

Innovation, Risk and Proactivity: Are firms following these strategies?

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Abstract: - In the present paper, management strategies are analysed in order to evaluate the degree of entrepreneurship in firms' management by the use of innovation, risk and proactivity strategies. Since we are dealing with management strategies, it is possible to relate them to the concept of *Intrapreneurship*. This study was done in a region of northern (Portugal *Vale do Sousa*) and focus on Industrial and Construction sectors. The region is composed of six *concelhos*¹ in some of which it is possible to identify some industrial districts. In order to get a valid sample, a group of 251 firms were analysed. Each strategy was analysed individually and the results pointed to a lack of culture of entrepreneurship in firms' management. Only Proactivity presented a positive result in firms' management. When grouping the results, it was possible to conclude that the degree of intrapreneurship is very low and firms are surviving (even succeeding) by following conventional (*old fashioned*) management strategies.

Key-Words: - Innovation; Risk; Proactivity; Small firms; Intrapreneurship; Strategy.

1 Introduction

The strategies referred on the title of this paper are important not only as regards firm management, but also because they can be directly related to the concepts of entrepreneurship or intrapreneurship.

Entrepreneurship can be presented from an external [1], [2], [3], [4], [5], [6], [7] or an internal perspective [8], [9], [10], [11]. The strategies analysed in this paper will be taken into consideration mostly from an internal perspective. According to several authors [11], [12], [13], [14], [15], [16], [17], [18], [19], this perspective can be described as Intrapreneurship.

Entrepreneurship can be measured by three factors: **(1)** Proactivity **(2)** Innovation and **(3)** Risk propensity [20]. Another model [21], frequently referred brings in yet two new factors: **(4)** Autonomy and **(5)** Competitive Aggressiveness. However in a later study [22], a negative relation between these two last factors was found by the same authors. Most of the studies published on the concept of entrepreneurship are based on the original concepts (Innovation, Risk and Proactivity), though.

Entrepreneurship is undoubtedly present in firm creation, but the same innovative capacity must be present in firms' management. This capacity cannot be implemented by law, but rather depends on strategy, culture and group relationships that will contribute to competitive advantages. These relations must, however, be present in firms' environment and may be identified through the firms' organizational culture. This allows us to conclude that, if the firm has a culture of innovation, risk and proactivity, this is probably the result of the firms' mission and strategy.

The analysis of the relationship between entrepreneurship and strategic management [24] has shown that entrepreneurial intensity is influenced by strategic management and firms' competitive advantages.

These concepts are very similar and present a string relation. Innovation in strategic management is a concept very close to entrepreneurship [5]. It can be presented as a dimension of intrapreneurship [23], but one can go further and argue that innovation in strategic management is intrapreneurship; therefore, talking about,

¹ *Concelho*: Portuguese administrative unit divided into smaller units called *freguesias*.

innovation, risk and proactivity as firm strategies is talking about intrapreneurship.

In order to be competitive a firm must develop its innovative capacity. [26], [27], [28], [29], [30], [31], [36]. And, since innovation also plays an important role on adding value to firms' production [32], one can argue that innovation is a way of becoming more competitive as well.

Until now the importance of innovation on firm management has been widely acknowledged, but there are those who claim that it involves more than just firm growth; innovation also fosters regional and local development [7], [33], [34], [47]. If in a region the firms are able to develop an innovative culture, it will draw new talents, new capital, and generate more and better innovation for the region [50]. It can be said that innovation plays a major role both in the firms and the region.

In the early 20th century, two other concepts were added to the concept of innovation in entrepreneurship: those of risk and uncertainty [1]. Knight referred the probability knowledge on risk calculation as the main difference between these concepts. On the other hand, uncertainty poses the problem of dealing with non-predictable events. The concept of risk is frequently associated with the concepts of entrepreneurship and intrapreneurship [2], [35], [36], [37]. According to Nistor et.al. [38], any activity or economic effort is based on a number of unknown and uncertain factors or opportunities for the simple reason that its subject is located in the future, meaning that risk is always present in firm management strategies. These strategies receive both internal and external influences. A risk taking strategy may be a positive factor on or lead to market pioneering [39], which in turn is starting to make room for the concept of proactivity.

According to the Global Entrepreneurship Monitoring [40], risk presents a relationship with opportunity (one of the reasons that justify entre/intrapreneurship). Opportunity seeking and exploitation is an evidence of proactivity.

"Being proactive is about making things happen, anticipating and preventing problems, and seizing opportunities. It involves self-initiated efforts to bring about change in the work environment and/or oneself to achieve a different future" [41]. This definition of proactivity is valid both for individuals as well as firms.

Entrepreneurship is also a process or a progression that includes an opportunity sequence of events and behaviours (or activities) [42]. These events or behaviours are expected to be proactive in what concerns both market reply and market changes [22]. According to Lumpkin & Dess [22],

proactivity is important because it presents a positive relation to firm performance.

Some authors [43] argue that entrepreneurship and risk taking behaviour should be promoted by universities, particularly in conservative regions and cultures. By doing so, universities would be playing a major role in serving and helping their communities prosper, while impacting the emerging economy positively. Together with innovation these concepts would lead the region to an entrepreneurial culture that would improve regional development.

From this brief literature review it is possible to conclude that the concepts of entrepreneurship and intrapreneurship present strong links to the concepts of innovation, risk and proactivity. All these factors were considered in a study of the differences among entrepreneurs, small business owners and large firm managers [44]. The results classify entrepreneurs as motivated agents, searching for success and exhibiting risk propensity behaviour. They promote innovation by changing products, markets or industries. Taking into consideration the mentioned study and some other literature references it is possible to list some factors that distinguish these three types of managers.

Table 1. Managers' behaviour in different business units

Factors	Entrepreneurs	Small business owners	Large firm managers
Proactivity	+++	++	+
Innovation	+++	+	++
Risk propensity	+++	++	+
Motivation	+++	+	+
Results search	+++	+	+
Management techniques	+++	++	+++

In table 1 a summary of some entrepreneurship related characteristics, as well as other management styles, is presented. The results point to there being no specific characteristics exclusive to entrepreneurship, since they are all present in different management styles. However, Proactivity, Innovation and Risk propensity are concepts which are closely related to entrepreneurs; consequently they are related to entrepreneurship. The combination of some of these factors with economic environment, local facilities, or even local culture will define the contribution that each firm can give to local development and sustainability (on firm and regional level).

In what regards differences between small and large firms, the results from a study on people's efforts to become small firm entrepreneurs through competency assessment and development indicate "that the small firm entrepreneur generally excels in "building a mechanism for talent development", while a large firm manager is good at "knowing the different urgency of elements of a problem" or "making feasible solutions for actions". Thus, if a large firm manager wants to emulate a small firm entrepreneur, the suggestion is to de-emphasize methodical thinking and paper work, and to undertake more human networking" [48].

The main question(s) that can be raised after this brief theoretical review are: How are firms (small ones) dealing with these concepts? Are they presenting a healthy strategy? These concepts will be analysed within the context of the region in the next chapters.

2 The Region and the Questionnaire

2.1 The Region

The region where this study was conducted is composed of 6 *concelhos* (*Castelo de Paiva, Felgueiras, Lousada, Paços de Ferreira, Paredes, Penafiel*) which together form the *Vale do Sousa Urban Community*. This region is located in the North of Portugal, and for statistical purposes it is a region within NUTE III – *Tâmega*. This region has 338,000 inhabitants of which a relatively high percentage is young people.

In the past the main economic activity of this region was in the primary sector, as indeed in most of the country. Other activities such as manufacturing or services have been assuming a more relevant role. Nowadays the main activities in this region are: shoe making, textiles, manufacture of furniture and construction. In four of these *concelhos* it is even possible to identify, some industrial districts [51], [52]: *Felgueiras*: Shoe production; *Lousada*: Textiles; *Paços de Ferreira* and *Paredes*: Manufacture of furniture.

In order to describe the entrepreneurial fabric, it was necessary to collect information from different institutions, since the available information varies from source to source. According to data from the Statistics National Institute, this region had 34,049 firms registered in 2005. However, information from CofaceMOPE reveals the existence of 11,973 firms and, according to the Work Ministry, the number of firms is 10,231. After contacts with local entities, it became clear there is no accurate information about

the exact number of firms, which led us to believe that the number of firms was probably close to 12,000.

According to the data provided by the above mentioned institutions, this distribution (in relative values) is similar, pointing to retailing, manufacturing and construction being the main activities, representing 75% of the firms in the region.

Nevertheless, it is not easy to analyse the firms' management strategies and their entrepreneurial and innovative actions using a single approach to all of them, since they belong to different sectors. The degree and type of entrepreneurship differs from a clothing store to a technology software industry [53] (even as regards the strategies adopted). In order to find more significant results, it was decided to limit this study to industrial (manufacturing and mining and quarrying firms) and construction businesses. This choice can be justified by the number of firms these activities engage, almost 50% of the total number of firms, and 75% of total employment. According to the data provided by the three institutions, the number of firms engaged in the industrial and construction sectors are around 5,000 (this figure will be used as the total population for the purposes of this study).

Still according to Coface/MOPE, firm size in this region does not follow the usual distribution pattern, with micro firms being by far the commonest type of firm. In this region, 62% of the firms are micro firms (in the whole of Portugal this figure is around 80 percent), whereas small firms represent 35%. Together they account for 97% of the firms, which is well within the class distribution found for Portugal. The remaining 3% are classified as medium-sized firms (large firms were not considered). However, in view of the data provided by the Work Ministry, micro firms reach 79% and 85% of the total number of firms, depending on whether they have less than ten employees or a turnover up to 2 million Euros, respectively.

2.2 The Questionnaire (Sample Population)

In order to get the necessary results to proceed with this study and considering the alternative options and some experience from past studies, the questionnaire seemed to be the best solution. Based on the literature review theories and a number of ideas and suggestions, a summary table was built to support the questions that were to follow (see appendix I).

Since questioning the whole of the population (5,000 firms) was out of the question, the study was

focused on a valid sample. The following formula [54], which takes into account the variability of the factors studied, the confidence interval required and the error margin was used to calculate the sample size:

$$(1) n = p\% * q\% * [z/e\%]^2$$

where: n : minimum sample size required;

$p\%$: proportion belonging to the specified category;

$q\%$: proportion not belonging to the specified category;

z : z value corresponding to the level of confidence required;

e : margin of error required;

According to Saunders, since the population is less than 10,000 a smaller sample can be used without affecting the accuracy.

The adjusted formula is:

$$(2) n' = \{n/[1+(n/N)]\}$$

where: n' : adjusted minimum sample size;

n : the minimum sample size (as calculated above);

N : total population;

Taking the strategic entrepreneurship (the combination of innovation, risk and proactivity factors) as the main factor and considering a variability of 80%–20% (which was later corroborated by the results), $n' = 235.47$ was obtained.

The questionnaire presented to firms included a large number of questions so as to allow the evaluation of different aspects of the firms' management. For the purpose of this paper, the questions regarded only the effect of the above mentioned factors on the firms' strategies.

The type of questions asked followed a Likert-type scale (1 to 5), or a Yes or No pattern. The total sample comprised 251 firms.

3 Innovation, Risk and Proactivity

As it was already mentioned in the beginning of this paper, the degree of entrepreneurship (or intrapreneurship) takes into consideration three factors: innovation, risk and proactivity. The results of each strategy and sub- strategy adopted by firms regarding their management are presented in the next section.

3.1 Innovation Strategies

In order to measure innovation, the questionnaire included a table with 14 strategies that could score 20 points, since some strategies were classified with different levels of importance, using different levels of weighting for that purpose. Considering the strategies presented in Table 1, the first two strategies (*Reorganization of Productive Processes* and *New Products*) had a weight of 3 points and the next two (*Differentiation* and *Focusing Change From Production to Sales*) a weight of 2 points. The remaining strategies were assigned 1 point.

Interviewees were asked to mark the strategies that the firm had been following in the latest years (with the possibility of marking one or more strategies).

In order to classify each firm according to their degree of innovation, 5 categories were created:

[0 – 4[: averse to innovation (-)

[4 – 7[: averse to innovation

[7 – 10[: moderate

[10 – 15[: innovative

[15 – 20]: innovative (+)

The reason to create different categories (3 categories from 0 to 9 points and two categories from 10 to 20 points) is related to the high percentage of firms that scored 9 or less points (87%). These results were somehow expected, for a sample study had been taken and the results suggested that most of the firms would present a very low level of innovative strategies. In the same previous study, only 20% of the firms reached a global result equal to or higher than 10 points. Global results are presented in Figure 1:

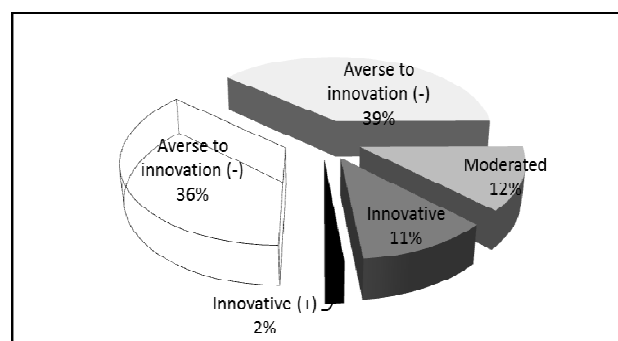


Fig.1. Innovation strategies classification

According to figure 1, it is clear that only 13% of firms present an innovative strategy (*innovative or innovative (+)*), which means that only 13% of the firms reached a score of 10 or more points. A similar result was obtained in the firms with a moderate approach (12%). However, it is important

to mention that moderate approach to innovation is a negative result (under 10 points in a score of 20 possible).

Most firms (75%) can be said to be averse to innovation (*averse to innovation and averse to innovation (-)*). When one considers the 75% of innovation averse firms together with the 12% moderate (also a negative result) one realizes that 87% of the firms cannot be considered innovative and that this is an aspect which does not play an important role in these firms' management.

Table 2 presents the main strategies followed by these firms:

Table 1. Innovation strategies adopted

Strategy	%
Reorganization of productive processes	14
New products	9
Differentiation	10
Focusing change from production to sales	2
Investments in new productive equipment	19
Sales extension (New markets)	14
New Sales/marketing strategies	6
Management reorganization	9
Competitors' cooperation	0
Suppliers' cooperation	1
Customers' cooperation	2
Social responsibility	4
Investments in the firms' image	10
Total	100

Some of the figures in this table are worth commenting on. Firms elected "*investment in new equipment*" as their main strategy (19%), followed by "*reorganization of productive processes*" (14%) and "*selling outside firms' usual markets*" (14%).

The first two strategies are often related, since the acquisition of new equipment implies the reorganization of the productive process. Unfortunately in the course of this study it was not possible to verify the reasons underlying the purchase of new equipment. We can only assume that it has to do with innovative purposes or necessity. In what regards the strategy of selling on different markets, this may be viewed as a way of improving firm sales, thus avoiding a direct competition war.

It can therefore be concluded that firms do not present very important innovations. The most frequent strategies adopted are the ones necessary to ensure firm sustainability.

This brief analysis of innovation procedures points to the firms' low level of innovation in their management, with the exception of a few which use a significant number of innovation strategies:

Differentiation 10%; New products 9%; Management reorganization 9%.

It is also important to notice that cooperation strategies are those with the lower results, including vertical cooperation, which means that managers do not follow the *Competition* strategy (an industrial district, working together to compete with other regions).

These figures indicate the existence of some innovative capacity in this region, but there is still a long way to go before a proactive attitude and behaviour towards organizational change is achieved. This result does not match the conclusions presented by OECD [45], which classified Portuguese small industrial firms as innovative. At least in the region within the purview of this study, firms do not appear to follow innovative strategies.

In table 3 it is possible to find some differences among the main categories of innovation. The shadow cells correspond to the most important strategies followed by each class of firms (on innovation levels)

Table 2. Main strategies by innovation categories

Strategy	Averse to innovation (-)		Averse to innovation		Moderate		Innovative		Innovative (+)	
	N	%	N	%	N	%	N	%	N	%
Investments in New productive equipment	53	33	53	19	19	13	25	13	3	8
Reorganization of productive process	1	1	60	22	18	13	27	14	4	10
Sales extension (New markets)	31	19	36	13	18	13	23	12	5	13
Differentiation	13	8	33	12	18	13	17	9	4	10
New Sales/ marketing strategy	16	10	7	3	11	8	12	6	4	10
New products	0	0	22	8	21	15	27	14	4	10
Focusing change from production to sales	3	2	3	1	1	1	5	3	4	10
Management reorganization	13	8	19	7	13	9	22	12	4	10
Competitors' cooperation	0	0	0	0	0	0	2	1	0	0
Suppliers' cooperation	4	2	4	1	2	1	2	1	0	0
Customers' cooperation	6	4	5	2	3	2	1	1	1	3
Social responsibility	1	1	11	4	5	4	9	5	4	10
Investments in the firms' image	22	13	23	8	13	9	16	8	3	8
Others	0	0	0	0	0	0	1	1	0	0

The figures in this table allow us to do various combinations. Considering those that can be more

interesting for this paper, it is possible to conclude that the three top class firms are those whose main strategy is something that can be linked to organizational (internal and external) change. Their most important strategies are new products, new markets and the reorganization of the productive process.

These results mean that change is more frequent in firms with a propensity to innovate; the main problem here is to find firms which possess that propensity. As it is clear from figure 3, only 25% of firms (at least) are moderate in relation to innovation.

It is also interesting to notice that firms in both *averse to innovation* and *innovative* categories present the *reorganization of the productive process* as their main strategy. However, when one considers the strategies in the less innovative firms (*Investments in new equipment* and *reorganization of the productive process*), even without further information, the doubt whether those firms are innovating out of necessity still persists. Nowadays technology is everywhere, and if a firm does not follow technological evolution, not only the machinery but the firm itself may become obsolete. It is possible, therefore, to conclude that firms only innovate when they are forced to.

This brief analysis about innovation procedures allows us to conclude that in this region, but for a few firms, which use a significant number of innovation strategies, the majority present a low level of innovative management. This result does not match the conclusions of an OECD report [45] which classified Portuguese small industrial firms as innovative.

3.2 Risk Strategies

In order to do the risk analysis, the same methodology as for innovation analysis was followed. This time risk strategies could score a maximum of 10 points. According to Table 4, the first strategy was weighted with 2 points and all the other strategies carried a weight of 1 point. The risk categories were organized as follows:

- [0 – 3[: very risk averse
- [3 – 5[: risk averse
- [5 – 7[: risk moderate
- [7 – 9[: risk taker
- [9 – 10[: risk taker (+)

The results are presented in Figure 2.

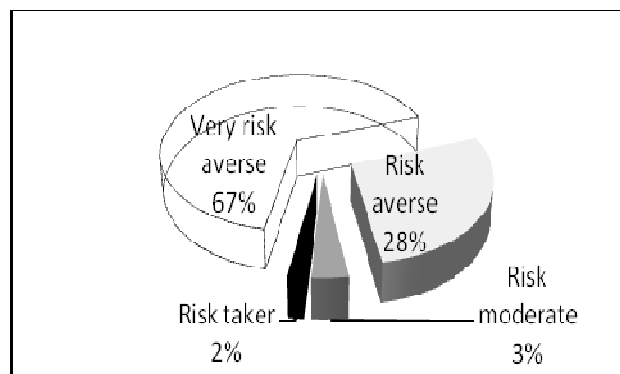


Fig. 2. Risk strategies classification

The results of the risk analysis are similar to those obtained for innovation. Accordingly, 67% of the firms present a very high level of risk aversion, which means that in recent years they have adopted a maximum of 2 risk strategies. There are still 28% of firms that have adopted a maximum of 4 risk strategies and that can be classified as risk averse; consequently, 95% of firms in this region present a risk aversion management. As regards risk takers and moderates, the result obtained was 5%.

As it happened with innovation strategies, an analysis of the most important risk strategies followed by firms in the *Vale do Sousa* region was done.

Table 3. Risk strategies adopted

Strategy	%
Investments in identifying customers' needs	12.6
Application to financial support other than bank or governmental subsidies	13.8
Investments in quality improvement	31.9
Satisfaction of customers' new needs	26.4
Implementation of management team (qualified resources)	9.2
Recourse to consultancy services	2.1
Internationalization of Production	0.6
Partial internationalization of production	3.1
Others	0.2
	100.0

The most frequent risk strategies are "investments in quality" (31. %) and "satisfaction of new customers' needs" (26.4%). It is important to emphasise that both strategies are almost risk free, given that in order to survive firms must invest in quality and keep their customers satisfied. At the same time, a financing strategy through means other than the firms' own capital, bank credit, or subsidies was chosen by 13.8% of the respondents, which proves the existence of an informal financing practice. It may also be questioned whether support

programs (namely European supports) have been designed to meet firm's needs.

In the course of the study, the relationship between the strategies *Satisfaction of customers' new needs* and *Investments in identifying customers' needs* was also analysed. Considering χ^2 test results, it was possible to reject the null hypothesis that presented the variables independence with a confidence interval of 99%.

These results do not differ from innovation analysis, because firms neither innovate nor take risks.

Besides financing out of the conventional systems, the remaining strategies do not present a significant value. Even those with higher values are conditioned by the percentage of firms that can be classified as risk takers (2%).

3.3 Proactivity Strategies

After innovation and risk had been analysed, the next step was to look into proactivity behaviour in these firms. It was measured through a latent variable, using a group of proactivity related indicators. Those indicators were the following:

- Employees' qualifications
- Employees' professional education
- Long-run versus short-run management
- Opportunities for future exploitation versus present exploitation
- CRM organization

In order to evaluate the results, the Cronbach's alpha was measured; the results, however, were not favourable, since the less than 0.6 obtained pointed to the probable inconsistency of the indicators. Nevertheless, in view of the fact that the indicators had resulted from the literature review and that they were all in some way or another related to proactivity, despite the Cronbach's alpha results, they were used to analyse the degree of proactivity.

Departing from the five proactivity indicators, an average result of 3.49 was obtained (the indicators were analysed on a 1 to 5 Likert-type scale). This result seems to be much better than those obtained for innovation and risk analyses, but in order to get them all on the same scale, innovation and risk results were standardized with proactivity. Recoding the two first factors (innovation and risk) on a 1 to 5 scale, the results presented an average of 1.27 for innovation and 1.06 for risk, which validated the perception that proactivity had shown a better result.

3.4 Strategy Analysis

The results for the three main factors of entrepreneurship allow us to conclude that firms accept changes but only when these have to do with aspects that can bring about profit on the short term. They act proactively probably because they expect a quick positive reaction from the market, but they do not innovate or take risks in their management neither welcome changes in structural aspects likely to affect the firms' future. This is concurrent with Avlonitis' & Salavou's research [46]. These authors identified two groups of entrepreneurs: active and passive entrepreneurs. The former present a higher risk propensity but they are all proactive as regards new products or new market approaches.

Considering the results obtained for the three strategies presented and after a value homogenization had been done, the degree of entrepreneurship was calculated and an average result of 1.94 (on a 1 to 5 scale) was obtained. Using SPSS software, each case was then recoded so that entrepreneurship categories could be established. From this recoding it was possible to create 5 entrepreneurship categories which are as follows:

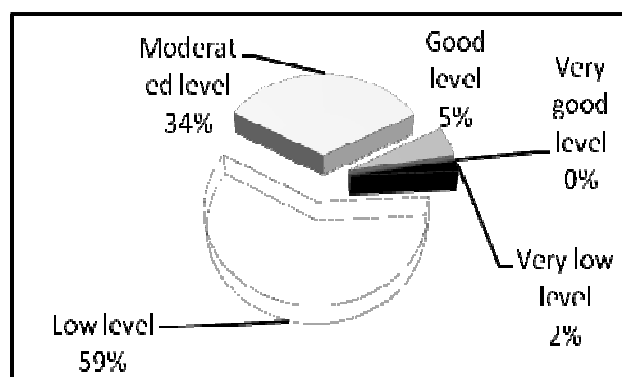


Fig. 3. Intrapreneurship levels

The figures presented in Figure 3 reveal that most firms in the *Vale do Sousa* region cannot be classified as entrepreneurial (innovative) firms. Most of them (59%) present a low level of entrepreneurship and the 0% of firms with a very good level corresponds to the real situation because there are no firms suited to be included in this category. Only 5% present a good level of entrepreneurship and one must not forget that these values are supported by the good results of proactivity, which was the strategy with the best results.

In short, as far as entrepreneurship is concerned, it is possible to say that firms present a very low level of innovation and risk as regards management and strategic decisions, thus

classifying as risk and innovation averse. In what concerns proactivity, results are more favourable to entrepreneurship. The combination of the three factors leads to a high percentage of firms classified with a low level of entrepreneurship (59%), while 34% present a moderate level.

The degree of entre/intrapreneurship presented in this study was measured with recourse to management actions/strategies, which lead us to the concept of strategic entrepreneurship. It differs from the commonly acknowledged notion of entrepreneurship which is only related to firm creation.

4 Conclusion and Further Research

In the present paper, the strategies followed by 251 firms in the *Vale do Sousa* Region were analysed for the manufacturing and construction sectors. Based on a literature review which considers innovation, risk and proactivity to be the main factors of entrepreneurship, this paper extended the analysis of those concepts onto firm management.

Bearing in mind the relationship between 'entre' and intrapreneurship, it appears the three concepts are associated with entrepreneurship and, when applied to firm management (strategy), they could lead to intrapreneurship – innovation, risk and proactivity in firms' management.

The results revealed that firms in this region present very low rates of intrapreneurship. They present a style of management that is poor in terms of the strategies analysed in this paper. Firms were considered innovation and risk averse. Only 13% and 5% of the firms are considered innovative or risk taking, respectively. The results are better for proactivity, though. Comparing the results of the strategies on a 1 to 5 scale, proactivity takes the lead:

Innovation: 1.27

Risk: 1.06

Proactivity: 3.49

Since on the one hand firms are classified as proactive but are, on the other hand, averse to risk and innovation, it can be argued that their managers are willing to change but only when it involves short-run factors. Innovation and risk are strategies that imply changes on a structural level, those being the most important changes.

When one considers business management, the strategies adopted for innovation and risk were very poor. The main strategies were related to firm survival changes rather than to firm proactivity. The most innovative firms design strategies in relation to

new products, new markets or to the reorganization of processes.

In risk analysis the most frequent risk strategies can hardly be classified as risky. Both investments on quality and on customers' needs are almost obligations for firms that intend to stay on the market.

From innovation, risk and proactivity results it was possible to calculate the level of intrapreneurship in this region. As expected, since the strategies adopted are not focused on a sustainable growth, the level of intrapreneurship is extremely low. Only 5% of firms in this region present a good level of intrapreneurship. The weak score does not necessarily entail the notion there are no entrepreneurs in this region; however, according to some studies, these managers are closer to the definition of firm owners than that of entrepreneurs. Alternatively they can be described as passive entrepreneurs - they may be expected to act quickly, even proactively when there is a chance of rapid profit, but as a rule they follow the market in what regards structural changes.

The results obtained suggest new research lines into management style and firms' success in this region, beginning with finding the answers to the following questions:

- What kind of strategies are these firms adopting?
- How can they survive in a competitive market with (perhaps) conventional (old fashioned) strategies?
- How old fashioned are these strategies actually?
- What happened to the *innovate or die strategy* advocated by Gary Hamel?

These results are also interesting because they show to what extent innovation and risk averse firms can be competing with other firms – although how long they will survive using their old strategies is difficult to say. In the recent past, it was possible to compete with the neighbours and succeed; presently the market is different. Competition is not only about our neighbour; it is everywhere - on the web, in the next country or continent. Accordingly managers must develop their competences in cooperation, innovation and risk cultures.

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Theory (References)	Hypothesis	Questions
ENTREPRENEURSHIP		
Miller (1983); Lumpkin & Dess (1996); Dean, Thibodeaux, Beyerlein, Ebrahimi, & D. (1993); Dess, Lumpkin, & Covin (1997); Beaver (2002); Schumpeter (1934); Knight (1921); ...	Entrepreneurship is analysed through (1) INOVATION (2) RISK PROPENSITY (3) PROACTIVITY	(1) Product Innovation (1) Process and/or marketing; (2) In order to get good results it is usual to take risks; (2) Before a new negotiation/business success probabilities are analysed; (3) Firm has a significant influence level on its activity sector (3) Firm follows the market tendencies;
STRATEGY		
Internal Strategy		
CE (2000)	Human resources skills	Employees present low skills levels; Human resources qualification is required and promoted by firm managers;
Entrialgo <i>et al.</i> (2000); Man <i>et al.</i> (2001); Malone (2004)	Strategic Analyses	Stakeholders play an important role on firm management and business planning;
Man <i>et al.</i> (2001) ; Entrialgo <i>et al.</i> (2000) ; Bruce <i>et al.</i> (1999); Ad_Capita (2002); David (1986); Ibrahim (1991); Kargar (1996); Olson & Boker (1995); Kerns (2002); Velho (2003)	Strategic Planning	Most employees participated on decisions concerning their sectors; There is cooperation and collaboration among different firm activities; Working in this firm means being part of a team; Strategic decisions are a result of departments discussion and collaboration;
Same as before	Short/long run perspective	Long-run management is more important than short-run management; Firm adopts a low cost strategy;
Inforegio (2000); CE (2000); Caloghirou <i>et al.</i> (2004); Magretta (2004)	Strategic flexibility	Firm strategy is adapted according to feedback received from the market;
External Strategy		
Freire (1997); Hasegawa (2003); Ad Capita (2002); Rosenfeld (1996); Mytelka (1991); Sarkar <i>et al.</i> (2001); Greeve (1995)	External Cooperation	The firm is a member of one or more entrepreneurial associations; Collaboration with other firms is frequent; Firms can get advantages from an entrepreneurial cooperation network;
EC (2004) ; Voudouris <i>et al.</i> (2000) ; Beaver (2002)	Markets	Is the firm's market local, national or international? Does the firm play in B2B or B2C?
Malone (2004) GEM	Opportunity	New businesses are planned and created during economic crisis periods; When results are as expected it is not necessary to exploit new opportunities;
Voudouris <i>et al.</i> (2000) Porter (1985)	Selling strategies	The firm presents a good CRM; The firm adopts a low-price strategy;