



## ENTREPRENEURSHIP, INNOVATION AND LOCAL DEVELOPMENT: MICRO AND SMALL COMPANIES IN THE INTERIOR NORTE DE PORTUGAL

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### SUMMARY

There is a great deal of evidence that establishes a direct relationship between a community's entrepreneurship and local economic development. Countless researchers argue that any economic development process is associated with innovations generated by entrepreneurs. In this way, entrepreneurship is associated, in most cases, with the introduction of innovations in the economy, resulting in the evolution and development of society itself. The purpose of this communication is to analyze the phenomenon of entrepreneurship and innovation in micro and small companies in Bragança and Macedo de Cavaleiros as well as their contribution to local development. Data collection was carried out through semi-structured interviews based on the questionnaire of a study completed in Barcelona, by the University of Catalonia, in 2006. Data from 65 companies were collected from November 2010 to February 2011. The results show that the majority of entrepreneurs are male (70.8%), are on average 44.7 years old, are up to 9 years old schooling (65.4%) and before the creation of the company itself, worked for others (83.1%). These entrepreneurs operate in several sectors of activity, with emphasis on commerce and restaurants and civil construction. The companies studied employ, on average, 5 workers and 50.8% achieve a turnover of up to 100,000 euros, making a positive contribution to local development. he has up to 9 years of schooling (65.4%) and before the creation of his own company, he worked for others (83.1%). These entrepreneurs operate in several sectors of activity, with emphasis on commerce and restaurants and civil construction. The companies studied employ, on average, 5 workers and 50.8% achieve a turnover of up to 100,000 euros, making a positive contribution to local development. he has up to 9 years of schooling (65.4%) and before the creation of his own company, he worked for others (83.1%). These entrepreneurs operate in different sectors of activity, with emphasis on commerce and restaurants and civil construction. The companies studied employ, on average, 5 workers and 50.8% achieve a turnover of up to 100,000 euros, making a positive contribution to local development.

**Key words:** Local development, Entrepreneurship, Innovation, Micro-small companies.

### 1. INTRODUCTION

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Any economic development process is associated with innovations generated by entrepreneurs [1], [2], [3], [4]. An entrepreneurial attitude results in the creation and innovation of business [5], new processes, new services [6] which together with knowledge management can contribute to a development strategy that combines the growth of job opportunities and the increased productivity [7]. Small business entrepreneurship is almost unanimously seen as beneficial to the economic and social life of countries and regions [8]. The contribution of entrepreneurship to economic development occurs, fundamentally, through innovation and competition in the market. More entry and threats in the market lead to more increase in productivity and innovation since the threat of being evicted serves as an incentive for established companies to keep out competitors [8]. The contribution of entrepreneurship is also important in creating jobs, in economic growth, in improving competitiveness, in harnessing the potential of individuals and in exploiting the interests of society with regard to the protection of the environment, the production of health services, education and social security services [9]. Although entrepreneurship by opportunity has a greater impact on economic growth compared to entrepreneurship by necessity [10], the latter occupies a prominent place with regard to social inclusion and poverty reduction,

Entrepreneurship is an important source of job creation; it plays a fundamental role in the introduction of innovations in the economy and is the mechanism that drives the economy and society itself to evolve and progress; it is a career option for an important part of the workforce; and, it has a very important impact on regional development and the growth of economies [13]. The main cause for growth and development is the increase in efficiency and competitiveness of the economy, and at the center of this increase in efficiency and competitiveness is innovation, and the basis of innovation is entrepreneurial initiative, that is, entrepreneurship [14]. In this context, it was intended as this research to analyze the phenomenon of entrepreneurship and innovation in micro and small companies,

## **2. EXPERIMENTAL PART**

As its name indicates, this point is dedicated to the presentation of the methodology used to carry out this investigation, namely, participants, material and procedure. For this, reference is made to the way the sample was collected, the data collection instrument and the statistical treatment of the same.

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## 2.1. PARTICIPANTS

A sample of 65 entrepreneurs was collected, aged between 23 and 67 years old, with an average age of 44.7 years old ( $SD \pm 11$ ). The businesses, located in two municipalities in the District of Bragança, as shown in table 1, are characterized by being micro (80%) and small (20%).

Most entrepreneurs are male (70.7%) and have compulsory education (55.4%). Before the creation of their own business, they already worked but for others (83.1%), namely, in private companies (81.7%), in the parent company (1.5%) and in a higher education institution (1.5%). Despite having created their own business, there is a relevant percentage that continues to have a paid complementary activity (35.4%). Although the difficulties and the economic context are unfavorable to the growth and development of business, 60% of entrepreneurs would like their children to follow their example, that is, to create their own company.

Table 1: Characterization of the entrepreneur

Groups	Frequencies	
	Absolute (n)	Relative (%)
<b>County</b>		
Bragança	49	75.4
Macedo de Cavaleiros	16	24.6
<b>Company type</b>		
Micro	52	80
Small	13	20
<b>Genre</b>		
Feminine	19	29.2
Male	46	70.8
<b>Instruction level</b>		
1st cycle	10	15.4
2nd cycle	13	20
3rd cycle	13	20
Secondary	14	21.5
University education	15	23
<b>Professional situation before business creation</b>		
Self-employed	5	7.7
Employee	54	83.1
Unemployed	4	6.2
Another	2	3.1

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<b>Develops paid complementary activity</b>		
Yes	23	35.4
No	42	64.6
<b>Family in the same business</b>		
Yes	23	35.4
No	42	64.6
<b>Desired professional situation for descendants</b>		
Create your own business		
Worker in family company	39	60
Employee	15	23.1
	11	16.9

### 2.2. MATERIAL

For data collection, a semi-structured interview was used as an instrument, resulting from the adaptation of questionnaires about the innovative context of micro-enterprises and local development [15], [16].

### 2.3. PROCEDURE

Data from 65 companies were collected from November 2010 to February 2011. It is, therefore, a cross-sectional study since this type of study involves the analysis of phenomena that are all taking place on a certain date and that have occurred in the past or in the present [17]. All contacts with the participants were made, personally, by an employee of this research, in their business context. It was in a first contact that the participants were informed about the nature and objectives of the investigation, the anonymity and confidentiality of the data was guaranteed and the voluntary interview was scheduled. The total interview time was, on average, 60 minutes.

The software used to edit and process the data was SPSS 18.0 (Statistical Package for Social Sciences). Descriptive statistics were used, namely, the calculation of absolute and relative frequencies whenever the variables were nominal; and, the calculation of measures of central tendency (mean) and measures of dispersion (standard deviation) whenever the variables were ordinal or higher.

## 3. RESULTS AND DISCUSSION

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This section presents and analyzes the results obtained following the treatment of the data collected through the semi-structured interview with entrepreneurs with businesses located in two Municipalities of the District of Bragança, namely, Bragança and Macedo de Cavaleiros.

### 3.1. CHARACTERIZATION OF COMPANIES

As shown in figure 1, the vast majority of entrepreneurs created their business in the 80s and 90s of the 20th century. Precisely, in Portugal, it was in the 80s of the last century that the importance of entrepreneurship began to be recognized, a phenomenon that encouraged individuals, especially unemployed, not to wait for a job that might not come, but to create it, making use of the skills gained during their professional life or in other extra-professional activities. Currently, this phenomenon is associated with the individual's ability to take initiatives through the transformation of an idea into a product / service, through a risky, innovative and pro-active attitude. -active.

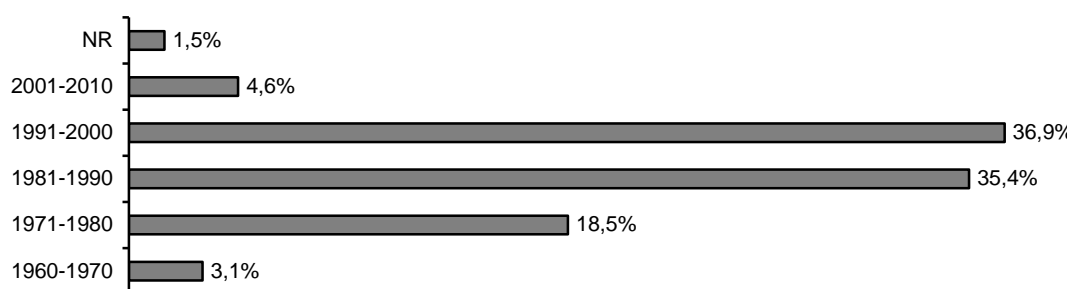


Figure 1: Year of creation of the company

As can be seen in Table 2, the number of male members is higher. Despite this, it is worth noting the increase in the number of partners registered since the creation of the company until today (5.6%) happened at different rates when gender is taken into account. In fact, the growth rate recorded by females (13.9%) is much higher than that of males (1.5%).

Table 2: Creative Partners, Current Partners and Evolution

Number of Members	Men	Women	Total
<b>Creators</b>	66	36	102
<b>Current</b>	67	41	108
<b>Variation (%)</b>	+1.5	+13.9	+5.6

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Economic motivation (39.4%) and personal fulfillment (39.4%) were the reasons that weighed most in the decision to create the company. The desire for independence is also one of the strong reasons cited by 27.3% of respondents (see figure 2).



Figure 2: Reasons for creating the business

When studying the support received when creating and starting up the company, it appears that many of the entrepreneurs did not receive any financial or administrative support (53.8%), as can be seen in figure 3.

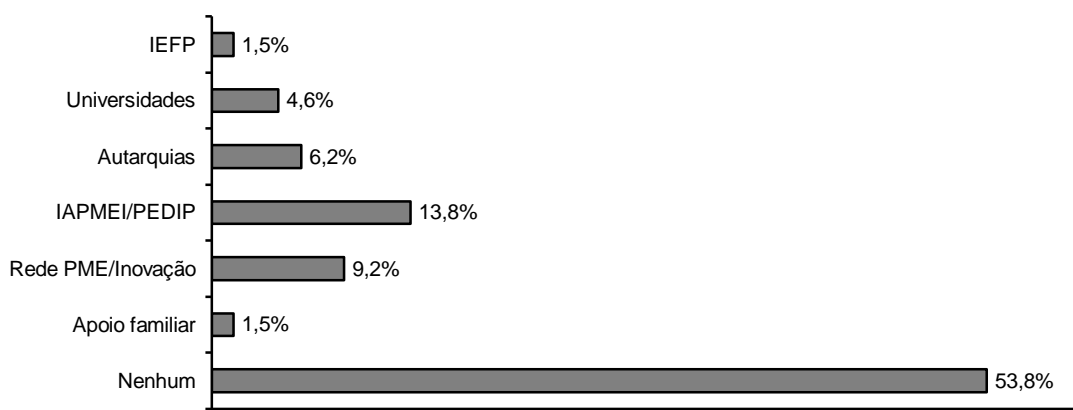


Figure 3: Support received for the creation of the company

Regarding the activity carried out by the companies, it can be seen, in figure 4, that the most representative sectors are, in decreasing order of importance, Catering and Commerce (30.8%), Construction (20%), Other Products and Services (18.5%), Personal Services and Social Activities (9.2%), Industrial Production (9.2%), Transport

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and Communications (6.2%) and, finally, Financial Services, Real Estate and Business (4, 6%).

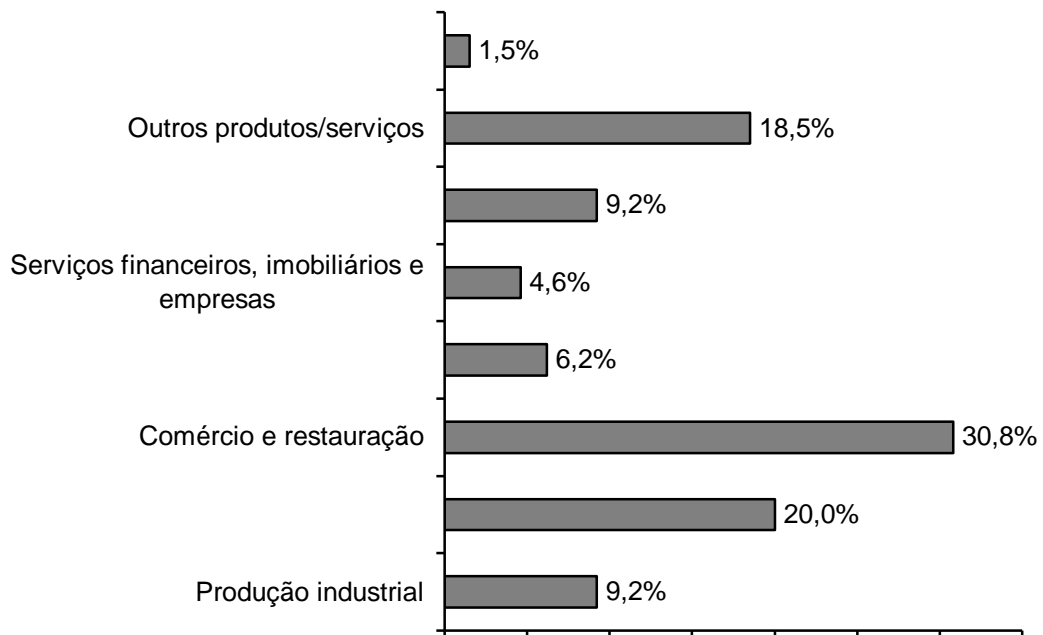


Figure 4: Sector of activity of the company

### 3.2. COMPANY ORGANIZATION

Most of the companies in this sample consider themselves to be organized by products / services (81.5%), projects (64.6%) and processes (53.8%), as can be seen in figure 5 .

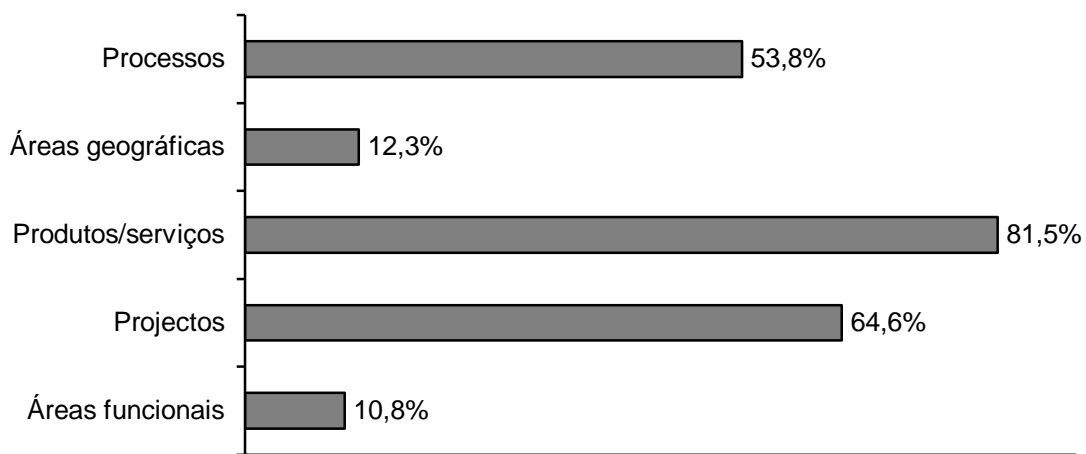


Figure 5: Organization of the company

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Figure 6 reveals that, in order to respond to market needs and adapt quickly to change, companies have flexible work teams (35.4%), favor work based on objectives / results (26.2%) and easily adapt technologies according to market demand (24.6%).

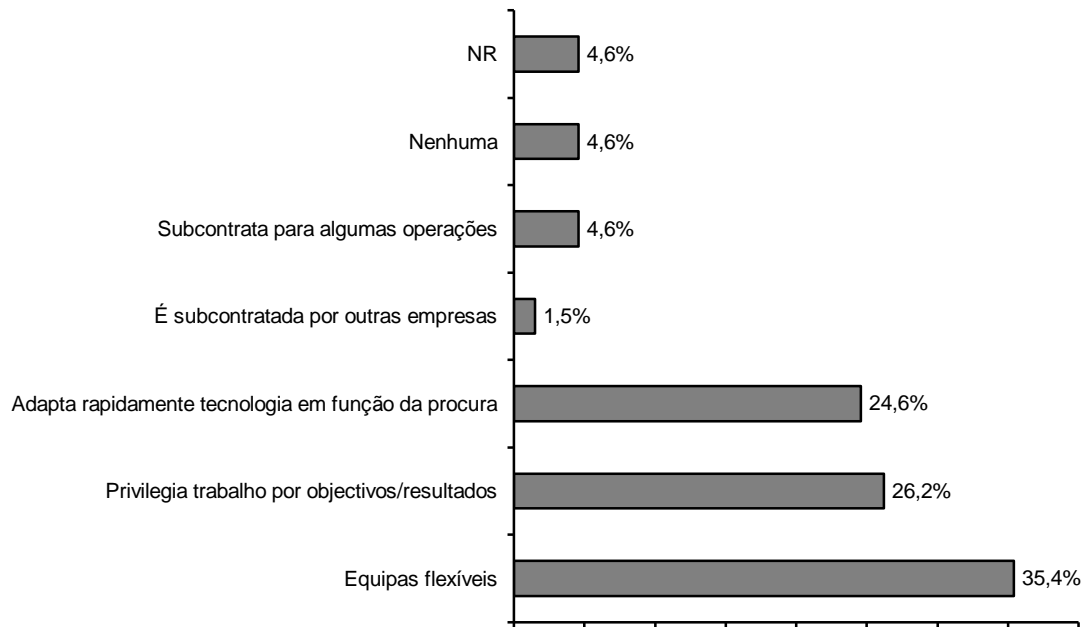


Figure 6: Organizational characteristics of the company

In order to maintain a good relationship with their customers in order to retain their loyalty, the approach followed by the entrepreneurs privileges customer segmentation (67.7%), the development of individual customer relationships (64.6%) and the preparation of market studies (41.5%) to better monitor the needs and tastes of its customers (see figure 7).



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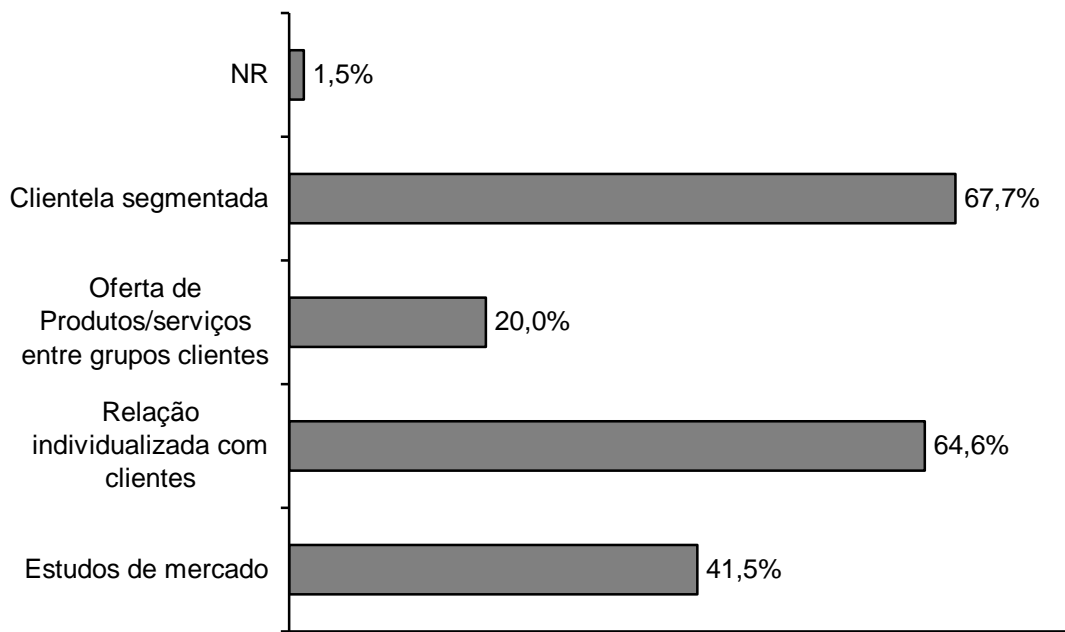


Figure 7: Customer approach strategies

Taking into account the use of Information and Communication Technologies (ICTs) by companies, the most used computer systems by companies are related to accounting and invoicing (52.5%), as can be seen in the figure 8.

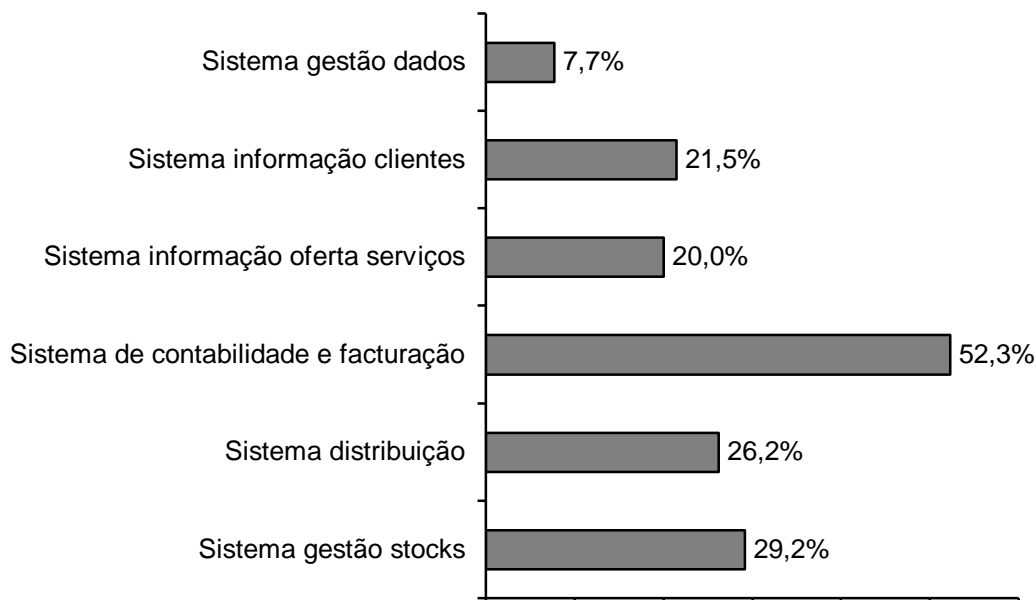


Figure 8: Information and Communication Technologies used by the company

As shown in figure 9, the greatest benefits pointed out by companies in view of their location are related to the proximity of suppliers and customers, which allows savings in the costs of distribution of products / services, a more personalized, efficient and effective service to customers. and great availability from suppliers.

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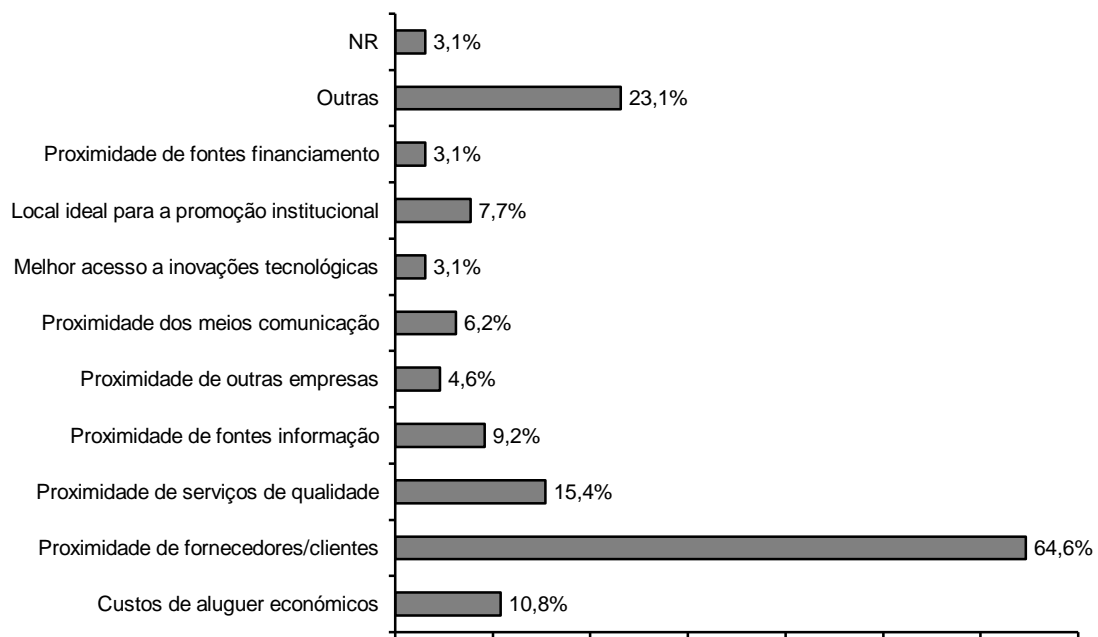


Figure 9: Advantages of the company's location

### 3.3. INNOVATIONS INTRODUCED

Innovation has become a key factor in the process of economic competitiveness, and within the scope of the concept of innovation systems, two complementary aspects can be considered, namely, institutional and technological [14].

Of the total number of companies, 66.2% introduced at least one innovation and, as can be seen from table 3.

Table 3 - ICT innovations

Groups	Frequencies	
	Absolute (n)	Relative (%)
<b>Cooperation in introducing innovations</b>		
I didn't cooperate with anyone	22	33.8
Non-university innovation centers	2	3.1
Distributors	15	23.1
Technology providers	17	26.1
Other suppliers	14	21.5
Rival companies	2	3.1
SME / Innovation Network Program	7	10.8
<b>ICT innovations introduced</b>		
Law Suit	11	16.9
Products / services	28	43.1
Organizational	29	44.6

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none	20	30.8
<b>Results of the innovations introduced</b>		
none	1	1.5
More agile logistics management	14	21.5
Broader product / service offering	14	21.5
More flexible production process	9	13.8
Faster response to market demand	17	26.2
New organizational structure	17	26.2
Automated internal management	13	20.0
Other benefits	10	29.2
<b>Patent ideas</b>		
Yes	9	13.8
No	56	86.2
<b>Origin of Innovations</b>		
Not applicable	12	18.5
The entrepreneur	1	1.5
The workers	20	30.8
Specialized companies	24	36.9
Company design department	9	13.8
University education	15	23.0
<b>Importance of R&amp;D investments</b>		
<40%	12	18.5
40-70%	14	21.5
71-90%	1	1.5
≈100%	3	4.6
NR	35	53.9

The innovations were introduced by cooperating with suppliers (47.6%), by specialized companies hired for the purpose (36.9%) and by employees of the company itself (30.8%). They had an impact mainly on the speed of response to the demand market and at the organizational level. Only 13.8% of companies have patented these innovations.

For around 40% of companies, the weight of investments in R&D activities represents up to 70% of the total investments made. However, the majority did not make any investment in R&D activities (53.9%).

### 3.4. MARKET AND COMPETITIVENESS

The market consists of the group of customers or potential customers who have the possibility or the desire to buy certain products or services, to satisfy their needs or desires [14].

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In this regard, the results show that the proportion of entrepreneurs operating in international markets is reduced. In fact, only 12.3% of respondents operate simultaneously in national and international markets. The companies are present, essentially, in the Spanish market in which more than 75% of the companies operate (see figure 10).

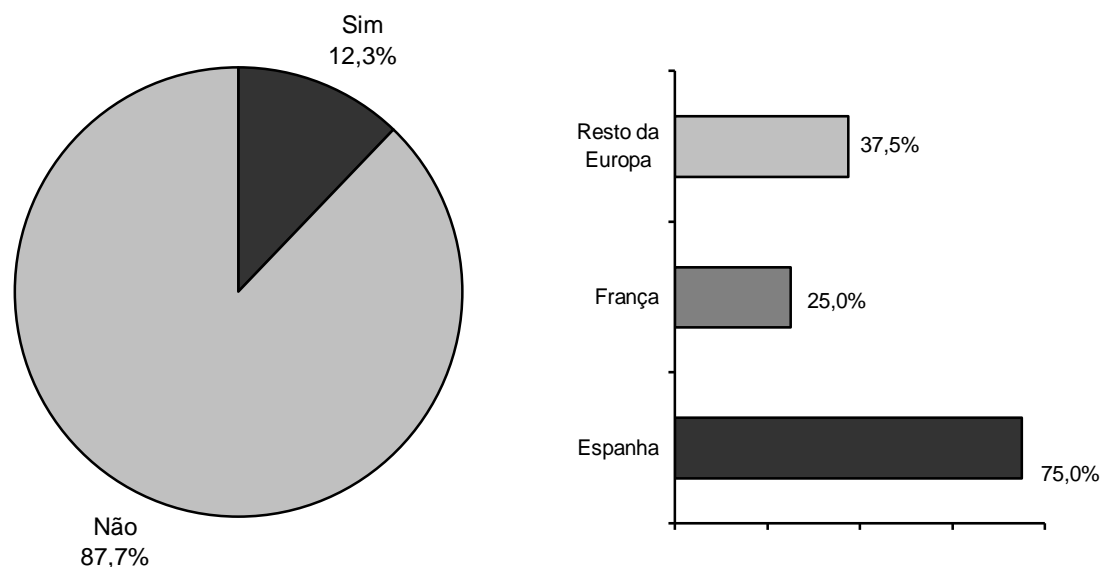


Figure 10: International markets (n = 8)

The competitiveness analysis looks at a group of companies or other institutions / organizations (in a given sector) that offer certain products or services that are similar or substitutes, close together [14].

The vast majority of entrepreneurs consider facing strong competitive pressure. In fact, more than 50% of respondents consider that the competitive pressure is high (50.8%) and 20% consider it to be very high. However, the percentage of respondents who consider themselves to have weak competitive pressure (27.7%) is significant (see figure 11).

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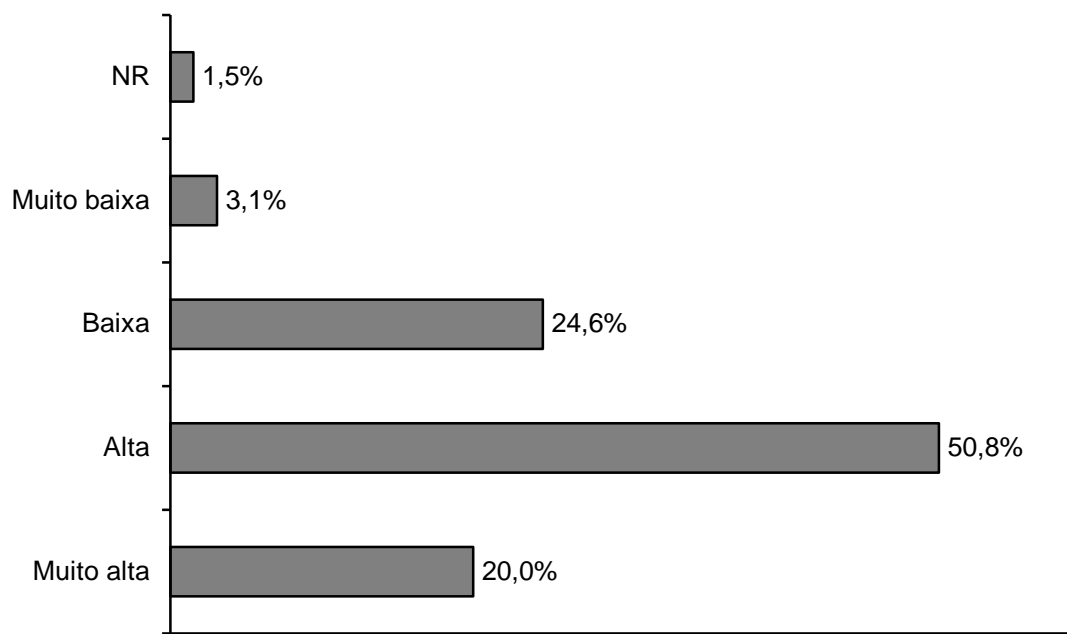


Figure 11: Perception of competitive pressure

The companies studied employ, on average, 5 workers and 50.8% achieve a turnover of up to 100,000 euros making a positive contribution to local socio-economic development (see table 4).

Table 4: Turnover, turnover evolution and number of employees, profit forecast

Groups	Frequencies	
	Absolute (n)	Relative (%)
<b>Volume of business (€)</b>		
<30000	21	32.3
30000-100000	12	18.5
100001-250000	6	9.2
> 250000	20	30.8
NR	6	9.2
<b>Evolution of the number of workers</b>		
Decreased	9	13.8
It remained	52	80.0
Increased	3	4.6
NR	1	1.5
<b>Billing evolution</b>		
Decreased	11	16.9
It remained	37	56.9
Increased	15	23.1
NR	2	3.1
<b>Profit forecast for the current economic year</b>		
Yes	61	93.8
No	4	6.2

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Despite the competitive pressure, 84% of companies maintained (80%) or increased (4.6%) the number of workers compared to the previous year. The same was true in relation to the volume of invoicing that was maintained or increased to 80% of the companies. More than 90% of companies expect to reach the end of the economic year and obtain a positive result.

A demonstration of how entrepreneurs intend to maintain their competitive advantage in the business was the fact that a large percentage of companies consider that they provide services or offer quality products (67.7%). In fact, quality, as can be seen in figure 12, emerges as the critical success factor capable of supporting the competitive strategy of the studied companies.

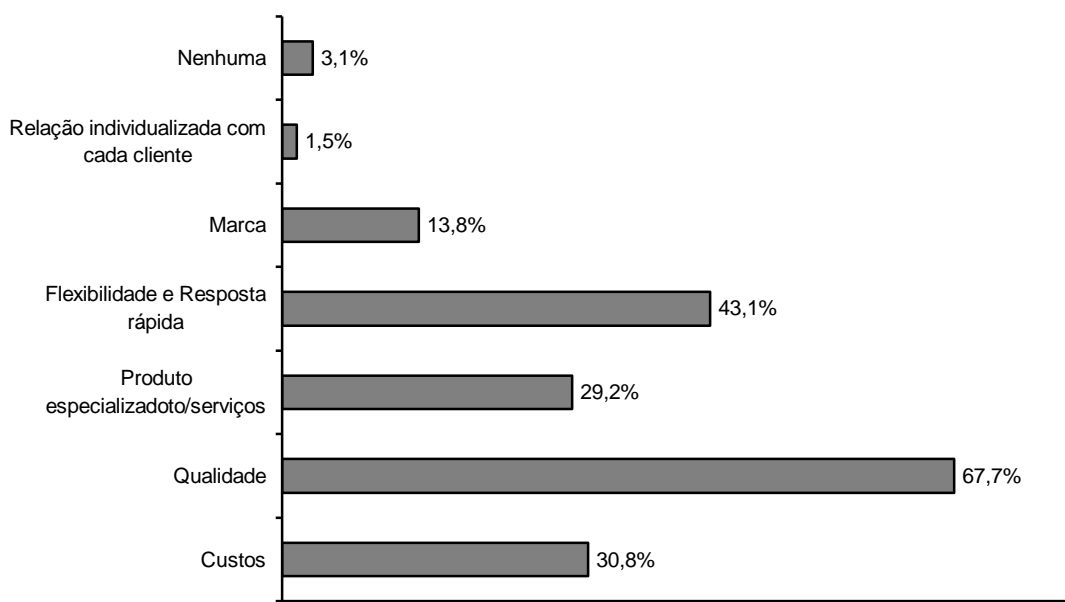


Figure 12: Predominant strategies in the company

The Brand is a promise about the characteristics and quality of the product and about its maintenance over time [18]. Despite the advantages of investing in a brand, namely, customer loyalty achieved through the confidence that the brand conveys [18], in the opinion of these entrepreneurs, the importance of the brand is not very significant (13.8%), which somehow, it seems to contradict the strategy of supplying quality products / services

### 3.5. COMPANY GROWTH

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Considering the growth strategies, 13.8% of entrepreneurs want to maintain their current position in the market. However, the overwhelming majority intends to grow by adopting strategies such as the development of new products and placing them in the markets where it already operates (64.6%) or conquering new markets with current products (38.5%) (see figure 13).

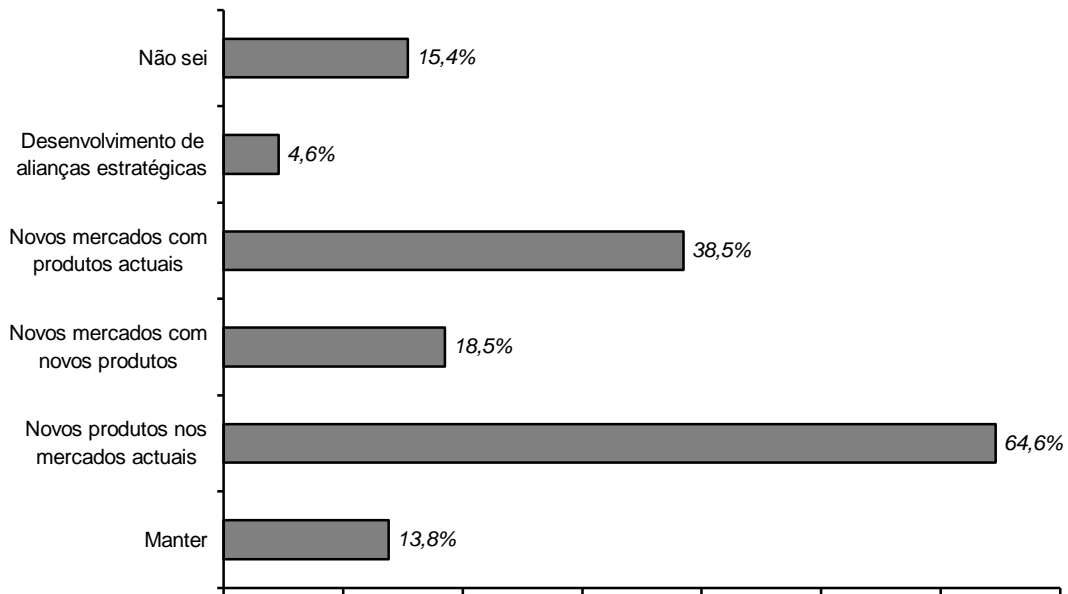


Figure 13: Growth strategies

Flexibility is seen by 80% of entrepreneurs, as an important feature to boost the company's growth since they intend to develop new products and enter new markets with current products. Again, to finance this growth, most entrepreneurs intend to use equity (see figure 14).

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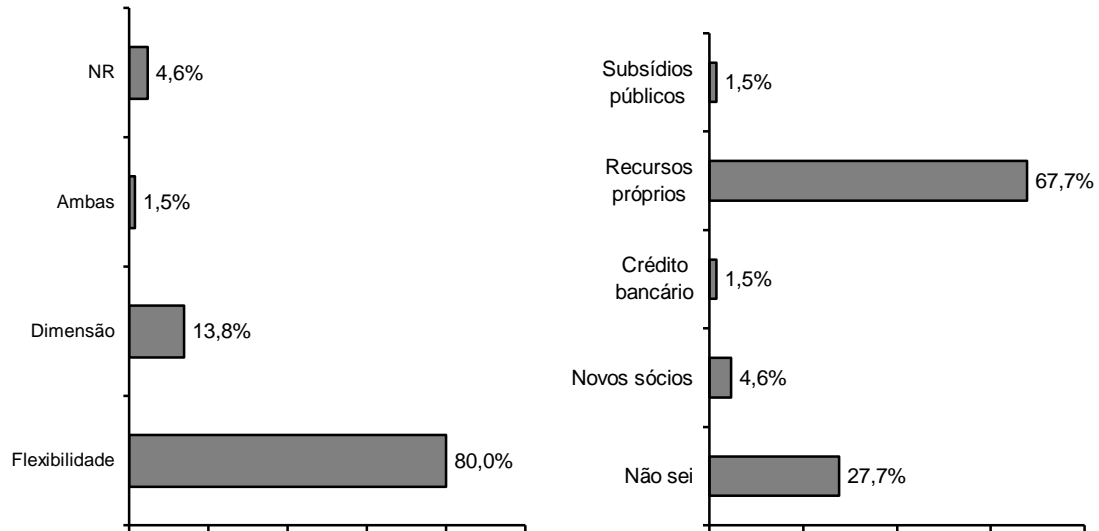


Figure 14: Ways to drive and finance growth

### 3.6. E-COMMERCE

The Internet environment has been an important tool in the search for relevant information for the management of organizations, in the modification of business processes and even in the creation of new business models [19]. Shipping products via the Internet is an easily accessible form of sales, as short sales / direct sales channels have improved prices at source, increasing company revenues.

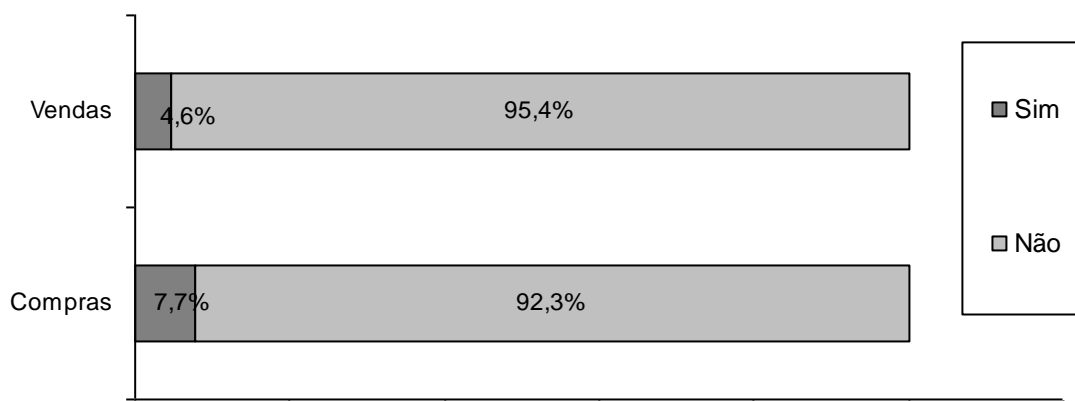


Figure 15: Internet purchases and sales

Although almost all companies have internet (73.8%) and a significant percentage have a website (26.2%), investments in internet advertising represent on average 17% of the total investment in advertising (1111.5 €). On the other hand, commercial activities, whether purchases or sales, made using these technologies are



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made by a minority, not even reaching 10% (see figure 15). However, purchases are made by a larger number of companies compared to sales. The same results were obtained in a study that aimed to explore the phenomenon of entrepreneurship and innovation within SMEs in Portugal with 30 companies of the COTEC Portugal SME Innovation Network [16].

### 3.7. CREATING NEW BUSINESS

When entrepreneurs were asked about the possibility of creating another company in the near future, only 12.3% answered affirmatively and planned to create it within a period of more than 12 months.

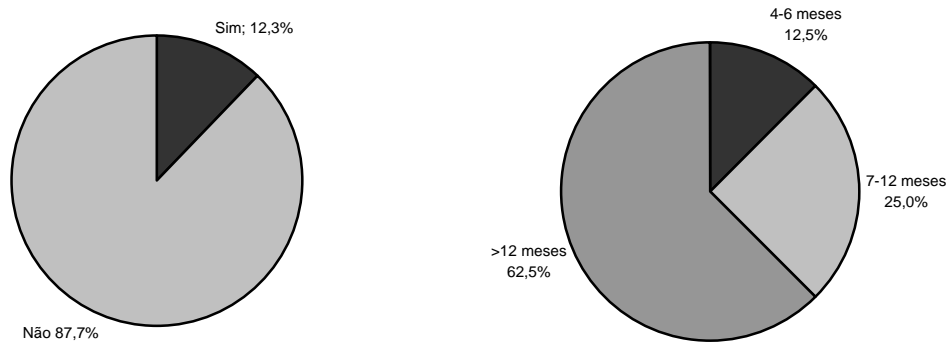


Figure 16: Creation of a new company and deadline (n = 8)

This new business will be financed using not only equity (75%), but also traditional funding sources such as bank credit and national and international public funding sources.

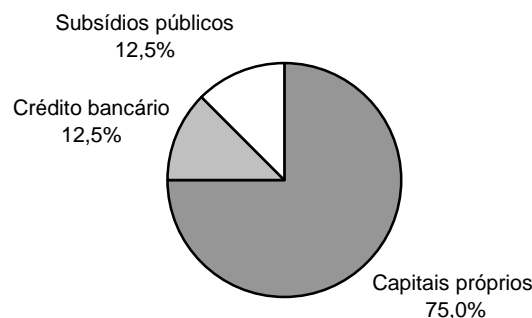


Figure 17 - Sources of financing for the new company (n = 8)

## 4. CONCLUSIONS

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This communication aimed to analyze the phenomenon of entrepreneurship and innovation in micro and small companies in Bragança and Macedo de Cavaleiros as well as their contribution to local development. The surveyed entrepreneurs are aged between 23 and 67 years old, with an average age of 44.7 years ( $SD \pm 11$ ), are mostly male (70.7%) and have compulsory education (55 , 4%). The vast majority of entrepreneurs created their business in the 80s and 90s of the last century and before their creation they already worked for others (83.1%). Economic motivation (39.4%) and personal fulfillment (39.4%) were the reasons that weighed most in the decision to create the company.

The companies studied employ, on average, 5 workers and 50.8% achieve a turnover of up to 100,000 euros making a positive contribution to local socioeconomic development. They operate mainly in the national market and, despite the small size, 12% also operate in the international market. Despite the competitive pressure, 84% of the companies maintained (80%) or increased (4.6%) the number of workers compared to the previous year. The same was true in relation to the volume of invoicing that was maintained or increased to 80% of the companies. More than 90% of companies expect, at the end of the economic year, to obtain a positive result.

Of the total number of companies, 66.2% introduced at least one innovation. For this, they mainly resorted to cooperation with suppliers (47.6%), namely, technology suppliers and other suppliers. These innovations had an impact mainly on the speed of response to the demand market and at the organizational level. However, only 13.8% of entrepreneurs claimed to have patented these innovations.

In the near future, 12.3% of entrepreneurs intend to create a new business within a period of more than 12 months. This new business will be financed using mainly equity (75%), as happened in the start-up phase of the current business (53.8%).

### **THANKS**

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