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Importance of ICT in the Accounting of SMES in the Southern Zone of the State of Tamaulipas

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Abstract

ICT have played a very important role in the accounting and administrative system. Through its use, both small and medium sized companies; commercial, industrial, or services, can keep track not only of accounting processes; such as internal control, strategic planning. Considering that electronic accounting is not mandatory for all companies, someone that are not required, are resistant to this change. However, for them to remain in a competitive market, they must be up to date with new technologies. According to INEGI data, it is reported that a low percentage of small and medium sized companies have computer, and of these, a great percentage make little use of ICT. The objective of this research is to show the importance of ICT in the accounting and administrative process, Analyze and determine the tools that SMEs can rely on to improve their performance and strengthen their stay on the market. The information obtained from managers is analyzed and the results that describe the relationship between the variables studied are shown, such as control and strategic planning.

Keywords: *Accounting, control, SEMs, ICT*

1.- Introduction

Today, technologies have facilitated activities in a number of areas, some with greater impact than others, but most of our activities are affected by the evolution of technology. For entrepreneurs, it is increasingly necessary to select different alternatives for decision-making, which requires an adequate use of ICTs (Information and Communication Technologies), since the way of managing the company is increasingly changing due to its evolution. (Rada, 2009)

As a result of this, globalization has led companies to incorporate methods of analysis and methodologies, replacing improvisation, helping to create a favorable environment to meet their expected expectations (Rada, 2009). ICTs have become an indispensable tool for companies that want to evolve and even survive. (Guillén, 2007). In the case of Accounting, the accounting process has undergone a drastic change, leaving behind manual processes, papers, books, however, the question arises if this is completely obsolete for SMEs, due to their resistance to change.

SMEs have been the object of study for many years, this has allowed them to improve in the economic environment, however, they continue to look for strategies to solve the problems they face (Figueroa, 2013), therefore, this research addresses the issue of the relationship between ICTs in the accounting process, control as well as strategic planning for better

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decision-making.

2.- General Objective

The general objective of the study is to analyze the relationship of ICTs as a support to the generation of accounting information to be competitive, have control and make strategic planning.

3.- Specific Objectives

In the same way, having systems allows it to be used in the use of different objectives, in this research it is determined:

- The use of ICTs is related to competitiveness
- The use of ICTs is related to control
- The use of ICTs is related to strategic planning

4.- Hypothesis

Therefore, the general hypothesis is:

Information Technologies are related to good Accounting that allows us to provide information to be competitive, have internal control and have strategic planning.

5.- Theoretical Framework

The variables and concepts used to allow a better understanding of the study are defined.

5.1 SMEs in Mexico

A central element for economic growth is the creation of private sectors, entrepreneurial activity represents one of the main forces of economic development mainly in developing countries (Orlandi, 2006).

SMEs, due to their characteristics, do not choose to have an accountant, in case they are not obliged to keep accounts, however, it is necessary to keep track of operations to know the financial life of the company. In the 2018 National Survey on Productivity and Competitiveness of Micro, Small and Medium-sized Enterprises, accounting methods are mentioned according to their form of registration.

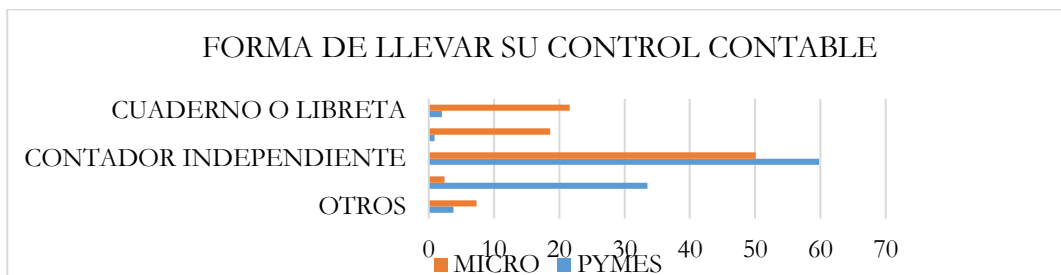


Figure 1: Accounting Control. In the Original Spanish Language.

Own Elaboration.

INEGI 2018.

As it could be observed, most SMEs use the service of an accountant, it should be noted that it is an opportunity for research if the accountant is trained to use ICTs or sends a monthly report of the activities for the knowledge of the entrepreneurs. Many of these companies do not consider it necessary to hire these services.

Cabrera, Cruz, et al (2019) explain that the factors that affect SMEs are lack of financing, infrastructure, technical aspects, lack of preparation, inventory control, which makes them vulnerable to changes or to face business problems.

5.2 ICT

Information technologies have made the world evolve, making tasks easier, as well as communicating with other people in an easier way at a distance. García and Hernández (2017) highlight the relationship between ICT and competitive advantages by leading the company to better opportunities.

According to Duarte (2008) ICTs help to solve specific problems, The advantage is when changes are produced for a social good, if they know how to use them, it becomes a very useful tool for the benefit of human beings, for example, the use of ICTs for education in the pandemic period, sales and purchases using ICT during the pandemic.

For accounting, the emergence of computing, the creation of specific programs bringing applications closer to the user, making them easy to use, has been a revolution. (Grande, 2008). Companies have witnessed the growth of Accounting and improvement in controls with ICT, documents, records and even electronic signature is used in other areas, breaking barriers of only use in accounting.

Zaragoza Velazquez & Monserrat Vera (2015) in their article describe that ICT generates efficiency in companies because it allows them to achieve greater profitability, accuracy in decision-making for the benefit of the organization, and currently ICT represents a very important role in companies due to the implementation of accounting systems as well as the benefit of applying them in other areas.

Therefore, it is important to use ICTs and be trained in the use of different packages to take advantage of the material that emerges from the information we can obtain in various areas. Used well, ICTs allow companies to produce more, faster, of better quality and in less time. They allow us to be competitive in the market, have time for different activities, and get customers and products from all over the world in a short time.

5.3 Accounting and Accounting System

Accounting has been indispensable for the financial development of companies, in addition to keeping control, it helps in decision-making and contributes to the proper functioning of companies' finances. Having good accounting helps to know if the company is profitable or the company is loss-making. Having a management of the company's accounting allows you to know the needs that each period faces and the resources you have for it, if you are not guided by the accounting, you run the risk that the company will be decapitalized and the owner will not realize it until it is very late. (Cifuentes-Quñones, 2018).

An accounting system is the set of tools, procedures and resources used by a company to keep track of financial operations and translate them into a useful way for decision-making. (Josar, 2011). You can choose to purchase a system or keep track of it in excel.

Figure 1

Structure of Accounting Systems

Record of Financial Activity	A systematic record must be kept in an accounting system
	of daily activity in economic terms
Classification of Information	Complete record of all activities involved in a
	Large volume of useful data for decision-making
Summary of Information	to be used by decision-makers

Own Elaboration.

FD Reyes Vega, Salinas Jara

5.4 Strategic Planning

Regardless of their size, companies are faced with threats and opportunities that drive them to establish strategies. The set of organizational plans that regulate the behavior of a company with the purpose of obtaining competitive advantages is strategic planning (Rodríguez, V 2005).

Rodríguez (2005) studied that strategic planning regulates a company's behavior in order to gain competitive advantages by achieving customer preferences. Although strategic planning does not represent a solution to all the problems that the company faces, it is nevertheless a necessary tool for correct decision-making.

5.5 Internal Control

As organizations have increased their volume of operations, there is a greater need to implement controls that allow them to achieve the objectives for which they were created: maximizing their financial results, increasing their liabilities or reducing financial losses.

On the other hand, setting goals below what is possible can put at risk the permanence in the market, but also setting unattainable goals can generate demotivation or non-compliance with them, facing external processes that do not depend on the staff. (Molina, 2000).

Controlling inventories, controlling cash, controlling staff schedules, is important to be able to plan and improve. This is achieved if you have systems that are related to each other, Accounting, Banks, Inventories, in this way the data is arranged and classified to obtain reports on the area that needs to be controlled. Any asset must be related to accounting data, in this way it is verified that the results are reliable.

Therefore, a process carried out by the Administration designed with the objective of providing a reasonable degree of assurance regarding the achievement of objectives with effectiveness, efficiency and reliability of financial information and compliance with applicable laws and regulations, is Internal Control.

5.6 Competitiveness

Small companies make decisions based on previous experiences, on the advice of their parents, peers, considering that they control the different market variables, however, the current conditions are not the same, based on better purchasing conditions and quality, they can offer services and/or products. Companies that design strategies and comply with them can become competitive by meeting the requirements of users. (Heredia, 2014)

With all of the above, it is understood that companies generate huge amounts of data which must be accurate and objective and easy to verify, so it is necessary to classify and order it, a good system and adequate training, a machine can do several processes on its own.

The information obtained from these systems can be valid, accurate, complete, up-to-date, and timely to aid decision-making, all measured in terms of quality, time, and cost. All this is

considered an indispensable part for the proper direction and management of the company (Saavedra, 2016)

6.- Methodology

The type of study is basic, quantitative approach at a correlational descriptive level, with a non-experimental cross-sectional design. The relationship between the Independent variable; Electronic Accounting with its dimensions: Competitiveness, Control, Strategic Planning and the Dependent Variable ICT's with its dimensions basic use and use of platforms by means of Pearson's Bivariate Correlation using SPSS.

6.1 Methodological Strategy

The methodological strategy carried out during the study was as follows:

- First, the literature related to the variables, books, articles, website, etc. is reviewed.
- Second. - The study population is identified and the statistical sample is determined.
- Third. - The data collection instrument is applied.
- Fourth. - the instrument is applied to the given study population
- Fifth. - tabulation of data, representing it in tables
- Sixth. - Data analysis and interpretation.

6.2 Population and Sample Size

The sample size was taken according to the method of non-probabilistic sampling for convenience considering Micro, Small and Medium Enterprises considered as young people and adults by INEGI in the southern area of the State of Tamaulipas, with the criteria of 5 Doctors experts in the subject of SMEs Figure 2

Stratification of establishments

Size Per Work Num		Age In Years	
Micro	0-10	Recently Created	0-2
Small	11-30	Young	3-5
Medium	31-100	Adults	6-10
Large	101 & Over	Greater	More Than 10

Own Elaboration.

FD: INEGI Economic Census 2019 SNIEG.

$$n = \frac{z^2(p \cdot q)}{e^2 + \frac{(z^2(p \cdot q))}{N}}$$

n= sample size	83
Z = Desired confidence level	95%
N = population size	600
e= level of error willing to make	5%

The data obtained through the surveys were prepared to be introduced to the SPSS, for which the operationalization of the variables is presented to present an independent variable and a dependent variable and their dimensions. This process is chosen to present a better relationship

of the variables.

Variables

dimensions

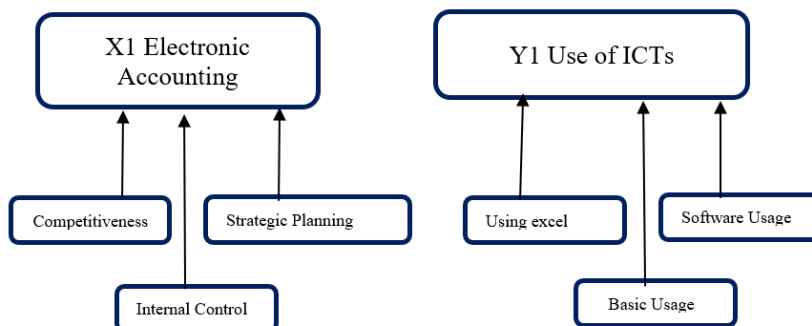


Figure 3. Variables and Dimensions
Own elaboration

According to the variables under study, and the questionnaire applied, Cronbach's alpha was evaluated by means of the SPSS to validate the instrument with a result of 0.981 with N of elements = 10.

The system is run according to Pearson's Bivariate Correlation method to look for the correlation between the variables, transforming the items to obtain an independent variable and a dependent variable and to be able to analyze each of the dimensions.

7.- Results

After running the data in SPSS, the results obtained are displayed.

The correlation between the variables is positive, i.e. if there is a positive relationship between the use of ICTs and Electronic Accounting for better management of companies. Accounting control. in the original Spanish language.

Correlaciones

		VI	VD
VI	Correlación de Pearson	1	.983**
	Sig. (bilateral)		.000
	N	83	83
VD	Correlación de Pearson	.983**	1
	Sig. (bilateral)	.000	
	N	83	83

** . La correlación es significativa en el nivel 0,01 (bilateral).

The relationship between the dimensions formulated is also positive

Correlaciones

		1.- Tiene conocimientos de competitividad	6.- Ud considera que es importante medir la satisfacción del cliente
1.- Tiene conocimientos de competitividad	Correlación de Pearson	1	.906**
	Sig. (bilateral)		.000
	N	83	83
6.- Ud considera que es importante medir la satisfacción del cliente	Correlación de Pearson	.906**	1
	Sig. (bilateral)	.000	
	N	83	83

** . La correlación es significativa en el nivel 0,01 (bilateral).

The next dimension in relation to internal control is positive but not as strong

Correlaciones

		2.- tiene conocimientos de control Interno	7.- considera importante establecer políticas, reglas, procedimientos
2.- tiene conocimientos de control Interno	Correlación de Pearson	1	.774**
	Sig. (bilateral)		.000
	N	83	83
7.- considera importante establecer políticas, reglas, procedimientos	Correlación de Pearson	.774**	1
	Sig. (bilateral)	.000	
	N	83	83

** . La correlación es significativa en el nivel 0,01 (bilateral).

The relationship between the strategic planning dimension is positive

Correlaciones

		3.- tiene conocimientos de planeación estratégica	8.- considera importante hacer proyectos a largo plazo
3.- tiene conocimientos de planeación estratégica	Correlación de Pearson	1	.834**
	Sig. (bilateral)		.000
	N	83	83
8.- considera importante hacer proyectos a largo plazo	Correlación de Pearson	.834**	1
	Sig. (bilateral)	.000	
	N	83	83

** . La correlación es significativa en el nivel 0,01 (bilateral).

From the above, the Information Technologies Hypothesis is related to good Accounting that allows providing information to be competitive, have internal control and have strategic planning.

8.- Conclusion

It is observed that the use of ICTs in the different processes favors in a discrete way, since the personnel has a very important role, the training of workers is the main cause of the good application of the technologies that the company has, they can be basic and very expensive, however, if you are not trained to use them the result will be the same. This marks a limitation, even if the result is a positive relationship, if the staff is not trained, even when you have different systems to control operations, you will not have good results.

For the exchange of information with suppliers and customers, basic ICTs are available, such as institutional emails, internet access and videoconferencing, web portals for different investigations, some employees interested in the use of ICT may not have the necessary skills, so it continues to generate poor quality in the service provided or the goods offered. however, its internal use can be satisfactory.

The study indicates that there is a high degree of relationship between the use of ICTs and electronic accounting, although it is not obligatory to generate sufficient information through the catalog of accounts, of the electronic invoice as a whole, there is a lot of information that, when classified and ordered, serves for good decision-making.

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