

Business DNA: an Analysis of Micro and Small Companies in the State of Santa Catarina

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ABSTRACT

This article analyzes the factors linked to the genesis and operation of micro and small companies (MSCs) in the southern Brazilian state of Santa Catarina, according to the perception of their owners. These factors are important for these firms' competitiveness and longevity. The theoretical framework covers the context of MSCs in the national and statewide scenario as well as factors for success/failure found in the national and international literature. The perceptions were assessed by application of structured questionnaires. Treatment of the data revealed the profile of the companies and identified the factors that can promote competitiveness and longevity of these firms. The results show that the owners surveyed are most capable of influencing the success of their undertakings by searching for knowledge about the market, the ability to deal with new situations and the use of administrative control instruments than on external factors such as access to seed capital, reduction of the market and competition.

Keywords: Success factors. Failure factors. Micro and small companies.

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1 INTRODUCTION

The Brazilian business environment since the turn of the century has become more complex and dynamic, the fruit of economic, social and demographic changes. For example, the official population rose from 169,799,170 in 2000 to 190,755,799 in 2010, and life expectancy increased from 70.43 to 73.40 years in the same period. Gross domestic product also expanded remarkably, from US\$ 601.8 billion in 2000 to more than US\$ 2.1 trillion in 2010, putting Brazil in eighth place in the world, while the trade balance moved from a deficit of US\$ 697.7475 million to a surplus of US\$ 20.2666 billion, over the same decade (IPEA, 2011).

These transformations were accompanied by changes in legislation and regulations on the creation and operation of businesses, particular Complementary Law¹ 128 of December 19, 2008, which created the new figure of “individual entrepreneur” (a type of sole proprietorship that can have at most one employee), with lower tax rates and simplified fiscal record keeping. This and other changes in the legal and regulatory framework have made it easier to start and run businesses, stimulating the formalization of small enterprises (Brasil, 2008). In 2010 alone, 1,378,448 new companies of all sizes were formally established, growth of 299% in comparison to 2000 and 100% more than in 2009 (DNRC, 2011).

Moreira (2005) stresses the importance of MSCs for economic growth and social development, because they help increase resources while improving social inclusion and decentralization of income, particularly in labor-intensive sectors, besides using local inputs and encouraging the development of an intrapreneurial spirit and new business leaders.

Therefore, we can say that the increase in the number of new MSCs has been positive. However, attention must be paid to maintaining the level of competitiveness and longevity of these companies, since the market is growing more dynamic and turbulent, especially after the global financial crisis of 2008. According to the Brazilian Service to Support Micro and Small Businesses (SEBRAE), the survival rate of MSCs in Brazil, when considering firms with up to two years of activity, was 71.9% for those established in 2005 and 73.1% for those established in 2006 (SEBRAE_B, 2011).

The literature is rich in studies trying to find a formula for the success of MSCs, mainly through empirical studies. These studies generally present factors originating from before the

¹ A complementary law (*lei complementar*) is an enabling law of constitutional provisions.

formalization of the business, such as previous professional management experience of the founder (IBRAHIM; GOODWIN, 1986; HUCK; MCEWEN, 1991; YUSUF, 1995; LUK, 1996; ORTIGARA, 2006; ÁNGEL; PULIDO, 2010), the support of parents who also are engage in business (ROSE; KUMAR; YEN, 2006) and the motivation to start a business, characterized by the desire to become independent (YUSUF, 1995; MERRETT; GRUIDL, 2000; BENZING; CHU; CALLANAN, 2005; ORTIGARA, 2006; BENZING; CHU; KARA, 2009), identification of an opportunity (HUCK; MCEWEN, 1991; ORTIGARA, 2006) and dissatisfaction with the work done before opening a business (Huck & McEwen, 1991). However, we only found one study that presents, in structured form, the most important factors that precede the opening of a business, which is fundamental for describing “business DNA”. The objective of this study was to analyze the factors associated with the genesis and operation of micro and small companies (MSCs) in the southern Brazilian state of Santa Catarina, from the perception of their owners, to delineate the most important factors for these firms’ competitiveness and longevity.

Genesis refers to the period leading up to the formal registration of the new business. During this step, the objective is to identify the factors related to the motivation to start a business, the local society, planning and the entrepreneurial spirit. After the business is up and running, the focus of useful study shifts to the daily operational aspects and the internal and external factors that affect this operation (ORTIGARA, 2006).

The article starts by describing the context of MSCs in Brazil and Santa Catarina, defines the legal concept MSCs and briefly discusses the national and local business climate and labor market. Then we examine the factors for success/failure found in the national and international literature and explain the method applied and the results, such as the profile and perception of the owners surveyed. After that, we discuss in greater depth the factors found in the literature and not covered in the model of Ortigara (2006). The last section summarizes the results and presents our final considerations.

2 MICRO AND SMALL COMPANIES IN BRAZIL AND SANTA CATARINA

In Brazil, although Complementary Law 123/2006 classifies the size of companies based on their annual turnover, the number of employees is also a criterion used for studies and surveys conducted by the Brazilian Institute of Geography and Statistics (IBGE – the census bureau) and by Sebrae. The complete classification according to turnover and headcount is presented in Table 1.

Table 1 – Criteria for Classification of Firm Size

SIZE	LEGAL BASIS	ANNUAL GROSS REVNUUE	NUMBER OF EMPLOYEES	
			COMMERCE / SERVICES	INDUSTRY
Individual Entrepreneur	Complementary Law 128/08	Up to R\$ 36 thousand	-	-
Micro Company	Complementary Law 123/06	Up to R\$ 240 thousand	Up to 9	Up to 19
Small Company	Complementary Law 123/06	From R\$ 240 thousand to R\$ 2,400 thousand	From 10 to 49	From 20 to 99
Midsized Company	-	-	From 50 to 99	From 100 to 499
Large Company	-	-	100 or more	500 or more

Based on the headcount criterion, there were 6,120,927 MSCs in Brazil at the end of 2010, accounting for 99% of the total of 6,180,578 companies (MTE, 2011). This large representation is also reflected in the regional statistics (Table 2).

Table 2 – Regional Distribution of Companies and Employees in 2010

REGION	NUMBER OF COMPPANIES			NUMBER OF EMPLOYEES		
	TOTAL	MSCs	% MSCs	TOTAL	MSCs	% MSCs
MIDWEST	455,764	451,765	99.1%	1,963,003	1,122,899	57.2%
NORTHEAST	926,893	917,761	99.0%	4,434,786	2,223,637	50.1%
NORTH	218,306	215,474	98.7%	1,219,281	594,707	48.8%
SOUTHEAST	3,142,217	3,108,608	98.9%	15,540,879	7,670,329	49.4%
SOUTH	1,437,398	1,427,319	99.3%	5,333,728	3,099,059	58.1%
TOTAL	6,180,578	6,120,927	99.0%	28,491,677	14,710,631	51.6%

Source: Adapted from (2011).

The statistics in Table 2 clearly show the importance of MSCs in balancing the supply and demand for jobs in Brazil, because at the end of 2010 such firms were responsible for 51.6% of the jobs in the formal economy². In Santa Catarina, this scenario is very similar. At the end of 2010 there were a total of 333,668 companies, together accounting for 1,503,677 formal jobs, of which 331,042 were classified as MSCs, employing 881,708 workers (MTE, 2011). The great majority of these companies in the state were classified as micro-businesses (93.7% of the universe), and they employed 29.1% of the total formal workers. In turn, small companies made up 5.5% of the total and employed 29.6% of the workers. Therefore, MSCs

² The percentage of workers in the informal economy is very high in Brazil (Menezes-Filho & Scorzafave, 2011), even after the recent legal reforms to make it easier and less expensive to open a formal business. This covers self-employed people who do not declare their income, people who run small unregistered businesses and employees who are paid under the table, by both registered and unregistered companies.

together in Santa Catarina represented 99.2% of the total number of formal companies and 58.7% of the regularized workers in 2010.

2.1 FACTORS FOR SUCCESS/FAILURE OF MSCS

The first two studies on this theme we identified were published in 1947 by the *Harvard Business Review* and *Journal of Finance*. Mace (1947) discussed the management techniques that could be applied to small businesses to generate good results, while Rosa (1947) focused on the causes for failure of small American companies.

In studies from the 1960s to 80s, it was possible to identify three dimensions used by researchers to study small businesses. The first was used by Friedlander & Pickle (1968), who focused on small companies as open systems to investigate the way they influence and are influenced by society. Studies in this period were also more concerned with identifying the factors that could lead to failure (FREDLAND; MORRIS, 1976; DANDRIDGE; SEWALL, 1978; PATTERSON; KOZMETSKY; RIDGWAY, 1983), the second dimension found. Finally, the third dimension involved the search for factors that could contribute to the success of small businesses, as in the studies of Dickinson, Ferguson & Sincar (1984), Ibrahim & Goodwin (1986), Dana (1988) and Perry, Meredith & Cunningham (1988).

In the 1990s, studies began to appear examining the influence of the personal characteristics of the owners of small businesses for the success or failure of their ventures, especially gender (KALLEBERG; LEICHT, 1991; LOSCOCCO ET AL., 1991; LOSCOCCO; LEICHT, 1993; TIGGES; GREEN, 1994). There were also studies into the success factors (HUCK; MCEWEN, 1991; HOLMES; ZIMMER, 1994; YUSUF, 1995; LUK, 1996; LIN, 1998) as well as those leading to bankruptcy (THENG; BOON, 1996; EVERETT; WATSON, 1998).

From 2000 onward studies can be found examining all of the above aspects in various combinations: factors, both external and internal, for success or failure and differences in the personal characteristics of the owners. For example, Merrett & Gruidl (2000) analyzed female entrepreneurship, by means of comparisons between companies managed by men and women, located in urban and rural regions of the United States. The authors concluded that location (urban or rural) was more relevant to a firm's success than the gender of the owner, affirming that women in rural areas have more difficulties in founding successful businesses than do either men or women in cities.

The model proposed by Bird, Sapp & Lee (2001) developed from studying small businesses in the United States stressed the links between the owner's characteristics, social relations, social structure and operations. The results indicated that operation in less competitive sectors, participation in training, hours worked in the business, access to credit and gender differences all have direct and indirect effects on the success of companies.

Lussier & Pfeifer (2001) identified that the same predictors of success identified in the United States (staffing, education level, use of professional advice and planning) also were predictors of success and failure in Central and Eastern Europe. For Benzing, Chu & Callanan (2005), small business success in Vietnam is related to the sympathy of response to customers and low prices allied with quality of the product, while failure is related to excessive competition, unreliable employees and inability to obtain credit.

Sánchez & Bañón (2005) studied the main factors related to success of small companies in Spain by undertaking an analysis of internal factors (financial management, technological resources, innovation, quality, direction and management of human resources, structural flexibility, information systems, alliances and cooperation agreements) and external ones (social, economic and legal variables).

Personal initiative was indicated as the main factor for small business success in the study conducted by Rose, Kumar & Yen (2006) in Malaysia, but they also detected a positive relation between success and the educational level of the owners and whether their parents had also owned their own business.

Roy & Wheeler (2006), studying small businesses in West Africa, identified investment in training, educational level of owners, vision of the future and the use of planning techniques as success factors of micro-enterprises. According to the authors, the lack of knowledge of the market and the products and services offered along with lack of confidence and cooperation and difficult access to credit are factors leading to failure.

In turn, Coy et al. (2007), in a study of small companies in Pakistan, also analyzed the internal and external success factors. The results indicated that focus on customers, use of market research, quality of products and services offered, adequacy of information systems and ability to delegate and maintain well-defined organizational functions were the internal factors, while the external ones were government support, association with banks and advice from friends and relatives.

Kessler (2007) formulated a model to compare the success factors of start-ups in Austria and the Czech Republic, using four dimensions for analysis (staffing, environment, resources and processes). The author found that while in Austria success in the early development phase could be predicted mainly based on the dimensions of the environment and process, in the Czech Republic factors were more related to the personal, resources and process dimensions.

The internal factors of reputation, honesty, charisma and good services were indicated by Benzing, Chu & Kara (2009) as the most important factors to the success of small businesses in Turkey, supporting their argument that the owners believe they are able to influence their own success. However, external difficulties with the country's complex tax system and with hiring reliable employees were identified, but not with the same degree of importance as the internal factors.

In Jordan, Al-Mahrouq (2010) found five success factors for small and mid-sized businesses, namely technical procedures and technology, firm structure, financial structure, marketing and productivity, and human resources structure.

Ángel & Pulido (2010) studied small Colombian firms, examining the strategic resources, the psychological traits, skills and organizational capabilities of the owners and the institutional setting as factors influencing success. The authors identified the experience of the owners, reputation and prestige of the company, government support measures for the sector and the local community as the most relevant causes of success.

Factors such as marketing efforts, location, competitive forces, availability of capital and motivation and capability of owners were indicated as the main critical success factors in China by Chawla, Khanna & Chen (2010). In turn, Chittithaworn et al. (2011) in Thailand and Philip (2011) in Bangladesh found that factors such as establishment of a guiding vision, know-how, choice of suitable products and services, talent for doing business and financial situation of the owner, as well as various external factors all affect the success of MSCs.

Hung & Effendi (2011), studying small businesses in Malaysia, concluded that the factors that contribute to success are a good network of relationships, good products and services, focus on the market, good relations with customers, a committed management team and strong leadership.

The analysis of success factors and challenges faced by micro and small companies carried out by Monahan, Shah & Mattare (2011) discovered significant differences based on gender, ethnicity, sales volume, time of operation (years) and type of business. However, the

main challenge, indicated by 79% of the owners surveyed by the authors, was the sluggish American economy.

A new current was addressed by Rajput (2011), who analyzed the impact of innovation and resources for the success of MSCs in the food sector in Pakistan. The survey identified a strong relationship between credit, experience of the owner, human capital and investment in training for innovation of the micro and small enterprises studied.

Finally, Ortigara (2006) analyzed the success or failure of MSCs in the state of Santa Catarina based on the genesis and operation of these ventures, by applying the model explained next.

2.2 THE MODEL CHOSEN TO ANALYZE THE SUCCESS/FAILURE FACTORS

As can be noted from the studies mentioned above, there is no uniform model regarding the factors for success and failure. The authors focus on a wide range of aspects, making it relevant to verify the applicability and/or complement the models used in empirical research in Brazil and other countries.

The model proposed by Ortigara (2006) is the result of a series of steps. First the author held a workshop with 16 business consultants accredited by Sebrae/SC, business professors and graduate students at Santa Catarina Federal University with practical and theoretical experience with entrepreneurship and management. In the workshop, the consultants listed the causes of success/failure of MSCs, attributing a score from 1 to 10 for least to most important (Figure 1).

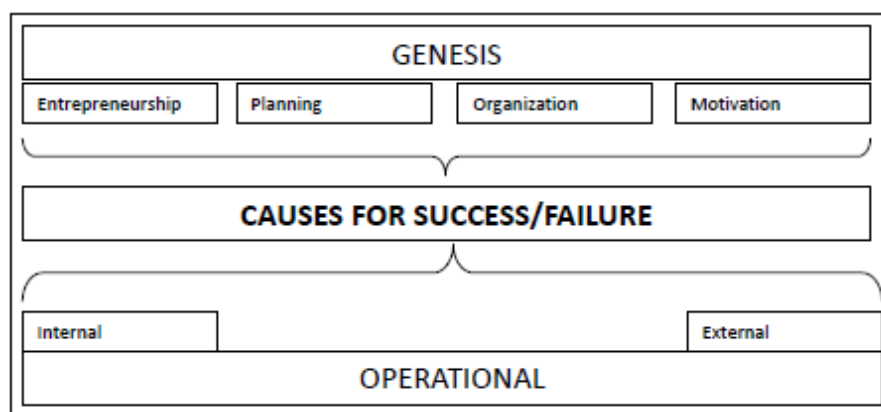


Figure 1 – Origin of the causes of success/failure of MSCs.

Source: Ortigara (2006).

The factors presented in Figure 1 were divided into two groups, based on distinct moments in the life of a MSC: **genesis** and **operation**. Genesis is related to the decisions made and elements determined before opening the business and that will have a decisive

effect on its success, classified in four categories: (1) **entrepreneurship**: refers to the entrepreneurial profile of the controlling owner or partners, including traits such as needs, knowledge, skills and values; (2) **planning**: related mainly to the advance formulation of a technical and economic feasibility study; (3) **organization**: involves the organizational structure, such as number and profile of the partners, ownership structure, etc.; and (4) **motivation**: contemplates the reasons for the entrepreneur to decide to open a business. In turn, operation is related to the functioning of the company and the mechanisms to respond to the market. This analysis includes two categories: (1) **internal**: referring to the structure of the company, so that the entrepreneur can control these aspects; and (2) **external**: related to the factors of the business setting, over which the entrepreneur has no control.

By considering the moment before opening the company, the model proposed by Ortigara (2006) enables a better understanding of the root causes of success or failure. This can help people considering starting a business to create and run it more effectively, so that the new firm will be born healthy and have a better chance of surviving the first two years of life, the period considered by Sebrae_B (2011) to be the most critical in the life of a new business. Of course, models only serve as a general reference for the development of studies and must be adjusted to the different contexts in which they are applied, because factors that affect organizational considerations are not identical and unchanging.

The next section presents the aspects related to the method applied, focusing on the universe, sample, research steps, treatment of the data and limitations.

3 RESEARCH METHOD

This study involved five steps: (1) **selection of the sample**, which was random, using the list of firms registered with the Santa Catarina State Commercial Registry (JUCESC); (2) **contact by telephone**, to verify the availability of the entrepreneur to be interviewed; (3) **application of the questionnaire**, from December 2010 to February 2011; (4) **organization of the data gathered**; and (5) **tabulation and analysis of the data**.

As indicated, the universe of companies used was obtained from the database of JUCESC, as can be seen in Table 3.

Table 3 – Number of Companies Registered with JUCESC

Discrimination	Year					TOTAL
	2000	2001	2002	2003	2004	
Companies registered	24,097	25,583	23,550	22,529	23,324	119,083

We selected a total of 1,393 companies at random, distributed in six regions of the state (West, Mountain, North, South, Itajaí Valley and Greater Florianópolis Metropolitan), with error margin of five percentage points and confidence index of 95% (Table 4).

Table 4 – Distribution of the Sample and Respondents

TABLE 1. DEMOGRAPHICS OF THE SAMPLE AND RESPONDENTS						
GENDER	SAMPLE	Respondents		Respondents		Companies not located/refused
		Active companies		Defunct companies		
		Number	%	Number	%	
Men	-	169	58%	38	56%	-
Women	-	121	42%	30	44%	-
TOTAL	1,393	290	100%	68	100%	1,035

Of the people contacted, 290 owners of active companies and 68 of defunct companies responded, to whom we applied the questionnaire from December 2010 to February 2011, consisting of questions on a scale of 1 (irrelevant) to 7 (very important) in relation to the factors analyzed regarding the genesis and operation of MSCs.

This study can be classified as descriptive regarding its subject matter, because it analyzes the perceptions of the respondents without the intention of modifying them, and quantitative regarding its nature (MARCONI; LAKATOS, 2009). The quantitative approach was used in the various steps of the study, including selection of the sample, calculation of the mean scores attributed by the respondents in relation to the factors considered, application of the exploratory analytic techniques and the Mann-Whitney U-test to compare two samples. This test was used to check for significant differences between the perceptions of the respondents regarding active versus defunct companies. This nonparametric test is a suitable alternative to the parametric t-test and is adequate for comparison of samples with unequal size involving data measured in ordinal form (STEEL; TORRIE, 1988).

Some limitations of this study should be mentioned, among them: a) it only covered companies in Santa Catarina incorporated in the period from 2000 to 2004 (119,083 companies); b) comparison of the variables considered in the model of Ortigara (2006) with those encountered in the literature enabled identifying factors and perspectives not utilized in

this study, which can be incorporated in future studies; and c) the results found reflect the perceptions of the respondents at a determined moment, so they are volatile and subject to change with time.

4 RESULTS

Below we present the data for characterization of the companies and the results of the perceptions of the respondents regarding success/failure factors of MSCs in the state of Santa Catarina.

4.1 SUCCESS/FAILURE FACTORS IN THE PERCEPTION OF OWNERS OF MICRO AND SMALL COMPANIES IN SANTA CATARINA

From the data collected and treated, we formulated the profile of the respondents and their companies. This profile considered the sector (commerce, service, industry) and gross revenue (on a scale from R\$ 0 to R\$ 2.4 million). Table 5 presents the sectors and the number of companies (active and defunct), by gender of the owner.

Table 5 - Sector of Activity								
Sector	Active				Defunct			
	Men	Women	Total	%	Men	Women	Total	%
Commerce	85	71	156	54%	20	14	34	50%
Service	68	35	103	36%	15	11	26	38%
Industry	16	15	31	11%	3	5	8	12%
TOTAL	169	121	290	100%	38	30	68	100%

As can be seen in Table 5, the sector with the largest representation was commerce, with 54% of the active companies and 50% of the defunct firms. Commerce was also the leader in number of male and female entrepreneurs. We also compared the gross revenue (Table 6).

Table 6 – Gross Revenue

Revenue range	Active				Defunct			
	Men	Women	Total	%	Men	Women	Total	%
Up to R\$ 60 thousand	47	41	88	30%	18	19	37	54%
From R\$ 60 to R\$ 120 thousand	45	27	72	25%	7	4	11	16%
From R\$ 120 to R\$ 360 thousand	26	23	49	17%	2	1	3	4%
From R\$ 360 thousand to R\$ 1.2 million	44	14	58	20%	6	2	8	12%
From R\$ 1.2 to R\$ 2.4 million	6	12	18	6%	1	0	1	1%
Had no revenue	0	1	1	0%	3	2	5	7%
Did not respond	1	3	4	1%	1	2	3	4%
TOTAL	169	121	290	100%	38	30	68	100%

The majority of the companies had sales revenue up to R\$ 120 thousand and the percentage was higher for defunct firms (70%). Besides this, there were twice as many women as men heading up active companies with revenue between R\$ 1.2 and 2.4 million. The results show that most of the MSCs run by men in the period studied were in the commerce sector, with yearly revenue up to R\$ 120 thousand. For companies with revenue greater than R\$ 1.2 million, the opposite was true, with twice as many women as men for active companies.

We also grouped the data between aspects of genesis and operation of the business, following Ortigara (2006). Table 7 shows, in decreasing order, the scores attributed by the respondents to the factors linked to the genesis of the firms still active, and compares these scores with those of the defunct firms.

Table 7 – Comparison of the Factors Related to Company Genesis

Factor linked to genesis	Actives	Extincts
Sense of organization	6,52*	6,54*
Knowledge of the product/market	6,42	6,26
Use of planning instruments	6,39	6,15
Definition of the focus of the business**	6,38	6,06
Ability to perceive opportunities	6,38	6,24
Ability to make fast decisions	6,27	6,35
Relations between partners	6,06	5,94
Individual/Legal entity	6,00	6,25
Ability to deal with information	5,95	5,79
Desire to be independent	5,87	5,56
Identification of an opportunity**	5,83	5,25
Experience in other companies	5,51	5,41
Need to survive	5,16	4,66
Obtain experience	4,21	3,60
Participation of the family**	3,67	2,93
Diversity of interests of the partners	3,16	2,78
Number of partners**	2,94	2,29

* Most relevant factor. ** (p < 0.05).

The factor related to the genesis of MSCs indicated as the most relevant was the sense of organization, which involves the need of the manager to plan the new venture so that it will be well organized. However, the Mann-Whitney U-test comparing the scores attributed by the heads of active and defunct firms identified significant differences ($p < 0.05$) in four factors: definition of the focus of the business, identification of an opportunity, participation of the family and number of partners. We separated the results of the perceptions regarding operational factors into internal and external aspects (Table 8).

Table 8 – Comparison of Operational Factors

Internal Operational Factors	Actives	Extincts
Knowledge of the market**	6,67*	6,43
Adequacy of the product mix	6,64	6,57*
Ability to deal with new situations**	6,57	6,26
Administrative control instruments**	6,47	6,24
Management of working capital	6,19	5,90
Price	5,92	5,94
External Operational Factors	Actives	Extincts
Knowledge of legislation	6,29*	6,38*
Access to financing	5,55	5,68
Reduction of the market	5,41	5,29
Purchase of raw materials	5,35	5,03
Financing of purchases	5,29	5,31
Financing of sales	5,05	4,75
Competition	4,60	5,01

* Most relevant factor. ** ($p < 0.05$).

In relation to internal factors, the managers of active companies attributed greatest relevance to knowledge of the market, and those of defunct companies gave the highest scores to need for adequate product mix. Knowledge of legislation was indicated as the most relevant external factor by both groups.

We again applied the Mann-Whitney U-test and three factors presented significant differences ($p < 0.05$): knowledge of the market, ability to deal with new situations and need to have administrative control instruments. On this question, there was a difference between active and defunct companies, indicating the causes for companies to survive in the market.

The external factors were considered less relevant by the respondents, because the average scores attributed were lower than those of the internal factors. There were no significant differences between the scores for active and defunct companies. These findings corroborate those of Benzing, Chu & Kara (2009) for small Turkish businesses, suggesting

that the heads of MSCs in Santa Catarina and Turkey both believe they can influence the success of their venture.

Figure 2 presents the three factors related to the genesis and operation of the business indicated as most important in the perception of the respondents.

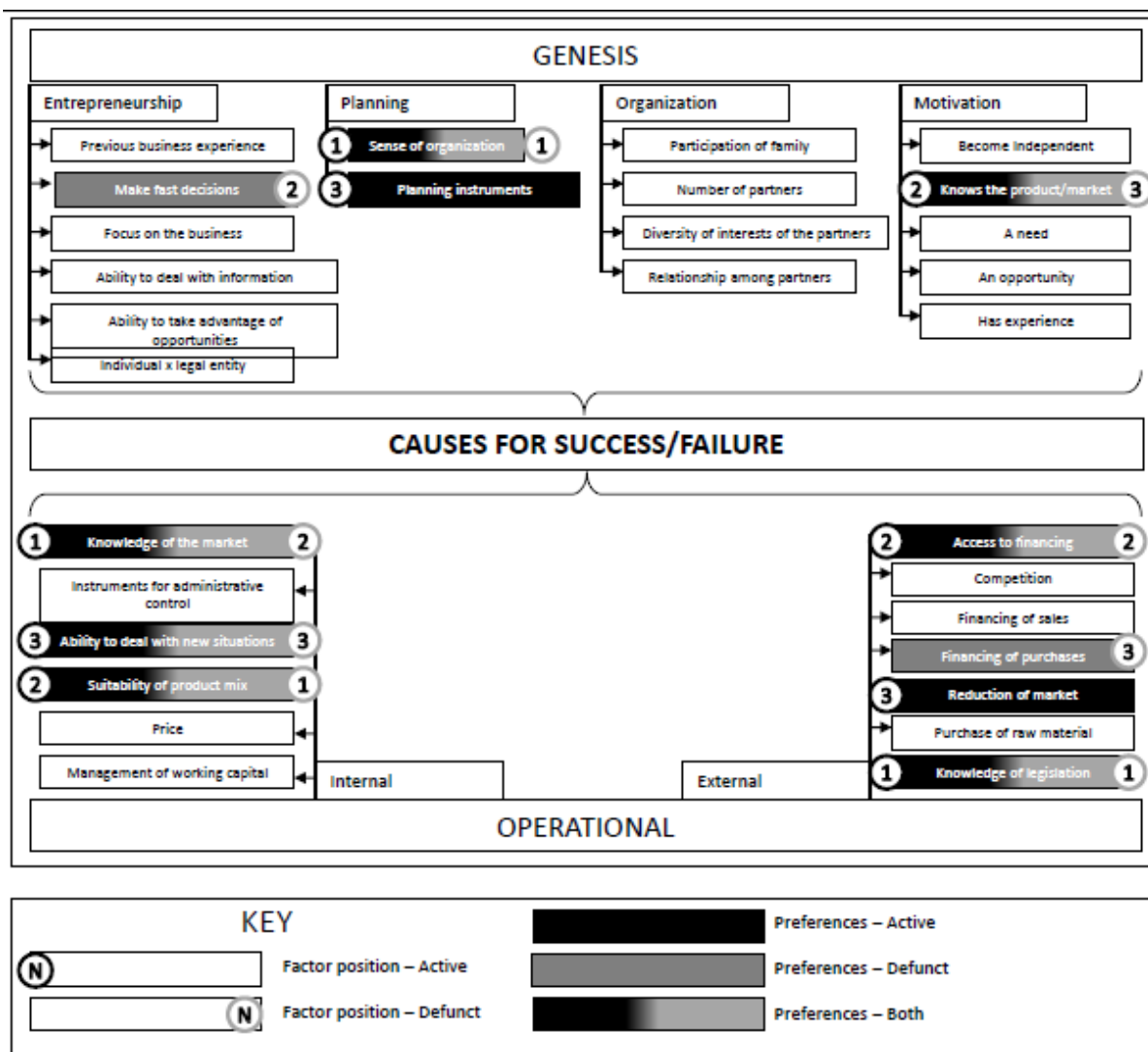


Figure 2 – Factors for success/failure according to the perception of the respondents.

The different colors show the perceptions of the heads of active and defunct companies (black for active and gray for defunct). The two colors together indicate that the factor was chosen as one of the most relevant in both categories. A circle appears beside each one, in the same color coding, indicating the degree of importance attained (first, second or third place).

There were some differences in the choice of the factors related to the genesis of the MSCs. For the managers of active companies, use of a planning tool was considered one of the three most important, while the former heads of defunct firms considered the need to make fast decisions to be the most relevant factor.

We also asked the respondents about factors that could contribute to success after opening the company. The three main internal factors were the same, only differing in their importance (ranking). Among the external factors, the heads of active companies indicated they were more concerned with reduction of the market, while those of defunct companies expressed most concern for financing of purchases, although access to financing was one of the three most relevant factors for both groups of respondents.

4.2 FACTORS FOUND IN THE LITERATURE AND NOT CONSIDERED IN THE MODEL CHOSEN

The model of Ortigara (2006) applied in this study, although it involves various factors, does not include some variables (factors and categories of analysis) discussed by other authors, among them **involvement of employees in the decision process** (IBRAHIM; GOODWIN, 1986; HOLMES; ZIMMER, 1994; SÁNCHEZ; BAÑÓN, 2005), **situation and support of the family** (IBRAHIM; GOODWIN, 1986; TIGGES; GREEN, 1994; BENZING; CHU; CALLANAN, 2005; MONAHAN; SHAH; MATTARE, 2011), **political situation** (IBRAHIM; GOODWIN, 1986), **ethnic origin** (IBRAHIM; GOODWIN, 1986) and **number of hours devoted to the business** (LOSCOCCO; LEICHT, 1993; LUK, 1996; BENZING; CHU; CALLANAN, 2005; COY et al., 2007; BENZING; CHU; KARA, 2009).

These factors have been analyzed from different standpoints, such as **gender** (HUCK; MCEWEN, 1991; KALLEBERG; LEICHT, 1991; LOSCOCCO et al., 1991; LOSCOCCO; LEICHT, 1993; TIGGES; GREEN, 1994; MERRETT; GRUIDL, 2000; BENZING; CHU; KARA, 2009; MONAHAN; SHAH; MATTARE, 2011; PHILIP, 2011; RAJPUT, 2011), **schooling level** (LOSCOCCO et al., 1991; LOSCOCCO; LEICHT, 1993; YUSUF, 1995; MERRETT; GRUIDL, 2000; LUSSIER; PFEIFER, 2001; ROY; WHEELER, 2006; COY et al., 2007; BENZING; CHU; KARA, 2009; AL-MAHROUQ, 2010; MONAHAN; SHAH; MATTARE, 2011), **age** (LOSCOCCO et al., 1991; LOSCOCCO; LEICHT, 1993; COY et al., 2007), and **characteristics of the business**, such as time in existence, size and number of employees (LOSCOCCO et al., 1991; LOSCOCCO; LEICHT, 1993; TIGGES; GREEN, 1994; MERRETT; GRUIDL, 2000; LUSSIER; PFEIFER, 2001; COY et al., 2007; AL-MAHROUQ, 2010; MONAHAN; SHAH; MATTARE, 2011; PHILIP, 2011). The comparison of the variables considered in the model of Ortigara (2006) with those found in the literature allowed identifying factors and perspectives not used in this study that can be incorporated in future studies.

5 FINAL CONSIDERATIONS

The relevance of studying the perceptions of the heads of MSCs is the insight this can provide for the sustainability of such companies. This is becoming more important due to the increasing number of small these enterprises, as indicated by the 100% increase in the number of MSCs founded in Santa Catarina in 2010 in comparison with the previous year. In this respect, we sought to identify the factors related to the genesis and operation of these small businesses that can help make them more competitive. We did so through a survey of the leaders of companies created between 2000 and 2004.

The elements associated with the genesis of MSCs that can influence their competitiveness and longevity were: a) definition of the focus of the business; b) identification of an opportunity; c) participation of the family; and d) number of partners. There were significant differences in the factors when comparing the responses of the heads of still-active companies with those of defunct firms. These differences in the responses of the two groups can indicate factors that received greater attention by the heads of active companies before start-up, contributing to the firms' survival.

Factors related to the operation of MSCs can also increase their competitiveness and longevity. The results found provide evidence that the owners of MSCs need to respond more dynamically to meet the challenges of the evolving market. That affirmation is based on the identification of significant differences in the internal variables related to knowledge of the market, ability of the owners in dealing with new situations and the need for administrative control instruments. Besides this, the factor related to the need to adapt the product mix to the real needs of the market, which is increasingly dynamic, was classified among the three most important in the scores of the respondents.

The results also indicate that the company heads believe their own qualities have the greatest influence on the success of the undertaking, with less dependence on external aspects such as access to resources and competition from rivals, because the average of the scores attributed to the internal factors (four factors with average above 6.00 – knowledge of the market, adequacy of the product mix, ability to deal with new situations and presence of administrative control instruments) was greater than that of external factors (only one factor with average greater than 6.00 – knowledge of legislation). Besides this, we did not find any significant differences in the comparison of the external factors for the two groups, indicating a similar opinion in relation to the elements analyzed.

The model chosen for analysis was congruent with those of other analyses of the factors for success/failure of MSCs from their origin, although not considering some variables considered by other authors mentioned here. These can be incorporated in future studies, among them involvement of employees in the decision process, situation and support of the family, gender, level of schooling, age, ethnic origin and hours devoted to the business, besides characteristics of the business itself, such as age and size.

REFERENCES

- AL-MAHROUQ, M. Success factors of small and medium-sized enterprises (SMEs): the case of Jordan. **Anadolu University Journal of Social Sciences**, v. 10, n. 1, p. 1-16, 2010.
- ÁNGEL, M. F.; PULIDO, D. U. El éxito de las pymes en Colombia: un estudio de casos en el sector salud. **Estudios Gerenciales**, v. 26, n. 114, p. 77-96, mar. 2010.
- BENZING, C.; CHU, H. M.; CALLANAN, G. A regional comparison of the motivation and problems of vietnamese entrepreneurs. **Journal of Developmental Entrepreneurship**, v. 10, n. 1, p. 3-27, abr. 2005.
- BENZING, C.; CHU, H. M.; KARA, O. Entrepreneurs in Turkey: a factor analysis of motivations, success factors, and problems. **Journal of Small Business Management**, v. 47, n. 1, p. 58-91, jan. 2009.
- BIRD, S. R.; SAPP, S. G.; LEE, M. Y. Small business success in rural communities: explaining the sex gap. **Rural Sociology**, v. 66, n. 4, p. 507-531, 2001.
- BRASIL. Lei Complementar nº 128 de 19 de Dezembro de 2008. **Diário Oficial [da] República Federativa do Brasil**. Brasília: Senado Federal, 19 dez. 2008. Disponível em: <http://www.planalto.gov.br/ccivil_03/Leis/LCP/Lcp128.htm>. Acesso em: 20 mar. 2011.
- CHAWLA, S. K.; KHANNA, D.; CHEN, J. Are small business critical success factors same in different countries? **SIES Journal of Management**, v. 1, n. 7, p. 1-12, 2010.
- CHITTITHAWORN, C. et al. Factors affecting business success of small & medium enterprises (smes) in Thailand. **Asian Social Science**, v. 7, n. 5, p. 180-190, 2011.
- COY, S. P. *et al.* Factors contributory to success: a study of pakistan's small business owners. **Journal of Developmental Entrepreneurship**, v. 12, n. 2, p. 181-198, 2007.
- DANA, L. P. More small business is not the answer for Peru. **Journal of Small Business Management**, v. 26, n. 3, p. 68-71, jul., 1988.
- DANDRIDGE, T. C.; SEWALL, M. A. A Priority analysis of the problems of small business managers. **American Journal of Small Business**, v. 3, n. 2, p. 28-36, 1978.
- DICKINSON, R. A.; FERGUSON, C. R.; SINCAR, S. Critical success factors and small business. **American Journal of Small Business**, v. 8, n. 3, p. 49-57, 1984.

DNRC. Departamento Nacional de Registro do Comércio. **Site**. 2011. Disponível em: <<http://www.dnrc.gov.br/>>. Acesso em: 18 abr. 2011.

EVERETT, J.; WATSON, J. Small business failure and external risk factors. **Small Business Economics**, v. 11, n. 4, p. 371-390, 1998.

FREDLAND, J. E.; MORRIS, C. E. A cross section analysis of small business failure. **American Journal of Small Business**, v. 1, n. 1, p. 7-18, 1976.

FRIEDLANDER, F.; PICKLE, H. Components of effectiveness in small organizations. **Administrative Science Quarterly**, v. 13, n. 2, p. 289-304, set. 1968.

HOLMES, S.; ZIMMER, I. The nature of the small firm: understanding the motivation of growth and non-growth oriented owners. **Australian Journal of Management**, v. 19, n. 1, p. 97-120, 1994.

HUCK, J. F.; MCEWEN, T. Competencies needed for small business success: perceptions of Jamaican entrepreneurs. **Journal of Small Business Management**, v. 29, n. 4, p. 90-93, 1991.

HUNG, D. K. M.; EFFENDI, A. A. A preliminary study of top SMEs in Malaysia: key success factor vs government support program. **Journal of Global Business & Economics**, v. 2, n. 1, p. 48-58, 2011.

IBGE. Instituto Brasileiro de Geografia e Estatística. **Site**. 2006. Disponível em: <<http://www.ibge.gov.br/home/estatistica/economia/demografiaempresa/2006/demoempresa2006.pdf>>. Acesso em: 17 abr. 2011.

IBRAHIM, A. B.; GOODWIN, J. R. Perceived causes of success in small business. **American Journal of Small Business**, v. 11, n. 2, p. 41-50, 1986.

IPEA. IPEAdata. **Site do IPEA**. 2011. Disponível em: <<http://www.ipeadata.gov.br/Default.aspx>>. Acesso em: 19 set. 2011.

KALLEBERG, A.; LEICHT, K. T. Gender and organizational performance: determinants of small business survival and success. **Academy of Management Journal**, v. 34, n. 1, p. 136-161, 1991.

KESSLER, A. Success factors for new businesses in Austria and the Czech Republic. **Entrepreneurship & Regional Development**, v. 19, n. 5, p. 381-403, 2007.

LIN, C. Y. Success factors of small- and medium-sized enterprises in Taiwan: an analysis of cases. **Journal of Small Business Management**, v. 36, n. 4, p. 43-56, 1998.

LOSCOCO, K. A. et al. Gender and small business success: an inquiry into women's relative disadvantage. **Social Forces**, v. 70, n. 1, p. 65-87, set. 1991.

LOSCOCO, K. A.; LEICHT, K. T. Gender, work-family linkages, and economic success among small business owners. **Journal of Marriage & Family**, v. 55, n. 4, p. 875-887, 1993.

LUK, S. T. K. Success in Hong Kong: factors self-reported by successful small business owners. **Journal of Small Business Management**, v. 34, n. 3, p. 68-74, 1996.

LUSSIER, R. N.; PFEIFER, S. A crossnational prediction model for business success. **Journal of Small Business Management**, v. 39, n. 3, p. 228-239, 2001.

MACE, M. L. Management assistance for small business. **Harvard Business Review**, v. 25, n. 4a, p. 587-594, 1947.

MARCONI, M. D. A.; LAKATOS, E. M. **Metodologia do trabalho científico: procedimentos básicos, pesquisa bibliográfica, projeto e relatório, publicações e trabalhos científicos**. 7. ed. São Paulo: Atlas, 2009.

MERRETT, C. D.; GRUIDL, J. J. Small business ownership in Illinois: the effect of gender and location on entrepreneurial success. **Professional Geographer**, v. 52, n. 3, p. 425-436, 2000.

MONAHAN, M.; SHAH, A.; MATTARE, M. The road ahead: micro enterprise perspectives on success and challenge factors. **Journal of Management Policy & Practice**, v. 12, n. 4, p. 113-125, 2011.

MOREIRA, S. **Por um modelo catarinense de desenvolvimento para o século XXI**. PNUD - Programa das Nações Unidas para o Desenvolvimento, 2005.

MTE. Ministério do Trabalho e Emprego. **Relação Anual de Informações Sociais (RAIS)**. 2011. Disponível em: <<http://www.mte.gov.br/rais/default.asp>>. Acesso em: 19 set. 2011.

ORTIGARA, A. A. **Causas que condicionam a mortalidade e/ou o sucesso das micro e pequenas empresas no Estado de Santa Catarina**. 2006. Tese (Doutorado em Engenharia de Produção) - Departamento de Engenharia de Produção e Sistemas, Universidade Federal de Santa Catarina (UFSC), Florianópolis (SC), 2006.

PATTERSON, R. A.; KOZMETSKY, G.; RIDGWAY, N. M. Perceived causes of small business failures: a research note. **American Journal of Small Business**, v. 8, n. 1, p. 15-19, 1983.

PERRY, C.; MEREDITH, G. G.; CUNNINGTON, H. J. Relationship between small business growth and personal characteristics of owner/managers in Australia. **Journal of Small Business Management**, v. 26, n. 2, p. 75-79, 1988.

PHILIP, M. Factors Affecting Business Success of Small & Medium Enterprises (SMEs). **Amity Global Business Review**, v. 6, n. 5, p. 118-136, 2011.

RAJPUT, A. A. Impact of innovation and resources in entrepreneurial success: a case study of Pakistani SMEs. **Interdisciplinary Journal of Contemporary Research in Business**, v. 2, n. 11, p. 606-636, 2011.

ROSA, R. V. Some small business problems indicated by the industrial loan experience of the Federal Reserve Bank of New York. **Journal of Finance**, v. 2, n. 1, p. 91-100, 1947.

ROSE, R. C.; KUMAR, N.; YEN, L. L. Entrepreneurs success factors and escalation of small and medium-sized enterprises in Malaysia. **Journal of Social Sciences**, v. 2, p. 74-80, 2006.

ROY, M.; WHEELER, D. A survey of micro-enterprise in urban West Africa: drivers shaping the sector. **Development in Practice**, v. 16, p. 452-464, 2006.

SÁNCHEZ, A. A.; BAÑÓN, A. R. Factores asociados con el éxito competitivo de las pyme industriales en España. **Universia Business Review**, n. 8, p. 38-51, 2005.

SEBRAE_A. **Critérios e conceitos para classificação de empresas**. 2011. Disponível em: <<http://www.sebrae.com.br/uf/goias/indicadores-das-mpe/classificacao-empresarial>>. Acesso em: 21 mar. 2011.

SEBRAE_B. **Taxa de Sobrevivência das MPE no Brasil**. 2011. Disponível em: <[http://www.biblioteca.sebrae.com.br/bds/BDS.nsf/45465B1C66A6772D832579300051816C/\\$File/NT00046582.pdf](http://www.biblioteca.sebrae.com.br/bds/BDS.nsf/45465B1C66A6772D832579300051816C/$File/NT00046582.pdf)>. Acesso em: 13 out. 2011.

STEEL, R. G. D.; TORRIE, J. H. **Bioestatística: princípios e procedimentos**. 2. ed. México: McGraw Hill, 1988.

THENG, L. G.; BOON, J. L. W. An exploratory study of factors affecting the failure of local small and medium enterprises. **Asia Pacific Journal of Management**, v. 13, n. 2, p. 47-61, 1996.

TIGGES, L. M.; GREEN, G. P. Small business success among men- and women-owned firms in rural areas. **Rural Sociology**, v. 59, n. 2, p. 289-310, 1994.

YUSUF, A. Critical success factors for small business: perceptions of South Pacific entrepreneurs. **Journal of Small Business Management**, v. 33, n. 2, p. 68-73, 1995.