

# The Importance of the Entrepreneur's Perception of "Success"

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## *Abstract*

**Purpose** - In spite of the fact that the success of new ventures has been a widely studied topic in the field of entrepreneurship, no consensus on what is understood by the success of a firm can be found in the literature. Thus, the objective of this work is to discover what the entrepreneur really understands by the success of his/her business in its early years. To that end, this study clarifies the principal indicators used by entrepreneurs and analyses the relationship between how entrepreneurs understand the success of their business and the performance of that business.

**Design/methodology/approach** – In a logit regression model, the research data are analyzed, using a sample of 98 entrepreneurs who are the heads of new firms in various sectors of activity.

**Findings** - The study shows that there is a relationship between the way in which the entrepreneur measures how the business is doing and the performance of that business. More specifically, this research reveals that it is not the use of a greater number of indicators to measure the success that identifies the successful newly-created business from the unsuccessful, but the fact that those indicators are from different perspectives. Moreover, the results show that customer-related indicators are more effective than financial indicators to distinguish between successful and unsuccessful organizations.

**Research limitations/implications** – Future research including qualitative interviews will help to further investigate the relationship between the entrepreneur's perception of success and company performance.

**Practical implications** – As a result of this research, the entrepreneurs can be conscience about how important it is the way they understand "the success" before they constitute their business. The results of this study mean a valuable knowledge to the academics that research in the entrepreneurship field, specifically to those that are focused on the success factors study.

**Originality/value** – This research is pioneering in relating the way that the entrepreneur measures his company's success and demonstrating its importance.

**Keywords:** *Entrepreneur's perception of success, new ventures, entrepreneurship.*

**JEL classification:** L26, L24

## Introduction

Currently, there is some agreement about the notion that entrepreneurial activity is a vital element for the regions and a key factor to imbue their economies with dynamism by making it possible to adapt to the continuous changes in the environment (McDougall *et al.*, 1992; Amit *et al.*, 1993; Reynolds *et al.*, 2005). Thus, authors such as Audretsch and Keilbach (2004) even state that “entrepreneurial capital” is the production factor ignored by the neoclassic models. The role of new business has aroused long-standing interest in the field of entrepreneurship to identify the factors that allow to distinguish new businesses that survive and contribute to the social and economic growth of a territory from those that do not (Hofer and Sandberg, 1987; Duchesneau and Gartner, 1990; Brüderl and Preisendorfer, 1998; Hay and Ross, 1989; Baron and Markman, 2000).

Thus, “company success” is one of the topics that the academic literature in fields ranging from economics to psychology, including sociology and anthropology, has paid great attention to (Van Praag, 2003). However, within our field of research, entrepreneurship, there is no consensus on the definition of the term, or on the best way to measure it in the first phases of the new venture (Vesper, 1996; Watson *et al.*, 2003). In that respect, the concept does not have to coincide with the inputs from other interesting fields of research since the period of time that interests us is one of the most delicate in the life of a business, namely, that of its birth. Therefore, the indicators and measures used in this field may vary considerably from those used in other stages of the life of the business since, with the passing of time, the amount and the quality of the information handled increases, and the entrepreneur and his/her team accumulate greater experience.

Therefore, the works that have focused more on this stage of a firm’s life do provide various, and controversial, definitions of success, from mere survival to the achievement of certain levels in the most frequently used financial ratios. Since, as Sexton (1988) says, the really important thing is growth in a field of research rather than a vast amount of research in it, the challenge for this paper is to contribute to future research by showing the complexity of the concept of success in the entrepreneurship field and identifying which indicators the entrepreneurs use in new ventures, and their relationship with real entrepreneurial success. Therefore, given that definition of the term, we turn to the entrepreneurs themselves to clarify what they really understand by the success of their businesses.

To that end, this work is structured as follows: this introduction is followed by the concept of the success of new ventures as found in the literature to date and the principal methods used to measure that success. The next section details the analyses that are conducted and the variables used for them. The results section firstly presents the indicators most used by entrepreneurs to measure success, as well as the dimensions to which they belong. Secondly, the relationship between the way in which entrepreneurs measure how their businesses are going and their success is described from both quantitative and qualitative points of view. Finally,

the conclusions section highlights the most important results of the work and their importance to the field of entrepreneurship from both the practical and the theoretical perspective.

## **Theoretical framework**

### ***The Concept of New Venture Success***

The study of the factors relevant to new venture success is one of the “star topics” in the field of entrepreneurship (Cooper and Gimeno-Gascon, 1992). Although this has been analyzed from very different points of view, no agreement has been reached on the definition of success or performance in the context of new business ventures (Murphy *et al.*, 1996; Stuart and Abetti, 1987; Vesper, 1996; Watson *et al.*, 2003; Walker and Brown, 2004) moving away from the possibility of finding the confluence of criteria that is required for scientific advancement.

Therefore, what should we understand as success in a new business venture? Defining a company’s success is an extremely difficult task in any kind of business but even more so when the subject of the study is new business ventures, particularly in the context of SMEs. Young firms lack historical information and many have neither standardized accounting measures nor indicators of performance yet. Moreover, they may not show profit in their first years of operation although their sales are increasing (Brush and Vanderwelf, 1992; Chandler and Hanks, 1993; Mc Dougall *et al.*, 1992). Moreover, we should consider the difficulty of access to the founder during this stage of the venture’s life, the time consumed in data processing and the questionable reliability of the data, which are problems faced by the researchers in their studies (Brush and Vanderwelf, 1992). On those lines, we should consider that the first years of a business venture are very unstable, and constitute a critical period for the venture. Therefore, this period can result in relatively poor results, high interest payments and setting-up costs, and yet the venture might not be considered an unsuccessful initiative. In fact, the entrepreneurial initiative could be positively assessed if, within this initial period, a good self-image is created and part of the target market is achieved.

For all those reasons, a number of scholar have doubted about basing extensively on financial performance indicators (Hillman and Keim, 2001; Ghobadian and O’Regan, 2006). Some authors such as Man *et al.* (2002) prefer to speak of success in terms of competitiveness to analyze these early years of the life of the business. Those authors show the implicit dangers of using only one or two financial measures to assess the evolution and potential progress of a new company at a certain moment in time. The company’s potential and future expectations in its specific field or market could open incredible opportunities and bring significant revenues in the coming months or years and should not be disregarded as indicators. One extreme on this line of thought is represented by some trends in the field of entrepreneurship and small business to consider that the current performance of a business should be one of the last criteria used to measure success

in empirical studies (Dyke et al., 1992) and in studies that propose theoretical models (Herron and Robinson, 1993; Hofer and Sandberg, 1987).

Outside the entrepreneurship field, Kaplan and Norton (1992) designed the balanced scorecard, a strategic planning and management system that is used to align business activities to the vision and strategy of the organization, monitoring organizational performance against strategic goals. Thus, the balanced scorecard is a performance measurement framework that adds strategic non-financial performance measures to traditional financial measures to give managers and executives a more “balanced” and complete view of organizational performance. This managerial tool includes financial measures that tell us the results of actions already taken. In addition, it complements those financial measures with three sets of operational measures related to customer satisfaction – Customer Perspective-, internal processes –Business Process Perspective-, and the organization’s ability to learn and to improve the activities that drive future financial performance – Learning and Growth Perspective- (Kaplan and Norton, 1992). In fact, the balanced scorecard is one of the most successful and durable management concepts of recent years and has been used extensively in business and industry, government, and non-profit organizations worldwide to help organizational planners identify what should be done and measured (Kaplan and Norton, 1992, Olve *et. al.*, 2000). Thus, it provides feedback on both the internal business process and the external outcomes in order to continuously improve strategic performance results.

### ***Dimensions and Indicators of Success***

The way in which success is defined in a research work is a fundamental aspect since it clearly influences the results; for example, a certain variable may be positively linked to one specific performance measure but negatively to another (Murphy et al., 1996). Thus, an effect on one chosen success variable does not guarantee that a similar effect will occur when other measures of success are used, and that is why it is so important to justify the way in which success is measured.

If we focus on the great number of indicators used to measure this construct in the entrepreneurship literature, we can confirm the wide range of perspectives from which to approach the issue. Many authors, such as Venkataraman and Ramanujam (1986) make a distinction between financial and operational (non-financial) performance. Thus, the financial measures have, for many years, been regarded as the most trustworthy measures of a company’s performance, sometimes on the same level as the concepts of success and economic performance (Willard *et al.*, 1992; Zahra and Covin, 1995; Murphy *et al.*, 1996; Robinson, 1999; Santos Requejo and González Benito, 2000; Harada, 2003). Nevertheless, it is very common to find sectors, such as high-technology companies, in which the initial investment of capital is very high and high profitability cannot be expected in the first years of the company’s life (McGee *et al.*, 1995; Bosma *et al.*, 2004). Thus, Stuart and Abetti (1987) propose a broader

concept of performance that includes non-financial indicators. Several researchers use this type of indicator, such as market share (Bamford *et al.*, 2000; Zahra and Bogner, 2000), the introduction of new products or product quality (McGee *et al.*, 1995). The main reason behind this line of thought is that a new company's success is difficult to measure using the conventional financial indicators (Hart *et al.*, 1995).

Thus, nowadays, management acknowledges the need to emphasize innovative measures of success, and not necessarily those of a financial nature (Ittner and Larcker, 1998; Usoff *et al.*, 2002; Kaplan and Norton, 1992). Several studies have demonstrated the importance of these measures in fields where intangible assets are linked to the key factors of success (Amir and Lev, 1996; Edvinsson and Malone, 1997).

Outside that classification, a significant number of studies in this field put the concept of entrepreneurial success on the same level as the concept of survival (Bosma *et al.*, 2004). The authors who opt for survival as a measure of success find support in the dynamic models of industrial organization, which establish that young ventures that obtain profit decide to stay in the market, while those that obtain losses end up abandoning the activity (Harada, 2003). Moreover, survival is easy to identify and measure.

However, there are studies that confirm that success and survival are very different concepts and variables such as those related to the entrepreneur or the initial size of the business affect these two measures in different ways (Kalleberg and Leicht, 1991; Gimeno *et al.*, 1997). Furthermore, there are many reasons for the closure of a business, even in the event of moderate, or even excellent, profit and performance. The final decision to cease operations or stay in the market will partly depend on the entrepreneur, and more specifically on his/her personal and professional interests, since in most cases this decision will have a significant effect on his/her lifestyle.

From the above, we may deduce that success has a multidimensional nature and, therefore, it is essential to include all the different dimensions of performance in the empirical research undertaken in the field (Wiklund and Shepherd, 2003). Due to the difficulty of assessing the venture in its first few years, researchers develop different measures that, in many cases, move away from the conventional measures commonly used by large corporations or already consolidated businesses, by focusing on the special nature of the young firm. In order to contribute to the discussion, we reviewed some of the most important entrepreneurship journals and found that the most used indicators were those related to company growth (see Table 1). This category includes 31% of the measures used in the articles and is by far the most preferred dimension to reflect the performance and success of new firms. After that dimension, authors prefer to use indicators that refer to profitability, which is applied in 18.11% of cases. That is followed by profit, with almost 14%, while liquidity trails with 7.16%. While the indicators in the last six of the eleven dimensions do not exceed 5% of the total, each of them appeared in at least 5 articles on the issue in question. In that respect,

the indicators referring to organization revenues and employees both represented 4.52% of the total, followed by those related to the production/service process (3.39%), the product or service itself (2.26%), the customer (1.88%) and market share (3.01%).

**Dimensions used in the literature (1995-2007)  
to measure the success of newly created firms**

**Table 1**

<b>Dimensions</b>	<b>Percentage of total indicators</b>
Growth	31.32
Profitability	18.11
Profit	13.96
Liquidity	7.16
Revenue	4.52
Human capital	4.52
Production process	3.39
Market share	3.01
Product/service	2.26
Customers	1.88
Others	9.81
<i>Total</i>	100.00

**Methods to Measure Success**

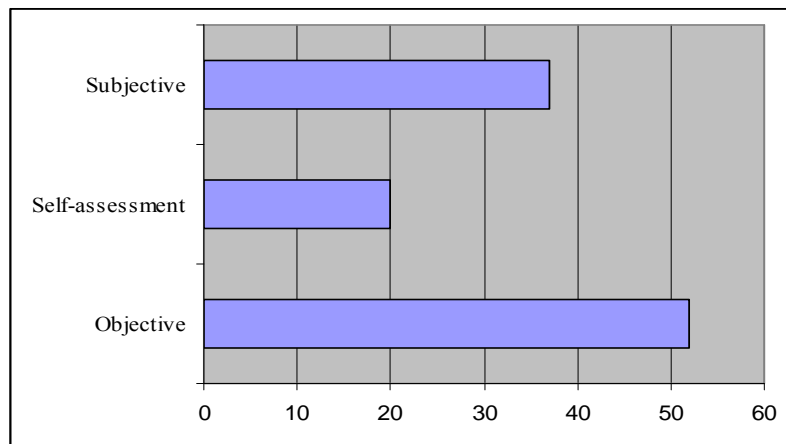
Two decades ago most of the studies used objective measures of success through different indicators, and studies that dared to use subjective measures were rare (Chambers *et al.*, 1988). However, some authors are starting to recognize that subjective measures may also reliably assess the success of new ventures and may become the best way to obtain information that would otherwise be very difficult to gather. In that respect, Wang and Ang (2004) establish three main reasons why subjective measures are commonly used in our field rather than objective measures. Firstly, most small companies are either unable or unwilling to provide objective information about the business, especially in its first years of life. Secondly, the accountancy data of these companies are difficult to interpret. Finally, if the sample is formed by companies in different industries, the accountancy data may be influenced by the specific sector they belong to.

However, measures of the latter type have been strongly criticized because they involve a high subjective component and could make it difficult to make comparisons between firms (Reid and Smith, 2000). In order to validate the subjective performance measures, several authors have compared the data provided

by the management or the owners of the business with its real data. Thus, Baron and Markman (2003) find a great similarity between the two sets of data and consider that the assessments and data provided by the individuals display a high degree of accuracy. However, a few years earlier, Sapienza *et al.* (1988) did not obtain such optimistic results when they analyzed the correlation between the objective and the subjective measures of performance in small businesses. Those authors compared the management's perception of sales growth and ROS with the real data and found no significant correlation between them.

It seems advisable to use a combination of objective and subjective techniques when measuring the performance of new business ventures (Naman and Slevin, 1993) since, even though subjective measures are not as accurate, these types of indicator are strongly linked to objective criteria of performance and considered satisfactorily valid (Wang and Ang, 2004). Moreover, they provide a kind of information that objective measures cannot capture and are considered the ideal complement to those objective measures.

In this sense, in the reviewed literature we identified three different techniques used in the entrepreneurship field: the objective technique, the evaluation of objective data by a member of the organization, and the subjective technique. The results are shown in Figure 1, which shows that the use of objective techniques exceeds that of the other two. In that respect, it should be pointed out that many authors consider that the evaluation of data, even financial or accounting data, is in itself a subjective technique. There is almost a perfect balance between objective and subjective measures, with around 50% in each case.



**Figure 1. Number of articles that use objective techniques, evaluation of objective data, or subjective techniques to measure success in the entrepreneurship field (1995-2007)**

Finally, if attention is focused on the specific indicators used by different works to measure success, the literature review showed that the most used, irrespective of the technique employed, was sales growth. That was followed by the indicators referring to the number of employees or the increase in that number and net profit that it represents. Other measures frequently used in the research works are those related to ROA, ROS and ROE. Nevertheless, new business ventures have different features that must be considered when assessing their success in their first years of life. Thus, Kalleberg and Leicht (1991:138) define a successful organization as “[...] the one which adapts more effectively and takes advantage of the opportunities offered by the business environment”. However, this type of definition is not operational, since it implies a high level of complexity when measuring the organization’s degree of adaptation to existing opportunities.

The analysis of the entrepreneurship literature revealed that an average of 3.83 indicators were used per work and a more detailed examination of the frequency of the measures used by researchers reveals that 80% of the articles used fewer than 5 indicators to measure the dependent variable while only 5% used more than ten. The more indicators that the researcher uses, the more information he/she has to analyze the new venture’s competitiveness. However, is all the information relevant? If we think about the entrepreneur and the first years of the company life, we can conclude that all the knowledge that the entrepreneur has about the business may be critical to its survival. On the other hand, too much information could have a negative influence on the entrepreneur’s perception of the new venture’s performance.

Consequently, the still unanswered questions are: How can we effectively measure the organizational success in these early years of life of the business? How many indicators are needed? and What sort of information must be gathered? If we wish to find indicators that show the present and future success of a business at this stage of its life, why do we not ask the “star of the show”, namely, the entrepreneur.

Thus, this work aims to: a) help researchers select the indicators that are most accurate and best suited to the information that the new venture and the entrepreneur may offer for their research and, b) to measure precisely what the entrepreneur believes useful to his/her daily practice. The work also aims to conduct an in-depth study of the relationship between the indicators used by the entrepreneur and the real success of the venture, in order to find out whether the entrepreneur’s perception of success will really influence the company’s performance.

## **Methodology**

### ***Sample***

The primary data needed for this research were obtained by means of a questionnaire. In order to find consensus on what is understood by a new venture, the Global Entrepreneurship Monitor (GEM) project proposes that new ventures



are those between 3 and 42 months old (Reynolds *et al.*, 2005). Thus, we assume the definition in that proposal in order to generate data and conclusions that are in line with an internationally agreed project. Moreover, the businesses should really perform a new activity in order to be considered “new”; in other words, those that had changed their legal form and those whose ownership had changed were excluded from the population of this research. After the necessary information had been obtained from the SABI (Analysis System of Iberian Balance) database, the questionnaire was sent to 1,565 new ventures. The SABI database is sold by the company Informa and contains information about more than 980,000 Spanish companies. After contacting some of those firms, we received 147 completed questionnaires, 98 of which were valid for this research, which represents a response rate of 6.26 percent and a sampling error of 8.55 percent.

The questionnaires were always completed by one of the owners of those businesses, who had to participate actively in the daily work and were preferably the owners with the greatest responsibility. If, during the first contact with any firm, we detected that the questionnaire would be completed by one of its employees, we discounted the firm immediately. Moreover, all the companies had been constituted between March 2002 and December 2005 in the Spanish regional area of the Canarian Autonomous Community. All the businesses fitted the SME definition, with an average of 6.1 employees per business.

### ***Variables***

#### *Dependent variable: Success*

Throughout this work, we have seen how difficult it is to evaluate success in a newly-created business, which justifies our attempt to measure it from different perspectives. In this study, new venture success is measured by subjective indicators reported by the entrepreneur (Van Gelderen *et al.*, 2000; Zahra and Bogner, 2000; Rhodes and Butler, 2004). On a 7-point Likert scale, the entrepreneur had to evaluate his/her satisfaction with sales, ROA, company growth, the achievement of business goals, general company success, and success compared with that of competitors. We performed a multiple correspondence analysis (MCA) to show the correlations between those six variables and demonstrate that they can be considered a single factor: “new venture success”. After that, and in order to demonstrate the validity of this subjective indicator, it was correlated with an objective measure: the increase in the real sales of the company, an indicator widely used in the business literature to measure performance (Davidson and Wiklund, 2000). The result showed a positive and significant correlation between them and validated the use of subjective indicators as a means of measuring business success.

Next, the companies were divided into two groups depending on their scores in the subjective factor “new venture success”. Thus, the first group, which comprises the 56 most successful companies, obtains a measurement of success of 6.16 with a standard deviation of 0.494. The less successful group, comprising 46 companies, obtains a measurement of 4.03 with a standard deviation of 0.867.

The split between the two groups took place at the arithmetical average of the values obtained for venture success, which was 5.1.

#### *Independent variables*

In order to know the way in which the entrepreneurs evaluated the success or performance of their businesses we asked the following question: “At this moment, how do you evaluate the performance of your business? In other words, how can you see whether your business is achieving the success that you expected or not?” This question was completely open and was carefully worded by the researchers so as to avoid influencing the entrepreneur’s answer.

The information was analyzed in the following order. First, the number of different indicators proposed by each owner for measuring the initial success of the business was determined. Second, the indicators were classified according to their nature and characteristics. The most general classification took the model proposed by Kaplan and Norton (1992) as the reference. In that model, those authors not only propose financial indicators that provide information necessary to manage the firm, but also stress the importance of using indicators related to the customer, internal processes and the human component of the firm. Therefore, in this research we propose a classification that includes economic-financial indicators, indicators related to internal processes and indicators related to the customer and the workforce. The four perspectives are: (1) *Financial Perspective*, which includes all the economic and financial related data, such as profit, liquidity or profitability; (2) *Customer Perspective* comprises all the indicators related to customers and their affluence, satisfaction or loyalty; (3) *Business Process Perspective*, which refers to the volume and characteristics of internal business processes and, finally, (4) *Human Capital Perspective*, which contains all those indicators related to human capital, from employees to entrepreneur, in the company.

By means of those four perspectives, we aim to discover whether there is any relationship between the tendency of the entrepreneurs to use indicators from one perspective or another and the initial success of the business.

### **Results**

The 98 interviewed entrepreneurs proposed a total of 162 different indicators to measure the success achieved by their companies, and those indicators were classified into five groups or perspectives. Apart from the perspectives mentioned above: Financial, Customer, Business Process and Human Capital perspectives, one last category called “Others” was established. This category included those indicators that did not fit the other categories, such as *comparison the competitors* or *goodwill*.

The following table (Table 2) shows the number of indicators that the entrepreneurs proposed in each category and the third row of that table displays the weight of each perspective in the total amount. Thus, as we can see in Table 2, the perspective most used by the entrepreneurs is the Financial Perspective, with almost 40% of the total of the proposed indicators (64 indicators). The second most

used perspective is that which includes the indicators related to customers: Customer Perspective, with 26.5% (43 indicators). The Internal business Perspective, which represents 19.7% of the total, is in the third position (32 indicators). And finally, only 8% of the indicators proposed by the entrepreneurs (13 indicators) are related to the Human Capital Perspective. The other indicators, ten in total, are included in the category *Others* since they can not be included in any of the other four perspectives.

**Perspective proposed by the entrepreneurs for the measurement of the success of their businesses**

**Table 2**

<b>PERSPECTIVES</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
Financial Perspective	64	39.5
Customer Perspective	43	26.5
Internal Business Perspective	32	19.7
Human Capital Perspective	13	8.0
Others	10	6.1
Total	162	100%

If we take a closer look at the proposed indicators, irrespective of the perspective to which they belong, the indicator most frequently used by the entrepreneurs to know whether their business is successful or not is *customer satisfaction*. Thus, 24 of the interviewed entrepreneurs stated that they used customer satisfaction to know whether their business was running well. The second most used indicator is the one that refers to the *profit* of the company, followed by its *sales level*, the *liquidity* of the business and the *number of customers* (see Table 3).

**Indicators proposed by the entrepreneurs for the measurement of the success of their businesses**

**Table 3**

<b>INDICATORS</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
Customer Satisfaction	24	14.8
Profit	17	10.4
Sales Level	14	8.6
Liquidity	11	6.7
Number of Customers	7	4.3
...	...	...
Total	162	100

Those two tables showed the most used indicators of success; however, does the way in which the entrepreneur understands success really matter?

First of all, a more quantitative analysis was conducted to determine whether there were differences between the most and least successful ventures according to the number of indicators and perspectives used by the entrepreneurs to measure their success. In order to know the influence of the number of indicators and perspectives used, the companies in the sample were divided into successful (>5) and less successful (≤5) groups depending on the score obtained in the factor called “new venture success”. Therefore, the number of indicators that the entrepreneur proposed was analyzed, as were the perspectives to which those indicators belong. That is, an interviewee can answer that he/she evaluates that success by means of ten indicators but all of them may belong to the financial perspective. In that case, the entrepreneur will only use one perspective despite the number of measurements proposed.

We applied a binomial logistic regression analysis to conduct our empirical tests. The binomial logistic regression estimates the probability of an event happening. In our case, there was one dependent variable, namely, new venture success.

$$prob(event) = \frac{e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots}}{1 + e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots}}$$

where the  $X_i$  terms represent our set of independent variables. We ran binomial logistic regression analyses for the dependent variable *new venture success*.

Our tests show that the number of indicators used by the entrepreneur to measure success is not a significant variable to distinguish between the most and least successful companies (see Table 4). However, the results do show that there is a greater probability that the more successful businesses are led by entrepreneurs who analyze success from a greater number of perspectives than those that are less successful ( $\beta=1,216$ ;  $p=0,045$ ). Those data suggest that the more varied the information used in the company to measure success is, the higher the performance is.

#### **Logit Regression Analysis of the Likelihood of new ventures being successful according to the way in which entrepreneurs perceive success**

**Table 4**

Variables	β	E.T.	Wald	Sig.	Exp(β)
<i>Number of perspectives</i>	1.216	0.606	4.019	0.045	3.372
<i>Number of indicators</i>	-0.316	0.394	0.642	0.423	0.729
Constant	-1.166	0.544	4.592	0.032	0.312
N= 98					
Chi2= 6.671 (p=0.036)		Cox R2 = 0.066		Nagelkerke R2 = 0.088	

Those outcomes indicate the importance of looking at business performance from different perspectives, however, it would be very interesting to know whether any of these perspectives can add more value to new ventures than

others. For this purpose, the factor “new venture success” was selected as dependent variable and “the perspective” as independent variable in order to test whether there were significant differences in success, depending on the perspective used. For instance, the average success of those companies with an entrepreneur who uses at least one indicator from the client perspective was compared with the rest of the companies. The analysis of differences of averages was based on independent samples, that is, it was conducted for the different groups defined according to the success measures. In this case, the *F* statistic enabled us to previously check the risk of rejecting the null hypothesis of equality of variances in order to decide about applying the *t* statistic, which assumes inequality of variances, or the statistic *t-test*, which supports equality of variances and is particularly interesting when working with small samples; i.e., fewer than thirty people (Norusis, 1990).

**Differences in the success of companies according to the perspective used by the entrepreneur to measurement of the businesses**

**Table 5**

	PERSPECTIVE									
	Customer Perspective		Financial Perspective		Business Process Perspective		Human Capital Perspective		Others	
	Customer Perspective	Others	Financial Perspective	Others	Internal Business Perspective	Others	Workforce Perspective	Others	Other Perspective	Others
<i>Success</i>										
Mean	5.63***	4.78***	4.86*	5.34*	5.41	5.06	4.76	5.21	5.38	5.13
S.D.	1.141	1.393	1.224	1.343	1.404	1.241	1.17	1.304	1.216	1.305

\*\*\*  $p < 0.00$

\*  $p < 0.10$

Table 5 shows that there are significant differences in two of the five proposed perspectives. Thus, those companies whose indicators for measuring success include an indicator from the customer perspective –i.e. customer satisfaction or loyalty- will usually achieve a higher degree of success than the other companies. Therefore, if the entrepreneur centres attention on customers during the firm’s first years, it will mean an added value for the business during that period. However, those companies that use economic-financial indicators usually have lower values in the averages of success than those that apply non-financial measures. With regard to the other perspectives, no significant differences were found.

## Conclusions

Although many studies have attempted to explain success in newly-created businesses (*i.e.*, Hofer and Sandberg, 1987; Duchesneau and Gartner, 1990; Brüderl and Preisendorfer, 1998; Hay and Ross, 1989; Reid and Smith, 2000; Baron and Markman, 2003), most of them address neither the definition of success nor the reliability and validity of the indicators used to measure it. However, those are crucial aspects since, depending on which measure is used to consider the success of a business, the results and interpretations can vary significantly. On that line, in 1986, Venkataraman and Ramanujam suggested that measures of performance with operational and financial factors should be improved through the study of multiple dimensions of performance, to which we would add not only the study of objective dimensions, but also the study of subjective dimensions in particular because of the characteristics of the unit of analysis.

With that aim, this work has undertaken an in-depth study of the indicators most used in the entrepreneurship literature and, more importantly, has revealed the way in which entrepreneurs know whether their new businesses are running as they expected. Therefore, this study is a pioneer work since it identifies which indicators entrepreneurs actually use to measure success in the first years of their companies. This has revealed the heterogeneity of the indicators and their different natures, which range from financial indicators to those related with the quality of the business. Thus, one of the most important findings is that, in spite of the fact that the most used indicators in the literature are financial, the indicator most used by the entrepreneurs is *customer satisfaction*.

Moreover, the research also observed the relationship between the use of one kind of indicator or another and the success of the business. As previously mentioned, the results demonstrate the richness of the concept of success in newly-created businesses, because the entrepreneurs in a sample of 98 new firms identified a total of 162 different indicators to measure that success. The analysis shows that it is not the use of a greater number of indicators to measure success that distinguishes successful newly-created business from the unsuccessful, but the fact that those indicators belong to different perspectives. This means that success would be easier to achieve if the owners had a broader and more diverse vision of the success of their business (evaluating it from different perspectives). Thus, the new management tools such as the balanced scorecard point towards the importance of using non-financial indicators when evaluating the business. Moreover, this study confirms that, while the vast majority of new small enterprises neither use those tools formally nor have formalized management systems, they do consider indicators other than those of a financial nature. Thus, this study demonstrates the importance that the entrepreneur attaches to other types of indicator, such as those related to the customer, human capital and internal processes, which are categories proposed by Kaplan and Norton (1992) in their management model.

Furthermore, the results of this empirical work enable us to reach an interesting conclusion, which is that those entrepreneurs who pay more attention to indicators related to the customer seem to achieve a higher degree of success than those who use indicators of a different nature, such as financial, internal business or workforce. On the other hand, those entrepreneurs who use indicators from the economic-financial perspective show lower rates of satisfaction with the success achieved by their companies.

Finally, this work also finds a certain disagreement between the indicators used by researchers in this field and those that are actually used by entrepreneurs. This means that, if the entrepreneurs are not familiar with more complex ways of measuring success or if they ignore them in the management of their businesses, they will be unable to provide this information to researchers who will consequently and systematically run the risk of the entrepreneurs providing unreliable data. One of the factors that may explain this is the low correlation found in some studies that try to compare objective data with the subjective evaluation of such data -see Sapienza et al.,-1988.

This work has been able to offer researchers a vision of what entrepreneurs really use to measure their level of their ventures' success, which may be important to learn what information could be available and what perspective they use when asked whether their business is going well or badly. Moreover, the work also reveals how important it is for new ventures to use non-financial indicators to know how the business is progressing. In that respect, new ventures have some significant peculiarities that must be taken into account and, despite the fact that the performance in the early years is not reflected in the financial situation, non-financial indicators can help entrepreneurs know the progress of their companies and be able to identify their weaknesses and the strengths that may improve competitiveness in the long term.

### References

1. Amir, E. and Lev, B. (1996). "Value-relevance of non-financial information: the wireless communication industry," *Journal of Accounting & Economics*, Vol. 22 N° 1-3, pp. 3-30.
2. Amit, R.; Glosten, L. and Muller, E. (1993). "Challenges to theory development in entrepreneurship research," *Journal of Management Studies*, Vol.30, N° 5, pp. 815-834.
3. Audretsch, D.B. and Keilbach, M. (2004). "Entrepreneurship capital and economic performance". *Regional Studies*, Vol. 38 N° 8, pp. 949-959.
4. Bamford, C.E.; Dean, T.J. and McDougall, P.P. (2000). "An examination of the impact of initial founding conditions and decisions upon the performance of new banks start-ups," *Journal of Business Venturing*, Vol. 15 N° 3, pp. 253-277.

5. Baron, R.A. and Markman, G.D. (2000). "Beyond social capital: the role of social competence in entrepreneur's success," *Academy of Management Executive*, Vol.14, N° 1, pp. 106-116.
6. Baron, R.A. and Markman, G.D. (2003). "Beyond social capital: the role of entrepreneurs social competence in their financial success" *Journal of Business Venturing*, Vol. 18, N°1, pp. 41-60.
7. Baumol, W.J. (1986). "Productivity growth, convergence and welfare: What the long-run data show," *American Economic Review*, Vol. 76, N° 5, pp. 1072-1085.
8. Birch, D. (1987). *Job creation in America: How our smallest companies put the most people to work*. New York: The Free Press.
9. Bosma, N.; Van Praag, M; Thurik, R. and DeWit, G. (2004). "The value of human and social capital investments for the business performance of start-ups," *Small Business Economics*, Vol. 23, pp. 227-236.
10. Brüderl, J. and Preisendorfer, P. (1998). "Network support and the success of newly founded business," *Small Business Economics*, Vol. 10, pp. 213-225.
11. Brush, C.G. and Vanderwerf, P.A. (1992). "A comparison of methods and sources for obtaining estimates of new venture performance," *Journal of Business Venturing*, Vol. 7, N° 2, pp. 157-170.
12. Chambers, B.R.; Hart, S.L. and Denison, D.R. (1988). "Founding team experience and new firm performance," *Frontiers of Entrepreneurship Research*, pp. 106-118.
13. Chandler, G.N. and Hanks, S.H. (1993). "Measuring the performance of emerging business: A validation study," *Journal of Business Venturing*, Vol. 8, pp. 391-408.
14. Cooper, A.C. and Gimeno-Gascon, F.J. (1992). "Entrepreneurs, Process of Founding, and New Firm Performance," in *The State of the Art in Entrepreneurship*. Ed. Sexton and J. Kasarda, Boston: PWS Kent Publishing Company.
15. Davidsson, P. and Wiklund, J. (2000). "Conceptual and empirical challenges in the study of firm growth". In D.L. Sexton and H. Landström (eds). *The Blackwell Handbook of Entrepreneurship*, pp.26-44. Oxford, Blackwell.
16. Duchesneau, D.A. and Gartner, W.B. (1990). "A profile of new venture success and failure in an emerging industry," *Journal of Business Venturing*, Vol. 5, pp. 297-312.
17. Dyke, L.S.; Fisher, E.M. and Reuber, A.R. (1992). "An inter-industry examination of the impact of owner experience on firm performance," *Journal of Small Business Management*, Vol. 30, pp. 73-86.
18. Edvinsson, L. and Malone, M.S. (1997). *Intellectual capital. Realizing your company's true value by finding its hidden brainpower*. New York: HarperCollins Publishers.
19. Gimeno, J.; Folta, T. Cooper, A. and Woo, C. (1997). "Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms," *Administrative Science Quarterly*, Vol. 42, N° 4, pp. 750-783.



20. Ghobadian, A. and O'Regan, N. (2006). The impact of ownership on small firm behaviour and performance, *International Small Business Journal*, 24(6), 555-584.
21. Harada, N. (2003). "Who succeeds as an entrepreneur? An analysis of the post-entry performance of new firms in Japan," *Japan and the World Economy*, Vol. 15, pp. 211-222.
22. Hart, M.M.; Stevensen, H.H. and Dial, J. (1995). "Entrepreneurship: a definition revisited," *Frontiers of Entrepreneurship Research*, pp. 75-89.
23. Hay, R.K. and Ross, D.L. (1989). "An assessment of success factors of non-urban start-up firms based upon financial characteristics of successful versus failed ventures," *Frontiers of Entrepreneurship Research*, pp. 148-158.
24. Herron, L.A., and Robinson, R.B., Jr. (1993). "A structural model of the effects of entrepreneurial characteristics on venture performance," *Journal of Business Venturing*, Vol. 8, N° 3, pp. 281-294.
25. Hillman, A.J. and Keim, G.D. (2001). "Shareholder value, stakeholder management, and social issues: What's the bottom line?" *Strategic Management Journal*, Vol.22 N°2, pp. 125-140.
26. Hofer, C.W. and Sandberg, W.R. (1987). "Improving new venture performance: Some guidelines for success," *American Journal of Small Business*, Vol. 12, pp. 11-25.
27. Ittner, C.D. and Larcker, D.F. (1998). "Are non-financial measures leading indicators of financial performance? An analysis of customer satisfaction," *Journal of Accounting Research*, Vol. 36, pp. 1-35.
28. Jarvis, R.; Curran, J.; Kitching, J. And Lightfoot, G. (2000). "The use of quantitative and qualitative criteria in the measurement of performance in small firm," *Journal of Small Business and Enterprise Development*, Vol. 7, N° 2, pp. 123-134.
29. Jennings, P. And Beaver, G. (1997). The performance and competitive advantage of small firms: A management perspective. *International Small Business Journal*, Vol. 15 N°1, pp. 66-75.
30. Kalleberg, A. and Leicht, K. (1991). "Gender and organizational performance. Determinants of small business survival and success," *Academy of Management Journal*, Vol. 34, pp. 136-161.
31. Kaplan, R.S. and Norton, D.P. (1992). "The balanced scorecard. Measures that drive performance". *Harvard Business Review*, pp. 71-79.
32. Man, T.W.Y.; Lau, T. and Chan, K.F. (2002). "The competitiveness of small and medium enterprises: a conceptualization with focus on entrepreneurial competencies," *Journal of Business Venturing*, Vol. 17 N° 2, pp. 123-142.
33. McDougall, P.P.; Robinson, R.B. and DeNisi, A.S. (1992). "Modeling new venture performance: An analysis of new venture strategy, industry structure, and venture origin," *Journal of Business Venturing*, Vol. 7, pp. 267-289.
34. McGee, J.E.; Dddowling, M.J. and Meggisosn, W.L. (1995). "Co-operative strategy and new venture performance: The role of business strategy and

- management experience,” *Strategic Management Journal*, Vol. 16, pp. 565-580.
35. Murphy, G.B.; Trailer, J.W. and Hill, R.C. (1996). “Measuring Performance in Entrepreneurship Research,” *Journal of Business Research*, Vol. 36 N° 1, pp 5-23.
  36. Naman, J.L. and Slevin, D.P. (1993). “Entrepreneurship and the concept of fit: A model and empirical test,” *Strategic Management Journal*, Vol. 14, N° 2, pp. 137-153.
  37. Norusis, M.J. (1990). *SPSS advanced statistics user's guide*. SPSS Inc., Chicago.
  38. Olve, N.G., Roy, J. and Wetter, M. (2000). *Implantando y gestionando el cuadro de mando integral (Performance drivers)*. Gestión 2000, Barcelona.
  39. Reid, G.C. and Smith, J.A. (2000). “What makes a new business start-up successful?” *Small Business Economics*, Vol. 14, pp. 165-182.
  40. Reynolds, P. (1987). “New firms: Societal contribution versus survival potential,” *Journal of Business Venturing*, Vol. 2, pp. 231-246.
  41. Reynolds, P.; Bosma, N.; Autio, E.; Hunt, S.; DeBono, N.; Servais, I.; López-García, P. and Chin, N. (2005). Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998-2003. *Small Business Economics*, 24: 205-231.
  42. Robinson, K.C. and McDougall, P.P. (1998). “The impact of alternative operationalizations of industry structural elements on measures of performance for entrepreneurial manufacturing ventures,” *Strategic Management Journal*, Vol. 19, N° 11, pp. 1079-1100.
  43. Rhodes, C. and Butler, J.S. (2004). “Understanding self perceptions of business performance: An examination of black American entrepreneurs”. *Journal of Developmental Entrepreneurship*, 9(1).
  44. Santos-Requejo, L. and González-Benito, O. (2000). “Economic success factors in Spanish small retail businesses. An analysis based on sector-relative definitions,” *Small Business Economics*, Vol. 15, pp. 209-222.
  45. Sapienza, H.J.; Smith, K.G. and Gannon, M.J. (1988). “Using subjective evaluations of organizational performance in small business research,” *American Journal of Small Business*, Vol. 12, N° 3, pp. 45-53.
  46. Sexton, D. (1988). “The field of entrepreneurship: Is it growing or just getting bigger?” *Journal of Small Business Management*, Vol. 26 N° 1, pp. 4.
  47. Stuart, R.W. and Abetti, P.A. (1987). “Start-up ventures: towards the prediction of initial success,” *Journal of Business Venturing*, Vol. 2, pp. 215-230.
  48. Timmons, J.A. (1990). *New business opportunities: Getting to the right place at the right time*. Acton, MA: Brick House Publishing Co.
  49. Usoff, C.A.; Thibodeau, J.C. and Burnaby, P. (2002). “The importance of intellectual capital and its effect on performance measurement systems,” *Managerial Auditing Journal*, Vol. 17, pp. 9-15.

50. Venkataraman, N. and Ramanujam, V. (1986). "Measurement of business performance in strategy research: a comparison of approaches," *Academy of Management Review*, Vol. 11, pp. 801-814.
51. Vesper, K. (1996). *New venture experience*. Seattle: Vector Books.
52. Walker, E. and Brown, A. (2004). "What success factors are important to small business owners?," *International Small Business Journal*, Vol. 22, N° 6, pp. 577-592.
53. Wang, C.K. and Ang, B.L. (2004). "Determinants of venture performance in Singapore," *Journal of Small Business Management*, Vol. 42, N° 4, pp. 347-363.
54. Watson, W; Stewart, W.H. and BarNir, A. (2003). "The effects of human capital, organizational demography and interpersonal processes on venture partner perceptions of firm profit and growth," *Journal of Business Venturing*, Vol. 18, N° 2, pp. 145-164.
55. Wiklund, J. and Shepherd, D. (2003). "Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses," *Strategic Management Journal*, Vol. 24, pp. 1307-1314.
56. Willard, G.E.; Krueger, D.A. and Feeser, H.R. (1992). "In order to grow, must the founder go: A comparison of performance between founder and non-founder managed high-growth manufacturing firms," *Journal of Business Venturing*, Vol. 16, pp. 181-194.
57. Zahra, S.A. and Covin, J. (1995). "Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis," *Journal of Business Venturing*, Vol. 10, pp. 43-58.
58. Zahra, S.A. and Bogner, W.C. (2000). "Technology strategy and software new venture's performance. Exploring the moderating effect of the competitive environment," *Journal of Business Venturing*, Vol. 15, N° 2, pp. 135-173.

## Appendix 1.

### Correlations, means and standard deviation

INDICATORS	Mean	S.D.	1	2
1. New venture success	5.10	1.31		
2. Number of indicators	1.62	0.92	0.202*	
3. Number of perspectives	1.43	0.64	0.263**	0.813**

\*\*Difference statistically significant at 1 percent

\* Difference statistically significant at 5 percent

Appendix I.

Indicators proposed by the entrepreneurs for the measurement  
of the success of their businesses

<b>FINANCIAL PERSPECTIVE</b>	<b>64</b>
<b>Profit</b>	<b>23</b>
Profit	17
Net profit	3
Pre tax and interest profit	1
Profit margin on the product/service	1
Monthly operating account	1
<b>Liquidity</b>	<b>15</b>
Liquidity	11
Cash account	3
Compliance with payments to providers	1
<b>Sales Income</b>	<b>9</b>
Invoicing	4
Revenue	3
Daily invoicing	2
<b>Profitability</b>	<b>4</b>
Profitability	2
ROI	2
<b>Other</b>	<b>13</b>
Balance analysis	7
Accounting advisor reports	1
Accounts balance	1
Financial security	1
Fixed assets	1
Economy of the company	1
Accounting data	1
<b>CUSTOMER PERSPECTIVE</b>	<b>43</b>
Customer satisfaction	24
Number of customers	7
Increase in number of customers	4
Perspective of capturing new customers	3
Customer loyalty	2
Being known by potential customers	1
Invoicing/Number of customers	1
Recommendations through which new clients come to the business	1
<b>BUSINESS PROCESS PERSPECTIVE</b>	<b>32</b>
<b>Business Volume</b>	<b>13</b>
Work volume	4
Production level	1
Number of transactions	1
Number of activities performed	1
Growth of business volume	1
Ongoing projects	1
Projects not yet formalized	1
Number of franchises	1
Number of employees	1

<b>BUSINESS PROCESS PERSPECTIVE</b>	<b>32</b>
<b>Business Volume</b>	<b>13</b>
Work volume	4
Production level	1
Number of transactions	1
Number of activities performed	1
Growth of business volume	1
Ongoing projects	1
Projects not yet formalized	1
Number of franchises	1
Number of employees	1
<b>Sales Level</b>	<b>16</b>
Sales level	14
Sales growth	2
<b>Improvement of Processes and Products</b>	<b>3</b>
ISO	1
Business improvements	1
Service improvements	1
<b>WORKFORCE PERSPECTIVE</b>	<b>13</b>
Entrepreneur profit/work Hours	4
Satisfaction of the founder's partners	3
Satisfaction of the employees at work	2
Entrepreneur's motivation and commitment	1
Earning the same as working for other parties	1
Employees' wages	1
Entrepreneur's perception	1
<b>OTHER</b>	<b>10</b>
Growth	6
Threats and opportunities from the environment	1
Comparison with competitors	1
Goodwill	1
Favourable negotiations with suppliers	1
<b>TOTAL</b>	<b>162</b>