (1981). Company internationalization: active and reactive exporting. *European Journal of Marketing*, 15(3), 26-41.
- Porter, M.E., (2001). Strategy and the Internet. *Harvard Business Review*, 79(3), 62-78.
- Prashantham, S., Young, S., (2004). The Internet and the internationalisation of small knowledge-intensive firms: promises, problems and prospects. *International Journal of Entrepreneurship and Small Business*, 1(1/2), 153-75.
- Rao, S., Metts, G., Mora Monge, C., (2003). Electronic Commerce Development in Small and Medium Sized Enterprises: A Stage Model and its Implications. *Business Process Management Journal*, 9(1), 11-32.
- Reid, S.D., (1981). The decision-maker and export entry and expansion. *Journal of International Business Studies*, 12(2), 101-12.

- Rennie, M.W., (1993). Global Competitiveness: Born Global. *McKinsey Quarterly*, 4, 45-52.
- Ricardo D., (1817). *On the Principles of Political Economy and Taxation*, London, MacMillan.
- Rowley, J., (2002). Using Case Studies in Research. *Management Research News*, 25 (1), 16-27
- Rullani, E., Micelli, S., Di Maria, E., (2000). *Città e cultura nell'economia delle reti*, Bologna, Il Mulino.
- Santovito, S., Silvestri, R., Lamonaca, E., Contò, F., (2016). "Producers organization and digital technologies for farms' competitiveness", International Scientific Day 2016, 19-20 May, Nitra, Slovakia, 828-835, ISBN 978-80-552-1500-6.
- Schmidt, M.J., Hollensen, S., (2006). *Marketing Research. An International Approach*. Harlow, England: Prentice Hall.
- Schumpeter, J.A., (1934). *The Theory of Economic Development*. Cambridge: Harvard University Press.
- Schutz, A., (1967). *Der sinnhafte Aufbau der sozialen Welt. Eine Einleitung in die verstehende Soziologie*, Wien, Springer.
- Shideler, D., Badasyan, N., (2012). Broadband impact on small business growth in Kentucky. *Journal of Small Business and Enterprise Development*, 19(4), 589-606.
- Silverman, D., (1989). *Telling convincing stories. A plea for caution positivism in case-studies* in *The qualitative-quantitative distinction in the social science*, B. Glaser and J.D. Moreno, Eds. Norwell: Kluwer.

- Silverman, D., (2005). *Doing qualitative research. A practical handbook*. London: Sage.
- Simmons, G., Armstrong, G.A., Durkin, M.G., (2009). A Conceptualization of the Determinants of Small Business Website Adoption: Setting the Research agenda. *International Small Business Journal*, 26(3), 351-389.
- Smith A., (1776). *La ricchezza delle nazioni*, Torino, Utet.
- Spurge, V., Roberts, C., (2005). Broadband technology: an appraisal of government policy and use by small-and medium-sized enterprises. *Journal of Property Investment and Finance*, 23(6), 516-524.
- Stake, R.E., (1998). *Case Studies* in: N. & Y. Lincoln. (eds.) *Strategies of Qualitative Inquiry*. Thousand Oaks, London, New Delhi: Sage.
- Stake, R.E., (2000). *Case Studies* in: *Handbook of Qualitative Research*, N.K. Denzin and Y.S. Lincoln, Eds. 2nd ed. Thousand Oaks: Sage.
- Stieglitz, S., Dang-Xuan, L., (2011). Adoption and Use of Corporate Wikis in German Small and Medium-sized Enterprises. In: Proceedings of the Seventeenth Americas Conference on Information Systems, Detroit, Michigan.
- Taiminen, H.M., Karjaluoto, H., (2015). The usage of digital marketing channels in SMEs. *Journal of Small Business and Enterprise Development*, 22(4), 633-51.
- Tashakkari, A., Creswell, J.W., (2007). Editorial. The New Era of Mixed Methods. *Journal of Mixed Method Research*, 1(1), 3-7.
- Tellis, W., (1997). Application of a Case Study Methodology. *The Qualitative Report*, 3(3).

- Turnbull, P.W., (1985). A challenge to the stages theory of the internationalization process, in *Management Export Entry and Expansion*, P. Rosson and S. Reid, Eds. New York: Praeger.
- Weber, M., (1904). *The "Objectivity" in Social Science and Social Policy in The Methodology of the Social Sciences*, trans. Edward Shils and Henry Finch. New York: Free Press [1949].
- Welch, L.S., Luostarinen, R., (1988). Internationalization: evolution of a concept, in *The Internationalization of the firm*, Peter J. Buckley and Pervez N. Ghauri, Eds. Second ed.: International Thomson Business Press.
- Westhead, P., Wright M., Ucbasaran, D., (2001). The internationalization of new and small firms: a resource-based view. *Journal of Business Venturing*, 16, 333-58.
- Whitehead, D., Schneider, Z., (2013). *Mixed-methods research* in: Schneider, Z., Whitehead, D. (eds.) *Nursing and Midwifery Research: Methods and Appraisal for Evidence-Based Practice*, 4th edition. Elsevier and Mosby, Marrickville, Sidney, 263-84.
- Williams, V., (1999). *Small Business Venture into E-commerce*. Office of Advocacy, US Small Business Administration.
- Williamson, O.E., (1975). *Markets and Hierarchies*, New York, Free Press.
- Wind, Y., Douglas, S.P., Perlmutter, M.V., (1973). Guidelines for developing international marketing strategies. *Journal of Marketing*, 37(2), 14-23.
- Wright, R.W., Etemad, H., (2001). SMEs and the global economy. *Journal of International Management*, 7(3), 151-54.

Yin, R., (1989). *Case Study Research: Design and Methods*. Beverly Hills, CA: SAGE Publications.

Yin, R., (1994). *Case study research, Design and methods (2nd ed.)*. London: Sage.

## APPENDICES

In this section the appendices are presented.

“Appendix A” refers to the first phase of research (*qualitative research*). It concerns the topics discussed with the entrepreneurs during the in-depth interviews.

“Appendix B” refers to the second phase of research (*quantitative research*). It concerns the questionnaire for companies.

Since all companies interviewed are Italian, the appendices are faithfully reproduced in Italian language, like so the surveys have been conducted.

**APPENDIX A**  
**Topics discussed during the in-depth interview**



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DI URBINO  
CARLO BO

DESP  
DIPARTIMENTO DI  
ECONOMIA,  
SOCIETÀ, POLITICA

A - Informazioni generali relative all'intervistato

1. Nome
2. Posizione all'interno dell'impresa
3. Anni di esperienza nel settore
4. Anni di esperienza in campo internazionale

B - Informazioni generali relative all'imprenditore (se diverso dall'intervistato)

5. Nome
6. Posizione all'interno dell'impresa
7. Anni di esperienza nel settore
8. Anni di esperienza in campo internazionale

C - Profilo dell'impresa

9. Ragione sociale
10. Tipo di attività

11. Tipologia di prodotti
12. Settore di appartenenza
13. Ruolo all'interno del mercato (produttore/subfornitore)
14. Data di costituzione dell'azienda
15. Fatturato
16. Numero di addetti
17. Numero di mercati esteri serviti

*D - Informazioni generali sulle attività nazionali dell'azienda*

18. Come è nata l'azienda?
19. Breve storia dell'impresa.
20. Descrizione delle attività che svolge l'impresa all'interno del mercato domestico.

*E - Informazioni sull'avvio del processo di internazionalizzazione dell'azienda*

21. Data in cui l'impresa ha iniziato ad internazionalizzarsi.
22. Come è avvenuto il processo di internazionalizzazione prima dell'avvento di Internet e della globalizzazione? (Quanti Paesi, con quali modalità di entrata, ecc..)
23. Che cosa si pensava dell'internazionalizzazione inizialmente?

24. Che posizione aveva l'impresa all'interno del mercato domestico quando ha iniziato ad internazionalizzarsi?
25. Quali sono stati i Paesi serviti inizialmente e quali sono i Paesi serviti oggi?
26. Tra i Paesi esteri attualmente serviti, quale è il mercato principale?
27. E' possibile avere informazioni riguardo la percentuale export sul fatturato riferita all'ultimo anno disponibile?

*F - Informazioni sulla storia internazionale dell'azienda dopo l'avvento di Internet*

28. Quando è stato realizzato il sito web aziendale e da chi? (personale interno all'azienda, agenzia di comunicazione, ecc...)
29. Perché da personale interno/agenzia di comunicazione/ecc...?
30. Qual è il motivo per cui è stato scelto di realizzare il sito web?
31. Dalla sua realizzazione ad oggi, il sito web è stato mai modificato? (es. tradotto in più lingue, passaggio da statico a dinamico/interattivo, ecc..)
32. Chi si occupa attualmente della gestione del sito web?
33. Quali sono le azioni che compie chi gestisce il sito? Con quale cadenza? (settimanale, mensile, trimestrale, annuale, ecc...)
34. L'azienda investe nella gestione del sito web?
35. Se sì, è possibile sapere quanto investe annualmente?
36. Indipendentemente che si sia investito (si stia investendo) o meno, secondo il parere di chi risponde è importante farlo? (sì/no) Per quale motivo?

37. Quali sono i profili social media dell'azienda? (es. Facebook, Youtube, LinkedIn, Twitter, Google+, ecc...)
38. Quando è stato aperto il primo profilo social dell'azienda e chi si è occupato della sua realizzazione? (personale interno all'azienda, agenzia di comunicazione, ecc..)
39. Perché da personale interno/agenzia di comunicazione/ecc...?
40. Per quale motivo si è scelto di aprire il primo profilo social (e i successivi, nel caso in cui siano più di uno)?
41. Prendendo come riferimento il primo profilo social media, chi lo gestisce e in che modo? Nel corso degli anni ci sono state modifiche riguardo alla modalità di gestione?
42. Quali sono le tempistiche con cui vengono pubblicati post/video/immagini e quali sono i tempi di risposta ai commenti degli utenti?
43. L'azienda investe nella gestione dei profili social media?
44. Se sì, è possibile sapere quanto investe annualmente?
45. Indipendentemente che si sia investito (si stia investendo) o meno, secondo il parere di chi risponde è importante farlo? (sì/no) Per quale motivo?
46. L'azienda analizza i dati che emergono da Internet? (es. attraverso Google Analytics, Facebook Insight, SproutSocial, NutsShellMAil, ecc...)
47. Perché lo fa/non lo fa?
48. Se sì, i dati analizzati vengono poi utilizzati per la pianificazione delle strategie di internazionalizzazione?

49. Perché lo fa/non lo fa?

50. L'azienda ha acquisito nuovi clienti esteri grazie ad Internet?

51. Se sì, mi può raccontare che tipo di relazione si è instaurata con questi clienti? (es. occasionale, continuativa, temporanea, ecc...)

**APPENDIX B**  
**Questionnaire**



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**Università degli Studi di Urbino Carlo Bo  
Dipartimento di Economia, Società, Politica**

I dati che gentilmente vorrà fornirci saranno utilizzati esclusivamente in forma anonima ed aggregata per finalità di ricerca.

Grazie per la collaborazione.

**Internet nel processo di internazionalizzazione delle PMI**

**Profilo aziendale**

1. Ragione sociale dell'azienda

2. Sede legale dell'azienda

3. Anno di costituzione dell'azienda

4. Numero di dipendenti

- < 10
- < 50
- < 250

5. Ultimo fatturato disponibile

- < o = a 2 mln di €
- < o = a 10 mln di €
- < o = a 50 mln di €

6. Il ruolo dell'azienda all'interno del mercato è:

- Produttore
- Subfornitore
- Altro (*il questionario termina qui*)

7. L'azienda si rivolge ai mercati esteri?

- Sì
- No (*il questionario termina qui*)

#### **Dati internazionalizzazione**

8. In che anno l'azienda ha iniziato il suo percorso di internazionalizzazione?

9. Quali sono, tra le seguenti, le aree di mercato attualmente servite dall'azienda?

- Europa
- America Latina
- Nord America
- Asia e Medio Oriente
- Africa
- Oceania

10. Tra quelle indicate, quale è stata la prima area di mercato a cui l'azienda si è rivolta?

- Europa
- America Latina
- Nord America
- Asia e Medio Oriente
- Africa
- Oceania

**Sito web aziendale e profilo social media**

11. L'azienda ha un proprio sito web e almeno un profilo sui social media (es. Facebook, Instagram, Pinterest, Youtube, LinkedIn, ecc...)?

- Sì
- No (*il questionario termina qui*)

12. In che anno è stato realizzato il sito web aziendale?

13. Il sito web aziendale è stato realizzato da:

- personale interno all'azienda
- altro soggetto esterno all'azienda (es. agenzia di comunicazione, professionisti, ecc..)

14. In riferimento alla risposta data alla domanda precedente, perché? (es. competenze del personale o professionalità dell'agenzia esterna, investimento necessario o non necessario, ecc...)

15. La gestione del sito web (es. aggiornamento contenuti, newsletter, ecc..) è attualmente affidata a (se la gestione è affidata ad entrambe le opzioni proposte, selezionare quella che ha maggiore peso):

- personale interno all'azienda
- altro soggetto esterno all'azienda (es. agenzia di comunicazione, professionisti, ecc..)

16. In riferimento alla risposta data alla domanda precedente, perché? (es. competenze del personale o professionalità dell'agenzia esterna, investimento necessario o non necessario, ecc...)

17. Relativamente al profilo social media dell'azienda, in che anno è stato aperto il profilo aziendale? (se l'azienda dispone di più profili social, si faccia riferimento al primo)

18. Il (primo) profilo social aziendale è stato realizzato da:

- personale interno all'azienda
- altro soggetto esterno all'azienda (es. agenzia di comunicazione, professionisti, ecc..)

19. In riferimento alla risposta data alla domanda precedente, perché? (es. competenze del personale o professionalità dell'agenzia esterna, investimento necessario o non necessario, ecc...)

20. La gestione del (primo) profilo social (es. aggiornamento contenuti, newsletter, ecc..) è attualmente affidata a (se la gestione è affidata ad entrambe le opzioni proposte, selezionare quella che ha maggiore peso):

- personale interno all'azienda
- altro soggetto esterno all'azienda (es. agenzia di comunicazione, professionisti, ecc..)

21. In riferimento alla risposta data alla domanda precedente, perché? (es. competenze del personale o professionalità dell'agenzia esterna, investimento necessario o non necessario, ecc...)

***Analisi e utilizzo dei dati***

*D'ora in avanti il sito web aziendale e il profilo social media verranno chiamati "Internet"*

22. L'azienda analizza i dati che emergono da Internet? (es. attraverso Google Analytics, Facebook Insight, SproutSocial, NutsShellMail, ecc...)

- Sì
- No

23. Perché?

24. I dati analizzati vengono utilizzati per la pianificazione delle strategie di internazionalizzazione? *(Rispondere solo se si è risposto "sì" alla domanda 22, altrimenti passare alla domanda 26)*

- Sì
- No

25. Perché?

26. Internet ha permesso all'azienda di acquisire nuovi clienti esteri?

- Sì
- No

Il questionario è terminato. Grazie per aver partecipato.