

E-Commerce Analysis as a Technological Tool for the Development of Pymes in Ecuador

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Abstract

The present contribution details the main motives for which the kindling's' businessmen and medium enterprises must penetrate to the environment of the electronic commerce since at present the tendencies are related straight to the information technologies companies managers allowing to help in a genuine way so much and autonomous in the use of this way like new route of sale to the market thinking about how to increase this way its income for each of them. Another fundamental aspect is the participation of the PYMES in the sector Electronic commerce, citing as an example companies that they take as a base to the managerial sector of the economy mostly Internet route increases the sales.

This investigation presents an analysis realized based on reports prepared by the department of telecommunications and magazine of Ekos Business, by what there was cited as an example the ranking of the 100 best PYMES to choose which is most hit to be employed at kindling's and medium enterprises, since the obtained results threw that not even 50 % of the PYMES in Ecuador use Electronic commerce as technological tool to promote its products since the investment that this leeway is usually a limit in a PYMES.

Keywords: Medium company, small company, telecommunications, PYMES.

INTRODUCTION

In recent years, small and medium-sized enterprises have been the center of attention for some jobs, mainly due to their great job creation capacity. Another important role they play is to generate wealth. Allowed a greater knowledge regarding its characteristics and relations with the economic environment. On the other hand, SMEs need operational foundations that reveal their problematic and strategies to the object to be analyzed in order to facilitate the decision-making, both from the internal political point of view of the company, as well as regional or state that allow to determine and fix programs of action and with sufficient time in advance.

The present research presents an analysis of E-Commerce as technological tools for SMEs in Ecuador, considering reports prepared by the Ministry of Telecommunications and Ekos Negocios magazine, and in the same way was taken as a reference the ranking of the 100 best SMEs and in this way get a better result.

The objective of the research is to analyze the E-Commerce situation as technological tools for SMEs considering their strategy and main competitive factors, degree of use of information and communication technologies, evaluating them by means of the aforementioned to determine if it is that In Ecuador is used as an electronic commerce tool providing improvements in the sale of its products.

How has the evolutionary rise of E-Commerce been a technological tool for SMEs in Ecuador?

H1: E-Commerce offers a number of aids, but among the main we have that it is used as electronic commerce facilitating the sale of its products allowing to increase its demand for the services they provide to the public.

THEORETICAL FUNDAMENT

What are SMEs?

"Small and medium-sized enterprises are known as small and medium-sized enterprises that, according to their sales volume, social capital, number of workers, and their level of production or assets present characteristics typical of this type of economic entity." [1]

Usually in our country the small and medium-sized enterprises that have been formed carry out different types of economic activities

According to [1] the highlights are:

- Wholesale and Retail.
- Agriculture, forestry and fisheries.
- Manufacturing industries.
- Building.
- Transportation, storage, and communications.
- Real estate and services rendered to companies.
- Community, social and personal services.

What is a microenterprise?

As the name implies is a small company, which usually has a maximum of ten employees, the owner of this type of business usually work in it.

What is a small business?

It is called a private organization, which does not exceed fifty employees, are not predominant in the sectors that perform but are nevertheless profitable in terms of profit.

What is a medium-sized company?

It is considered an institution that is dedicated to sectors such as commerce, industry, finance, among others, this type of companies have between fifty and two hundred and fifty employees.

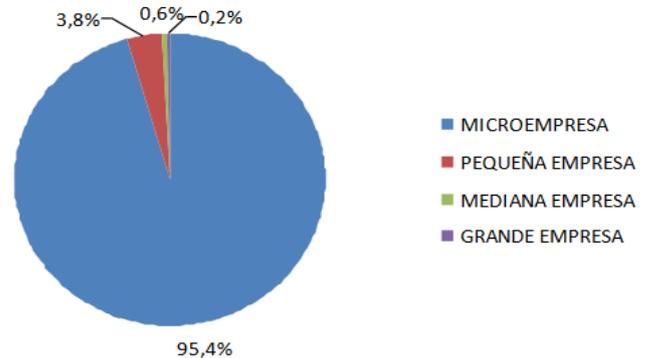
Importance of SMEs

The SMEs in our country are particularly in the production of goods and services, being the basis of the social development of the country both producing, demanding and buying products or adding added value, which is why they are a fundamental player in the generation of Wealth and employment.

MIPYMES

MIPYMES is the acronym of "micro, small and medium enterprises", is an extension of the original term PYMES.

Empresas nacional por tamaño



Source: National Economic Census -CENEC- 2010 – INEC

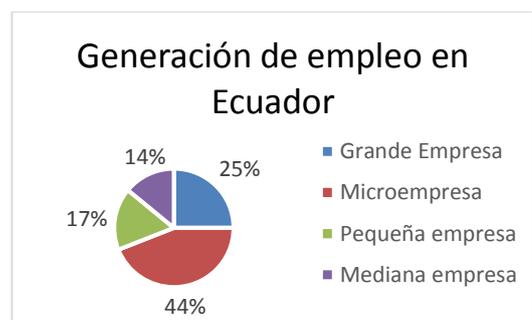
According to the National Economic Census in Ecuador, most companies belong to the MIPYMES category, which confirms its importance for the country's economy. [2]

"Because SMEs have smaller structures, it is easier for them to adjust to market and customer requirements. However, they also have some limitations or challenges related to the entrepreneurial nature of their business." [3]

These are, for example, less availability of resources, little access to credit, limitations to undertake technological development processes, among others.

Generation of employment in Ecuador

According to ECLAC (Economic Commission for Latin America), Ecuador is the second largest Latin American country in which more microenterprises exist. The first is Peru and Ecuador is followed by Mexico. "In Ecuador, 44% of jobs are generated by micro-enterprises, while 17% are small and 14% are medium-sized." [4]



Source: ECLAC 2012

Based on the chart drawn up by ECLAC, it can be observed that labor productivity in Ecuador tends to increase as the size

of the company increases. This indicates that a worker in a larger company will generate more income for the company.

PYMES ECUADOR

STRENGTHS OF SMES IN ECUADOR

In the national economy SMEs have their strengths in basically 2 important points:

"1. Contribution to the economy: SMEs represent over 90% of the productive units, give 60% of employment, participate in 50% of production, and generate almost 100% of the services that an Ecuadorian uses in a day (For example: shop, lunches, copies, cybers, buses, among others). "[5] [6]

SMEs contribute most to the economy of our country, especially when the price of oil has declined considerably in recent years.

"2. Ability to adapt and redistribute: In the absence of many workers, SMEs have organizational structures that adapt more quickly to changes in the economy. In addition, managerial positions have salaries closer to those of the rest of the company, unlike the managerial positions of a large company (where a General Manager earns hundreds of times more than an average employee), and this particularity of SMEs helps To a better redistribution of the wealth of an economy. "[6]

SMEs are adaptable to the medium in which it is applied, because it has organizational structures that adapt to the constant economic changes.

WEAKNESSES OF SMES IN ECUADOR

"The weaknesses of SMEs are mainly lack of knowledge in the business environment, lack of capital or liquidity to grow, insufficient machinery and / or technology for their productive, accounting and administrative processes, difficulty with competition with large multinational companies, lack Advisory services and specific programs for SMEs, among others. "[6] [7]

Production Code For SMEs

The Sectoral Council for Production will coordinate the policies for the promotion and development of the Micro, Small and Medium Enterprise with the sectoral ministries within the scope of their competencies. In order to determine the transversal policies of MSMEs, the Sectorial Council of Production [8] will have the following attributions and duties:

To approve the policies, plans, programs and projects recommended by the executing agency, as well as to monitor and evaluate the management of the entities in charge of the execution, considering the cultural, social and environmental particularities of each zone and articulating the necessary

measures for the technical support And financial.

Formulate, prioritize and coordinate actions for the sustainable development of MSMEs, as well as establish the annual budget for the implementation of all programs and plans that are prioritized within it.

Regulatory bodies of SMEs :

"A regulatory body is responsible for defining and maintaining certain legal and regulatory conditions regarding the execution of tasks, activities and processes. The structure and capabilities of the regulatory body influence the effectiveness of its decisions and its ability to ensure compliance with the law through sanctions and corrective measures. "[9]

The Superintendence of Companies is the regulatory technical body in Ecuador, with administrative and economic autonomy, which monitors and controls the organization.

Economic model

"An economic model is a simplified description of reality, designed to offer hypotheses about economic behavior that can be verified. One of its important characteristics is its necessarily subjective design, since there are no objective measurements of economic results. "[10]

Generally economic models can be theoretical or empirical. Theorists look for implications that can be verified about economic behavior, provide qualitative answers to certain questions, such as the optimal way to stay in the market.

Instead, empirical models try to verify the qualitative predictions of the theoretical models, to transform them into precise and numerical results.

Economic models usually consist of a set of mathematical equations that describe a theory of economic behavior.

E-commerce

"E-commerce goes beyond the online sales of our services and products through digital catalogs available on virtual store platforms accessible from a web page or on a mobile device." [11]

These platforms can be owned by the same company, or also be true digital markets where several suppliers converge to offer their products.

Advantage of using with E-commerce

For companies and suppliers the best advantage is to be able to access a market of customers who are difficult to reach by traditional means.

The advantage for customers is to be able to purchase products or services regardless of business hours, compare

between various products and even consult comments from other customers.

"E-commerce has ceased to be a priority in commerce, it is a part of its essence. And it is a challenge for SMEs to be able to reach this market, because it means investments that are reasonable and adequate today." [11]

E-commerce in SMEs

It forces the market to keep abreast of trends in e-commerce and digital advertising globally, so that customers will not only think of commercial transactions but of a complete shopping experience throughout the process from the attention to the reception of the Product and method of payment.

METHODOLOGY

For the development of this article has taken into consideration the use of certain methods, indicators and materials, which are detailed below:

Methods

For the corresponding investigation the following research methods were used:

Analytical method: It is used in the analysis of facts related to E-commerce and companies the boom it has had in recent times, as well as the advantages, benefits and facilities it offers, in order to determine their incidence in development Of the SMEs in the country.

Descriptive method: It is used when describing each of the characteristics and benefits of E-commerce both in general and for Small and Medium Enterprises (SMEs).

Bibliographic method: It is used in the search of information in reliable sources regarding cases and facts raised with respect to E-commerce and SMEs.

Taking into account the mentioned methods above, the incidence of E-commerce on SMEs is analyzed through the consultation of related data and other references, which will allow to establish the degree of benefit of this technological tendency towards the development of Small and Medium Companies from Ecuador.

Definition of indicators

For the development of the present article, several aspects of analysis were taken into account regarding the technological trend E-commerce and Small and Medium Enterprises (SMEs) of Ecuador. These aspects are detailed below:

- O Internet service present in SMEs.
- O The use of internet in SMEs.

- O Provision of web services in SMEs.
- O Use of E-commerce in SMEs.

Materials

In order to verify the hypothesis, it will be necessary to apply a strategy to establish whether E-Commerce is used as a technological tool for SMEs in Ecuador.

To obtain pertinent and necessary information for the investigation, data were collected corresponding to different companies (large, medium and small), which were obtained through Internet research of reports made by the Ministry of telecommunications and magazine Ekos Negocios.

In order to analyze the use of E-commerce in SMEs, a survey was carried out on a group of medium, small and micro enterprises, which are specified below:

Table 1: Sample for E-commerce Analysis in SMEs

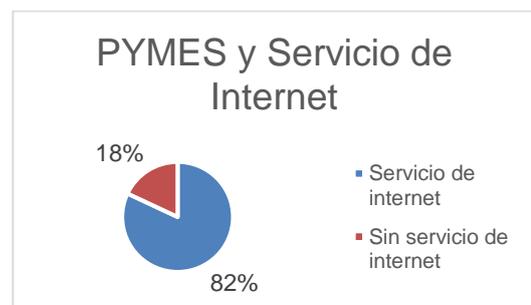
Type of business	sample
Medium company	50
Small company	50
Microenterprise	100

Finally, for a better understanding of the results, these were based on reports already made in which it was established that companies in Ecuador do not use E-Commerce to increase the number of sales in their companies.

RESULTS

Through the collection of information obtained through the review of studies carried out by the Ministry of Telecommunications, the percentage of SMEs with an internet service could be known.

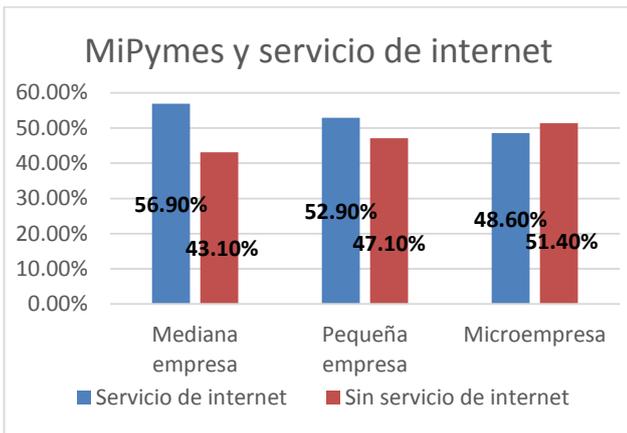
Illustration 1: SMEs with internet access.



Source: Ministry of Telecommunications

82% of SMEs have or have internet service, while 18% do not have this service, which has now become indispensable for the development of different operations, transactions.

Illustration 2: Statistical table based on the availability of Internet service in the types of MSMEs



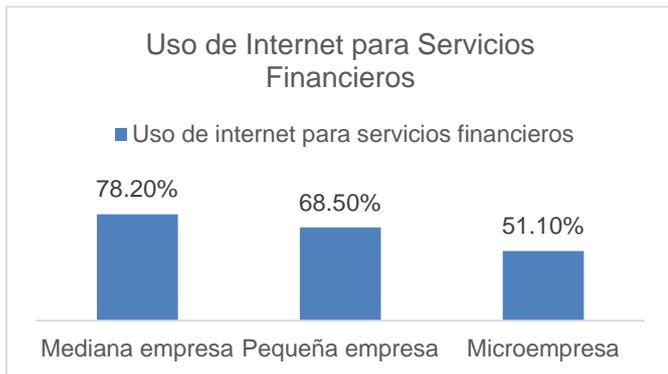
Source: Ministry of Telecommunications

56.9% of medium-sized companies have internet service, while 52.9% of small businesses have internet service. Lastly, there are only 48.6% of micro-enterprises. Internet.

The results of the studies carried out by the Ministry of Telecommunications regarding SMEs and access to the internet are presented below.

Data on Online Banking :

Illustration 3: Statistical table based on internet use for financial services in companies.

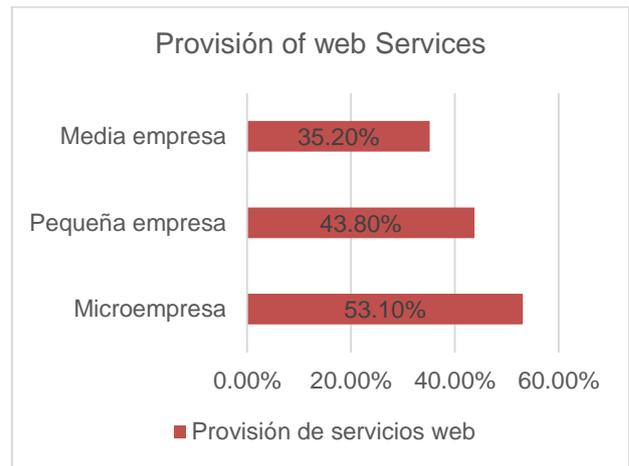


Source: Ministry of Telecommunications

In terms of the use of financial services (online banking), its use in the medium and small enterprises is wide, at 78.2% and 68.5%, respectively, but among microenterprises its use is intermediate, since only 51.1% of these use it.

Provision of services through the web:

Illustration 4: Provision of Web Services in Companies

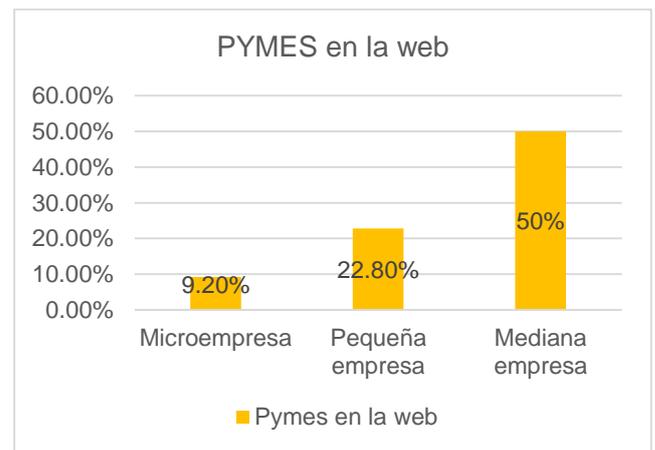


Source: Ministry of Telecommunications

The provision of services on the web is at a medium level, mainly in the microenterprise (53.1%), followed by the small business (43.8%) and the median (35.2%).

Presence on the web

Illustration 5: Presence of the Companies in the Web.



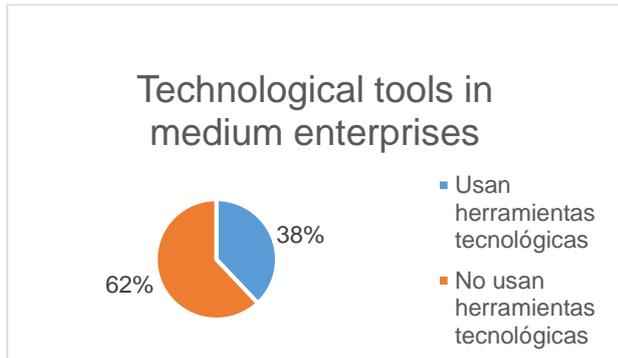
Source: Ministry of Telecommunications

The presence of SMEs on the web is marginal, since only half of medium-sized companies have their own website, while in micro and small enterprises it is even lower with 9.2% and 22.8% respectively .

After reviewing the related data based on internet access or use of it for different purposes in SMEs, below are the percentages of the use of E-commerce as a technological tool. It was necessary to take into account the ranking of the top 100 SMEs according to [12].

Technological tools in SMEs (Medium enterprises)

Illustration 6: Use of technological tools in medium-sized companies.



Source: The Authors.

The percentage of use of technological tools in medium-sized companies is 38% of the total sample, indicating that 62% of medium-sized companies do not use technological tools to boost their companies.

Medium-sized enterprises and the use of technological tools

Table 2: Medium-sized enterprises and technological tools used

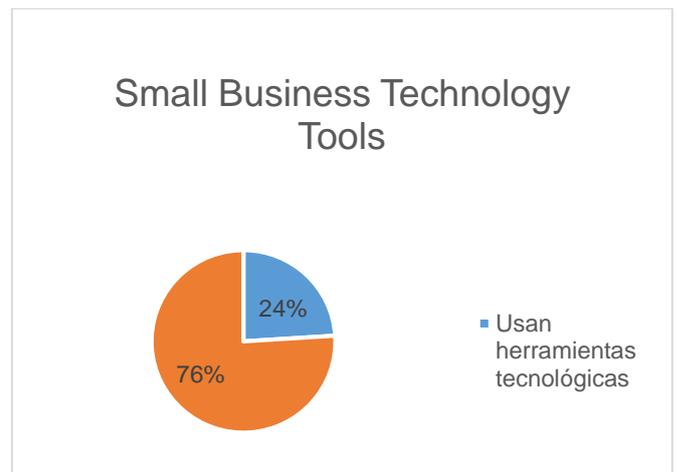
Empresa	E-Commerce	Redes Sociales	Big Data	Cloud Computing
ZAVATO S.A.	x	X		
ORENAS S.A.	x	X		
ANDIPAPEL S.A.	x			
SERVI ROJAS		X		
OROESTIBA S A	x		x	
TRAUMAMED S.A.		X		
ENATIN S.A.		X		
ARROYO AGUIRRE CONSTRUCTORES Y SERVICIOS CIA. LTDA.	x			x
ESCOBAR RUIZ CIA. LTDA.	x			
COELEC S.C.		X	x	
CEGRAFICO S.A.	x			

ALUMINAR - V, ALUMINIO, VIDRIOS Y ESPEJOS S.A.	x	x		
SEGINTER	x			x
REPCONTVER S.A.	x	x		
INCINEROX CIA. LTDA.	x			
MENYDIAL	x	x		
INDUMAIZ DEL ECUADOR S.A.	x			
HIPERTRONICS S.A	x			x
ESCAVI CIA. Ltda.	x			
Total	15	9	2	3

The 38% obtained in illustration 6 referring to the use of technological tools in medium-sized companies is equivalent to 19 medium-sized companies, of which the majority use E-commerce as a technological tool to increase their sales, followed by social networks that also represent an important tool to promote a company in technological means.

Technological tools in SMEs (Small companies):

Illustration 7: Use of technological tools in Small Business.



Source: The Authors.

The percentage of use of technological tools in small companies is 24% of the total of the sample, indicating that 76% of small companies do not use technological tools to boost their companies.

Small enterprises and the use of technological tools

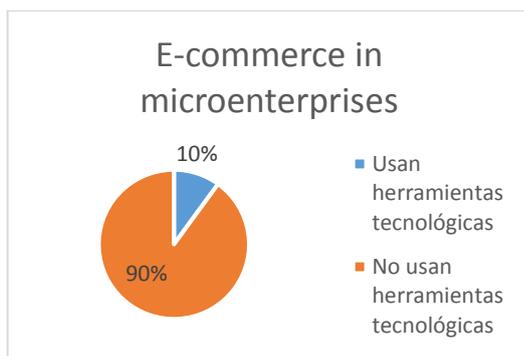
Table 3: Small businesses and technological tools used

Empresa	E-Commerce	Redes Sociales	Big Data	Cloud Computing
WILLIAM SHAKESPEARE SCHOOL S.A.	x			
SAMISA S.A.	x	X		
DIAGRAPH S.A.	X	X		
IMPROMEX CIA. LTDA		X		
EXPERTATEL S. A	X			
DILECONST S.A.		X		
GAMMATRADE S.A		X		
CONTROL CIA. LTDA.	X			
K&IMPORT CIA. LTDA	X	X		
ALIANZA FRANCESA DE GUAYAQUIL	X	X		
SILVERCROSS S.A.	X			
DEDINO REPRESENTACIONES CIA. LTDA.	X			
Total	9	7	0	0

The 24% obtained in illustration 7 referring to the use of technological tools in small companies is equivalent to 12 small companies, of which the majority use E-commerce as a technological tool to increase their sales, followed by social networks that also represent an important tool to promote a company in technological means.

Technological tools in SMEs (micro-enterprises):

Illustration 8: Use of technological tools in microenterprises.



Source: The Authors

The percentage of use of technological tools in micro-enterprises is 10% of the total of the sample, indicating that 90% of small use technological tools to boost their companies.

Micro-enterprises and the use of technological tools:

Table 4: Microenterprises and technological tools used

Empresa	E-Commerce	Redes Sociales	Big Data	Cloud Computing
Darwin Adrianza		X		
Corellprint		X		
Enfrutados		X		
“Las Tinajitas”		X		
Taty Create	x	x		
Full color	x	x		
Diarte		x		
DISFAMOSA	x	x		
MARAMAR	x			
NOVA SECURITY	x			
Total	5	8	0	0

The 10% obtained in illustration 8 referring to the use of technological tools in micro-enterprises is equivalent to 10 micro-enterprises, of which the majority use social networks as a technological tool to promote their businesses, while E-commerce is used only in half Microenterprises as technological support to increase their sales.

Micro-enterprises have a lower percentage of E-commerce use compared to medium and small enterprises, one of the factors that prevent the upgrade of services with technology is the investment that this requires, because SMEs are a Strong limiting.

DISCUSSION

E-commerce or e-commerce is considered as one of the most widely used technology trends today because of the great advantages, benefits and the myriad of tools it offers for its use.

The use of E-commerce services has allowed the small and medium-sized companies to possess more possibilities of development since it allows their expansion in the commercial scope both nationally and internationally, obtaining higher income and advertising in the medium, however, Is E -

commerce the main technological option used by companies in Ecuador?

Based on the results obtained from the different sources, it is obtained that 50% of companies, specifically medium-sized ones, are the ones that more presence in the web own and use it to promote their services and acquire others, however. It is evident that for Small businesses and microenterprises the situation is different with what is established that in the country does not use E-commerce as a source of agile development for the country's commercial entities.

Then, the implementation of this new market technology in SMEs is suggested for the commercialization of different products that allow them to acquire profits and, therefore, a greater profitability.

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