



## New Information and Communication Services Companies

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**Keywords** : *new technologies of information and communication, business services, marketing services.*

**GJMBR-E Classification** : *FOR Code: E32*



NEW INFORMATION AND COMMUNICATION SERVICES COMPANIES

*Strictly as per the compliance and regulations of:*



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# New Information and Communication Services Companies

Edson Pacheco Paladini <sup>α</sup> & Douglas Gimenez <sup>σ</sup>

**Abstract** - This study identifies and analyzes the use of New Information and Communication services companies in Brazilian state of Santa Catarina. We have surveyed 14 companies of all sizes and segments. The study design was exploratory and descriptive and uses qualitative approach. A non-probability sampling has been adopted and the information was collected through structured non-disguised interviews with the leaders of the selected companies. The main conclusion of the study is that companies are not using the NICTs properly and, because of that, do not exploit all its possibilities. Lack of marketing culture in this area has been detected. The companies also need to clearly define their objectives and the criterion of evaluating the results regarding the NICTs.

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## I. INTRODUCTION

In contemporary world it is possible to observe a symbiosis of information flows and communication processes, making of them one of the most strategic components of corporate environments. Entrepreneurs are motivated to reflect about the key aspects of recent technological innovations that occurred in the communication field, including those aspects in the scenario of the business environment and in processes for integrated communication marketing.

The continuous and accelerated changes in social ambient; also in the psychological, cultural, demographic or political areas, as well in the legal, competitive, governmental and technological sectors characterize the current macro environment of marketing firms. Those aspects, combined with the changes in human resources areas of domestic companies (loss of skills, for instance) or the changes in strategies and planning policies (availability of any type of resources, for instance), become the task of management extremely complex and risky, especially to the marketing management, which is geared primarily to the complex and changing external environment.

We are living in a moment characterized by intense competition. Commodities management, globalization efforts and rapid technological obsolescence are elements that require new bases and new concept for marketing work - to plan and to execute marketing programs. A generic analysis of the marketing scenario

suggests that traditional marketing is not working (Kotler and Keller, 2006). Senior management sees now waste of money in most of mass campaigns. They see the sales promotion campaigns as temporary sales, but without any result of profit. Attempt to make direct marketing campaigns to get the simple rate of return of 1%. "Their new products are failing the frightening rates", postulate those authors.

According to Iacobucci (2011), there are two answers to the challenges of marketing faced by businesses today. One is to know customers better and be closer to them. The other is differentiating their offer through branding work, so that it shows relevant and superior in value to a well defined target market. Irrespective of the way, companies increasingly need a critical factor: information.

One of the safest ways to reduce the risk of marketing management is obtaining the maximum knowledge and understanding of the behavior of numerous external and internal variables to the company, before make the decision. To have knowledge and understanding of these two important aspects it is necessary to understand the availability of quality information and the correct use of information.

Often, the company has large amount of irrelevant or low quality information. It causes fragileness to the whole process of marketing. In other occasions, the company has a good amount of relevant and good quality information, but marketers do not realize the importance of its use and they make decisions based only on intuition and experience.

Other companies have a good amount of relevant and good quality information, but they are used in a incorrectly way for making marketing decisions. Sometimes, the lack of knowledge about how select the appropriate information means difficulties in interpreting them correctly. It has resulted in a fail of all the process of marketing planning.

According to Hoffman (2009), services are actions and efforts with intangible performances. For this reason the services cannot be stored, resulting in greater difficulty to display and disseminate them and also difficult to other simple situations, like setting prices. It is easy to understand that without the proper use of New Information and Communication Technologies (ICTs) the marketing management is much harder.

In this context arise the two research questions that guide this work:

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- How services companies of different industries are using New Information and Communication Technologies (ICTs) to identify, win and keep customers?
- How do these companies use ICT in their relationship with key stakeholders - employees, suppliers and partners?

So, this paper has, as general purpose, to develop an analysis to evaluate the use of new Information and Communication Technologies (ICTs) by service companies. As specific purposes, we intend to describe the key strategies related to ICT in the identification, acquisition and retention of customers as well as the relationship of companies with key stakeholders; to identify the factor impacts in adopting of ICT in service firms; to study the results of these actions and to introduce the changes and tendencies related to the ICT in the companies surveyed.

## II. METHODOLOGY

According to Gil (2002), from the point of view of the objectives, the research we are presenting here is classified into three categories: exploratory, which has the purpose to provide greater familiarity with the problem, in order to make it more explicit or building hypotheses; descriptive, which aims to describe the characteristics of a given population or phenomenon or the establishment of relationships between variables; and explanatory, which has as their central concern to identify the factors that determine or contribute to the occurrence of phenomena. This method go deeper into the knowledge of reality because explain the reason for things. Based on these definitions, the present study is characterized as exploratory and descriptive, with a qualitative approach. In fact:

- a) It is an exploratory research because focuses on in the question of the use of ICTs on companies services for obtaining knowledge and understanding about it.
- b) It is a descriptive by describing how companies use the ICTs and assess the outcome. In a certain way, the study describes the behavior of service firms in particular. To Malhotra (2011, p.59), "descriptive research is a type of conclusive research that has as main objective the description of something". According to this author, most of the marketing researches are descriptive.

In the point of view of the way to approach the problem, Lakatos and Marconi (2001) understand that the research can be classified as quantitative, where every element of the research can be measured. It means to translate in numbers reviews and information to classify them and analyze them; and qualitative, because there is a dynamic relationship between the real world and the subject, that is, an inseparable link between the objective world and subjectivity of the subject that cannot being translated into numbers. For

Merriam (2008, p.5) "this kind of research considers a qualitative concept 'umbrella', which covers various forms of research that can help to understand the meaning of a social phenomenon". The interpretation of the phenomena and the assignment of meanings are essentials in the process of qualitative research.

In accordance with the listed definitions, this work features the characteristics of exploratory research and descriptive qualitative nature. According to Malhotra (2011, p. 34), "qualitative research is unstructured in the fact that the questions asked are formulated as the research progresses. It is exploratory in nature and based on small samples." He goes on to state that this type of research "involves popular qualitative techniques such as depth interviews, personal, confirming the thought of those interviewed in detail."

Regarding the sampling, it was decided to select a non-probability sampling, especially due to the knowledge of the authors in the area (where he served professionally more than fifteen years) and the resistance of companies to participate. A non-probability sampling is a technique that does not use the random selection. Instead, trust in the researcher's personal judgment." (Malhotra, 2001, p.305). According to Hair (2005), when using non-probability sampling, the researchers have no interest in generalizing the findings to the population, but rather to collect data quickly and with low cost.

It has been contacted 32 service organizations, visiting them or making contacts by phone or email. Taking knowledge of the objectives of the study, twenty-four leaders expressed interest in participating in the research but only 14 responded to interview. The others companies gave up their participation for various reasons; this fact constitutes a limitation of the study.

Precisely because of the limitations of accessing to businesses, we have chosen a non-random sample accessibility.

According to the book "Numbers of Santa Catarina", published by SEBRAE in 2012, the Brazilian state of Santa Catarina has today about 320,000 enterprises operating in the formal sector of trade and services. These companies, with reference to the month of December 2012 accounted for 930,000 formal jobs. The region of the city of Florianópolis, main city of the state, according to the publication, has about 50,000 companies in the trade and services.

Companies that participated in the survey are listed in the chapter in Table 1. Its is important to note that we have no interest in possible generalizations of this study, since it is a non-probability sample for trial.

Table 1 shows the companies we have surveyed and positions of the respondents os these companies.

As a qualitative research, this study was conducted in a single period of time (transversal), considering the opinion of at least one manager from

each company. It is understood that these professionals are best qualified to answer the research instrument because they are performing functions within the organization, including the decision-making.

The primary data collection occurred through structured, non-disguised interviews, guided by a script prepared in advance. The interviews select the owners or the responsible persons for marketing or commercial area of the companies. According to Hair (2005), structured interviews are those in which a researcher uses a predetermined sequence of questions and applies the same sequence to avoid tendentiousness that might result in inconsistent practices. This alternative is one of the main methods of obtaining qualitative data.

Company/Activity	Position in the Company
Greylogix Brazil Industrial automation	CEO
Credifiese Credit cooperative	Manager
Clinicão Petshop	Owner
Blucargo Transportes Nacionais e Internacionais Carrier	Manager
Vida Ativa Consulting health	Owner
Contabilidade Andreatta Office accounting	Owner
Grupo Terra Media and digital communication	Senior communication analyst
Ativacred Ltda Bank	Manager
Audaces Automation and industrial informatics	Manager
Cinehouse Video rental	Owner
Check Check Credit data base	Manager
JC boutique de cabelo Beauty salon	Owner and manager
Interativa Soluções Software development	Responsible for customer support
Instituto Mapa Market research	CEO

Source : Primary data, 2011.

**Table 1 :** Companies and positions of the respondents surveyed

The choice of the method of personal interview, with semi-structured interview, aided by the questionnaire, is justified by the overall objective of the study, which is the structure of the model of quality management. The semi-structured questionnaire combining open and closed questions where the respondent has the opportunity to discuss the proposed topic. The

researcher must follow a predefined set of questions, but he does so in a context very similar to an informal conversation. According to Malhotra (2006), in this method of interview, it is drawn up a formal questionnaire and the questions are made in predetermined order, so the process is straightforward. This author adds that a direct approach is not disguised because the reason is revealed to the questionnaire or respondents and it is evident in the questions. Mattar (2009, p.174) confirms the idea, "in this instrument, commonly called the questionnaire, the questions are presented with the same words, in the same order and with the same option of response to all respondents".

To simplify the exhibition of the results, facilitating their analysis, the different issues addressed in the script were analyzed and coded in keywords. Therefore this brought in a selection of similar words, allowing calculating the percentage of keywords with the highest incidence.

The intention was to work with the categorization technique to find similarities between the responses. Therefore, the data were analyzed to characterize what is typical in the surveyed companies, which is common and what is innovative in every group to demonstrate relationships between data collected in business. This analysis allowed obtaining a conclusion to the work.

### III. THEORETICAL BASIS

#### a) *The Inexorable Advance of Technology on Service Organizations*

The new information and communication technologies (ICTs) are advancing in all types of company and business segments. We focus the service sector, whose importance in the economy of the countries is growing. It is worth to note that the supply of jobs in the sector increases. To Paladini (2011), in Brazil, "the service sector already accounts for about 70% of national formal employees".

In accordance with Hutt and Speh (2012) business services are growing even in regions where production is declining. The authors suggest four factors responsible for the growth of business services.

##### i. *E-Business*

In addition to creating new businesses, the Internet is creating new models and causing a manner fundamentally different of business. Customers in the industrial market have spent over \$ 1 billion per day in information technology services to transform important processes, such as supply chain management, services and customer support and distribution.

##### ii. *Outsourcing*

Organizations of all types are buying more services today than in the past. The trend is to outsource departments and services that are not the main specialty of the company (such as processing of



the data of the employees payment, storage of documents or even the entire Human Resources or communication department). An avalanche of new service providers has emerged to meet the needs of large and small customers.

### iii. *Innovations*

New services that were not even considered ten years ago are driving the increasing demand for services. Security for networks computer services remotely, via computer systems, environmental control for commercial buildings and custom training for employees, are some types of services provided via the Internet.

### iv. *Growth of Production*

The production continues to grow even with the reduction in the number of employees in the area. With this growth, demand for services such as logistics, advertising and information processing continues its upward trend.

### b) *The on Line Information Revolution*

Organizations are linking information technology more directly to business strategy. The strategy experts argue that the way an organization manages information and knowledge will determine whether it will win or lose, it means, it will be a leader or follower. To align information technology with strategy, companies need advice (by consulting groups, for instance) on equipment to be acquired and continuous guidance with respect to the best way to use these devices in order to acquire competitive advantage (Nogueira, 2008).

Considered the "Father of Modern Management", the Austrian Peter Drucker has an explicit approach when the subject is transformative power of information in organizations.

"The truly revolutionary impact of the Information Revolution is just beginning to be felt. But it is not the information that fuels this impact. It is not 'artificial intelligence'. No effect of the computers and data processing on decision making, policy making or strategy. This is something that almost no one foresaw or, indeed, there was not even mentioned ten or fifteen years e-commerce - that is, the explosive emergence of the Internet as a important, perhaps more importantly, global distribution channel for goods, services, and surprisingly, managerial and professional jobs. "(Drucker, 2002,p15.)

When Drucker wrote this, the world had not succumbed yet to the collective buying sites, for example. Today, an increasing number of consumers buy products (goods and services) over the internet with speed, comfort and safety. More than that, people have access to an immense contingent of information that allows them, among other things, to compare offers from various companies around the world and choose the one that seems most advantageous. This tendency

inserts all companies in an environment of global competition.

To Cunha (2010, p.14), the new Hypercompetitive environment creates a great challenge for organizations of any size and industry: "to understand this new environment and properly define future scenarios, taking advantage of the opportunities and avoiding (or anticipating) threats of marketing becomes vital for any organization, anywhere in the world".

The "Information Age" is revolutionizing the management of enterprises, enabling greater synergy of information in the industrial and commercial applications, generating unprecedented results. With greater control of information and more closeness and understanding of the clients, companies have more opportunity to thrive and advance into new markets. The technology thus becomes part of all human activities and people, that, in turn, become increasingly dependent on it.

### c) *New Information and Communication Technologies*

With the revolution of information comes the New Technologies of Information and Communication (NICTs) characterized mainly by a process to make communication faster and making its content less palpable, either by scanning and or communication networks. The NICTs enabled the emergence of "information society", the information becomes the most important raw material and valuable processes.

NICTs include personal computers, the electronic tracking for digital imaging (scanners), printing for home printers, recording domestic CDs and DVDs, mobile phones, electronic mail (email), discussion lists (mailing lists), the Internet as a whole, the world wide web (the main graphical interface of the Internet), websites and home pages, digital technologies for capture and processing, movies and sounds digital photography, digital video, digital sound, the remote access technologies(wireless or wireless), Wi-Fi, Bluetooth, among others.

Grönroos (2009) argues that the NICTs are progressing at an impressive speed and recruiting more people and creating an overall interconnection, a virtual communities and a collective intelligence. Collective intelligence is an aspect of a universal contact, a universal action that is growing in the same way as the population does.

Considering all the NICTs, one can say that the Internet is the technology that has more potential in human relations, interpersonal communication, organizational and communication at work. The network enables men to a situation in which people need not be present in the same space. It also allows individuals and organizations on opposite sides of the globe to have a perfectly communication. The Internet has literally allowed people and companies crossing their physical limits, changing forever the borderlines of the markets.

Currently, NICTs became part of the organization, becoming essential tools in the management. These new technologies have the ability to create environments that provide many functions and allow for greater interaction with all stakeholders of the organization. The systems developed have large capacity storage of information, promote flexibility and can perfectly fit the profile of the company.

The Information Technology (IT) passed from a simple support tool administration to an element incorporated into the final activities of the companies, being part of the services and products of these, sometimes even turning up in the business itself (online shops).

Some of the information systems used by most organizations are the ERP - Enterprise Resource Planning, SCM - Supply Chain Management and CRM - Customer Relationship Management, as well as the systems developed for the analysis and decision making the DW - Data Warehouses and systems BI - Business Intelligence.

Correa and Caon (2010) say that the main reason for firms to use information systems is the search for competitive advantage. This advantage is obtained by the reduction of the costs due to increased automation and process efficiency, and improve the quality of information available to all members of the organization, so that they can better manage and implement the processes.

The current context characterized by many authors as it was the "Society information". We can state that what characterizes a society as a Information Society is basically the fact that the economy is grounded in information management, information communication, telecommunication and information technologies. So, as many authors have pointed out, the information can be seen as the raw material, it means, the basic input of the process. The authors of the area of Society Information usually understand communication as a set of means or vehicles to the process of information dissemination or the act of information distribution. An information technology device can be understood as a structure for information storage, information processing and easy access for all kind of information.

A communication "network" has allowed greater interaction between business and the various suppliers around the world. The available information is increasing and, therefore, became important to know that companies collect, organize and securely store all content that is available (Esteves, 2011).

From all points of views, the advancement and importance of NICTs for the corporate world (and people) are evident. In accordance with to the Brazilian Institute of geography and Statistics (IBGE, 2012), in 2012 there were 70.000 Brazilian organizations in segment of the Information and Communication

Technology(ICT), had net revenue of US\$ 100 billion, which represents 8.3% of the total value produced by industry in 2012, including commerce and services. The ICT sector in Brazil employed 750,000 people. Between 2006 and 2012, the sector increased 18.3% in the number of companies and 40.7% in employed people. In relation to persons employed in ICT sector, there was also a concentration in the service sector, which in 2012 gathered 75% of employed persons, while in industry this share was 30% and the trade has continued representing lower relative importance (3.3%).

Also according to the IBGE survey, the activities of the ICT sector were concentrated in Southeast of the country in respect to the personnel employed (65.6%) and the generated value (64.4%). Secondly, it appeared the South region of Brazil, with 13.2% of employed persons.

To have an idea of the economic and social importance of the segment, in state of Santa Catarina (south of Brazil) 3,000 companies in the industry have directly employed about 30,000 workers in professional and technical posts, graduated from universities, technical schools and vocational courses. The industry produces more than one billion of US dollars a year in goods and services, with 80% exported to other states and countries.

Although the apparent growth of NICTs in Brazil, a comparison with other countries shows that, such as occur in various industries, the country still has a long way to go. It is clearly emerges from the Global Report of Information Technology 2010-2011, World Economic Forum. Brazil occupies the 56th place among 138 economies, in the world ranking that analyzes the adoption rate of IT, such as management software, to support growth and development of the economy. In ranking the five best scores were: Sweden, Singapore, Finland, Switzerland and the United States. According to the Corporate MPL software:

"The ranking is formed by applying an assessment called the Index of Information Technology (ITI), which analyzes the level of preparedness of countries to adopt technology in three respects: the regulatory environment, business and infrastructure; preparation of individuals, businesses and governments to use technology and implementation of available technologies. There were 138 countries that were part of the report, which is the most reliable international assessment of the impact of technology in the development process and competitiveness of nations (world Economic Forum, 2011)."

In the last decade, many organizations have invested in practices, solutions and methodologies of knowledge management, driven by market movement, or concerned with the widely held view that organizational knowledge is the only source of lasting competitive advantage in a changing environment and high global competitiveness.

The placement and use of new technologies is determined by the logic of competition, where the important thing is to ensure and increase its market share. Therefore, companies seek through new technologies, increase the competitiveness of their products to market by reducing costs, increasing productivity and reducing production time (Since 1993, Mañas has pointed out this fact).

A company that does not go to the technological innovations cannot compete in a technologically advanced market, where prices are lower and product quality are superior to it in practice. By addressing how NTICs impact on the organization of modern enterprises, Coutinho (2010) states.

"The development of new technologies has also changed in a significantly way the system of business organization. The Internet, the largest global network of interconnected computers, was created in the spirit of free access to information. With the transition of the platform, used primarily for research by government and educational institutions, to commercial entity, well established companies and entrepreneurs began to build web sites and use the Internet to put their mark on the digital frontier."

To Granerod (1996), since 1996 Internet marketing and Web Marketing differs from traditional marketing, because it is the costumer that directs his attention to the company web site. So how the marketing activities would be analyzed in this new environment? The famous 4Ps (Product, Price, Place and Promotion), advocated in the 1960s by the North American Jerome McCarthy, remain as valid and viable structure for the development of new marketing strategies. In this new environment, the products (goods and services) can be created and produced in different places, leaving to the firms the mission to search the expansion of the product concept, by internet, through the support services consumer and post-sales.

The price, which is a result of customer perception, is replaced by its focus on the means of payment and the legal issues and security in transactions, reflecting the costs of production and distribution network. The places or distribution channel expands into the virtual space of the network itself, in search of the distribution of products online, at any time and place (Stil and Zimmerman, 2011).

Nascimento and Lopes Umann (2011), in his article "Marketing and New Technologies: the main tools of web marketing", postulate.

"The promotion or communication is carried out on the web, incorporated as new media, interactive in character. Although the marketing activities have been well accepted in the network, advertising is still being accepted, with the new media the World Wide Web. Its interactive features begin to be an efficient virtual channel advertising, marketing and distribution of goods

and information services. This new model of interactive communication can be represented by four basic forms: the site of company, email marketing, communication actions aimed at generating visitors to the site (banners, rich media and sponsored links) and viral marketing. These four formats and represents the new model of marketing - or web marketing - are in themselves, the strategies to gain and retain new customers for businesses".

About this new form of marketing, we cannot forget the concept of viral marketing. Viral marketing equivalent of: "I'll tell two people, and they will tell two people, and so on." But the Internet has led to organic form of marketing to new heights, enhancing communication and strengthening the communities of people - thus making the viral marketing even more effective. When you use viral marketing as a tool, is testing the network in a creative way, the way it should be used (Fiore, 2011).

It is easy to understand how services companies are taking advantage of the enormous opportunities offered by NICTs. Because of these advantages, the companies have redefined objectives and strategies of communication with the market and they have become the tool for the success of these organizations.

#### IV. ANALYSIS OF RESULTS

In this section, we proceed to the research analysis. Initially, Table 2 summarizes, by company, new information and communication technologies adopted, the main factors that determined the use of these technologies and achievements.

The survey was conducted with different companies of various sizes and lines of business. This allows obtaining a broader analysis, due to the heterogeneous sample, providing a broader discussion of the results.

Research demonstrates that all companies, regardless of size and sector, are aware of the profound changes in business environment and the importance of new communication technologies and information. The conventional strategies of communication are sharing space with new media, such as that comes from the Internet - websites, blogs, Skype, among others.

The adoption of NICTs arises not only because they are available to any organization, but because they are generally cheaper, agile, comfortable and efficient. In addition, some of them allow to measure easily and instantly, as is the case of using page view sites.

The increase in the prices at the conventional media - like TV, Newspaper, Magazine, Film and Radio - are another factor that, according to Cunha (2010), contributes to the migration of advertisers for interactive digital media.

Company/ Activity	Nicts	Determinants Factors	Results
Greylogix Brazil Industrial automation	Websites VoIP Skype e-mail Intranet	Agility in the processes. Cost reduction.Efficient communication	Cost reduction. 24-hour contact with customers and partners
Credifiese Credit cooperative	Internet banking Webmail Talk free Intranet Management software	Competition Convenience to the costumer Safety Speed.	Agility in the processes. Stand by decrease. Quality increase.
Clinicão Petshop	Database Websites Blog E-mail Telephone Mailing list	Approach with the client Company's positive image	Directed marketing. Approach with the client
Blucargo Carrier	Merchandising in magazines and TV. Font-light Software SSW Intranet	Competitive advantage Approach with the client.	Unable to inform
Vida Ativa Consulting health	Websites Skype Blogs Mailing list Newspapers Social networks.	Cost. Market information	Cost reduction. Update the database. Brand visibility.
Contabilidade Andreatta Office accounting	Websites Mailing list Telephone and software e-Doc.	Agility in the processes Reduction of space and time.	Convenience Safety Speed.
Grupo Terra/ Media and digital communication	Contact center E-mail Marketing Intranet Websites events Newspaper, Journal and Tv.	Use of multiple channels Media platform to reach the market.	Increase of marketing share.
Ativacred Ltda Bank	Websites Contact center	Improving the quality of service.	Unable to inform
Audaces Automation and industrial informatics	Websites Software VoIP Long distance education platform.	Improving the quality of service	Agility in the processes Cost reduction.

Company/ Activity	Nicts	Determinants Factors	Results
Cinehouse Video rental	Software Vexxa Web sites Telephone and newsletters	Competition. Better services to customers.	Unable to inform
Check Check Credit data base	24-hour contact with customers Telephone E-mail SMS and Skype.	Improve the quality of service. Streamline communication	Increased customer satisfaction.



JC Hair Salon Beauty salon	Internet TV Mailing list Folders and Skype	Customer loyalty Attracting new customers Improve communication with partners.	Positive outcome
Interativa Soluções Software development	Newsletters Websites Telephone Skype Google talk.	Identify, attract and retain customers	Unable to inform
Instituto Mapa Market research	Website Blog Twitter Linkedin Telephone and e-mail	Strengthen the brand in the market,	Positive outcome

Source : primary data.

Table 2 : NICTs, determinants and outcome

The Map Office, one of the companies surveyed, holds an annual study entitled "advertising marketing in Santa Catarina." In its last version (2013, partially available at [www.mapa.com.br](http://www.mapa.com.br)), the research shows data of 2006: The dominance of broadcast TV, which grabs 56.8% of the amount of advertising (R\$ 1 billion), followed by the Journal (17.9%) and radio (16.9%); the Internet represented only 0.4% in that year.

Today, internet represents almost 40% of the total...

The item 3.3 of this research presents data and information demonstrating the inexorable growth of the web and NICTs caused by the world wide web.

Another important aspect of this study is that 28.5% of firms (four) didn't know to dimension the result of NICTs. Considering that in three other companies managers do not need to know the results, giving only vague information, we can infer that half of the companies cannot point their results, although they use and affirm the importance of NICTs.

None of the companies surveyed had a formal communication plan to show.

Without planning communication efforts, says Kerin (2007), the company has difficulty in defining goals, objectives, and the most appropriate strategies to achieve them, that why they rarely can measure the results. Research indicates that most companies place their marketing efforts and communication empirically on the basis of "trial and error."

This can be corroborated when analyzing the factors that determined the adoption of NICTs of some companies. Reasons like "approach to the customer", "improve communication with partners", "better serve customers" sound vague and relative. It can be noted insufficient concrete reasons for defining the goals and strategies for the use of new technologies. Without goals and strategies, the measurement of concrete results is practically impossible.

Among all the considered situations, business owners using Internet is the hegemonic tool. Virtually all of them provide information and maintain a communication channel customer online. In some cases, there are several communication channels also to providers. This proves the effectiveness of the web as information technology and communication. Besides the Web site, the main NICTs used by businesses are Skype, Intranet, web mail, Database, and blogs.

The phone is still important as a tool for contact center (the old telemarketing).

But in 2006, 60% of the contacts were made by phone. In 2012, this number decreases to 15%. According to the research, in 2006, 20% of the contacts were made by e-mails. In 2012, this number increases to 65%.

Besides telephone and e-mail contacts, other conventional media were cited in the survey: TV, direct mail, magazine, front light, Newspapers, Public Relations (events), brochures and newsletters.

Amazingly, social networks, like Facebook or Twitter, were also mentioned. Since 1996 Granerod asserts that these networks represent the future of business communication with customers after the advent of media convergence. We can see today that he was correct.

On the search result, it can be seen that the use of NICTs by companies is still incipient. There is, as already stated, even a plan that allows the systematic and strategic use of these new technologies. Paradoxically, all companies said that the use of NICTs is vital for the survival and growth of any company in the new competitive environment

This paradox may result from:

- The way how some employers still view the process of communication in their companies with the market elements. For them, communication is a cost, not an investment.

- b) Misunderstanding (or ignorance) about how a communication process works. This process, according to Hoffmann (2009), needs to be interactive, from the company to the customer and from the customer to the company. The Internet, for example, is perfect today as a tool for interactive communication.
- c) Failure to invest in the areas of corporate marketing. 75% of entrepreneurs surveyed said they have no marketing department in their companies. In these cases, the marketing function - that involves communication - is performed by a manager or in some cases by the owner of the company.
- d) Absence of complete knowledge of the local culture. Without knowing how people think, there is no way to know if the business investments in communication have a result or not.
- e) No strategic management. According to Carvalho (2010, p.49), "strategic management is the management of a greater capacity to impact on the organization. It directs, looks at the long term, takes a broad view of the organization and adopts a more global perspective in a long term, so as to decide the best way to achieve their goals within the context of an uncertain future".

The interviews demonstrate that three out of four entrepreneurs are more concerned with the operational management than with the strategic view. Strategic view is used, for instance, to turn the information into knowledge and so we can take real advantage from information. Otherwise, it is not possible.

In general, the surveyed companies still manage their business based on the culture of the sale, and not in the culture of marketing.

## V. CONCLUSIONS

In a highly dynamic and competitive world, information has to have a strategic role in organizations. It is not enough merely to collect market data. It must transmute them into this information and, from information, to knowledge. In this sense, the adoption of new technologies, including communication, is becoming increasingly important in generating competitive advantage.

The present study has examined the use of new Information and Communication Technologies (ICTs) for service companies to answer two questions:

- How service companies from different industries are using the New Information and Communication Technologies (ICTs) to identify, attract and keep customers?
- How the surveyed companies have used NICTs in their relationship with the main stakeholders, like employees, suppliers and partners?

Results from the field research, based on the theoretical framework, allow us to define some conclusions.

The segment size of the service area where the company is acting determines whether or not the use of NICTs. It means: the impact of the concurrence in the business decisions.

If it not necessary to evaluate the impact of the concurrence, there are no defined objective goals. It has been observed in this survey. In fact, none of the 14 companies surveyed had specific goals or measurable objectives. Elements like time or costs are not clearly known. So the use of technology in the identification, acquisition and retention of customers is not effective. The answers, as already stated, were vague and imprecise.

Without the correct definition of the objectives, therefore, the measurement of results arising from the use of NICTs is virtually impossible. For example, when a manager states that use webmail to get closer to your customers, he does not define indicators to accomplish and evaluate this "approach." Without this (numerical) evaluation, there is no way of knowing if the expected results were positive or negative.

The same principle that governs the relationship of companies with their customer applies to other stakeholders - employees, suppliers and partners in general. For these stakeholders, the relationship is maintained in traditional way of business.

It is worthy to mention the subject published in *Veja Magazine* (2012), which points to the excessive optimism by 60% of Brazilian consumers as one of five factors that make Brazil one of the most expensive countries in the world.

The Internet (as we should expect) emerges as a tool (or media) that companies use to open its doors to the world. However, its use is still restricted to the organizations Web Page, to send and to receive web mails and some very specific uses of cheaper resources that the network offers. Reducing costs, incidentally, is one of the main aspects pointed to the use of NICTs.

There is no doubt that controlling costs is essential to have products with competitive prices. But it is not enough. One must also consider the benefits that NICTs bring (or not) for companies. These benefits that go far beyond the sale of products, and that means answering questions such as:

- What is the impact of NICTs in the image of the company and its products?
- What the best information and communication technologies for my business?
- What strategies best suited for my company in relation to use of NICTs?

The correct answers to these questions may be obtained, possibly with other studies. This concludes that the service in companies of the Brazilian state of

Santa Catarina have a long way to go toward excellence in communication. This involves a cultural change for entrepreneurs who need to replace the vision for the strategic and operational tactics in your business. In a world of global competition, this can mean the difference between success and business failure.

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