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DIAGNOSIS OF THE POSITIONING OF ELECTRONIC COMMERCE IN THE COMPANIES OF THE INDUSTRIAL SECTOR OF CUENCA

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DEDICATIONS

After these years of my professional journey, I want to dedicate this degree work to my parents, Carlos and Ximena, the fundamental pillar of my life and to whom I owe everything I am today, and to my husband and best friend Juan Andres, to whom I dedicate my achievements and triumphs.

Nicole Cabrera Cordova

This degree work is dedicated to my parents Esteban and Fabiola, thanks to their love, sacrifice, and dedication, I thank them for everything I have achieved and will achieve. And to all the people and institutions that serve this research.

Adriana Monge

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Resumen

Frente a un mundo globalizado y en constante evolución nace el comercio electrónico para renovar por completo los negocios en el mundo, el presente trabajo de investigación realiza un estudio de este enfocado en el sector industrial de Cuenca, Ecuador, conceptualizando a fondo lo que es el comercio electrónico, y sus beneficios de implementación para realizar transacciones virtuales de forma segura. Consta de tres capítulos, el primer capítulo se encuentra enfocado en los principales conceptos, ventajas, desventajas, modelos de negocios existentes. El segundo capítulo trata sobre el tipo de estudio a realizarse, el modelo de negocio a analizar, los métodos y técnicas de investigación utilizados en el presente estudio, también las variables que se analizan en cada empresa que se recolectó los datos, finalmente en el capítulo tres se realiza un estudio a profundidad aplicando el modelo de negocio generando un análisis de resultados, para finalmente dar recomendaciones y conclusiones que se han encontrado a lo largo del desarrollo de este trabajo investigativo .

Palabras claves: Comercio electrónico, investigación, beneficios, resultados, evolución.

Abstract

Faced with a globalized and constantly evolving world, electronic commerce is born to completely renew business in the world, this research work carries out a study of this focused on the industrial sector of Cuenca, Ecuador, thoroughly conceptualizing what is the electronic commerce, and its implementation benefits to carry out virtual transactions safely. It consists of three chapters, the first chapter is focused on the main concepts, advantages, disadvantages, existing business models. The second chapter deals with the type of study to be carried out, the business model to be analyzed, the research methods and techniques used in the present study, also the variables that are analyzed in each company that collected the data, finally in chapter three an in-depth study is carried out applying the business model generating an analysis of results, to finally give recommendations and conclusions that have been found throughout the development of this research work

Keywords: Electronic commerce, research, profits, results, evolution.

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Introduction:

E-commerce involves the general exchange of information within a company or between companies and customers. It is the process of purchase and sale supported by electronic means, especially through the Internet, is nothing more than the use of electronic means linked by the network to carry out commercial transactions of products and services; any transaction arises from something very fundamental which is the need or dissatisfaction of a good or service, which leads to the interaction between sellers and buyers, reducing the gaps between consumers and the market.

In this sense, supply and demand do not necessarily require a physical location, as is the case with traditional markets where sellers and buyers are located; Currently, the Internet offers various spaces and types of negotiations for the exchange of goods and services. In short, it is possible to understand e-commerce as the transformation of business processes through the use of Internet technologies.

The development of humanity has always been linked to advances in technology, from the simplest tasks such as planting products to feed the population or building their homes, which have been improved by the introduction of new mechanisms conceived by the constant innovation and creativity of individuals in society. These innovations set the tone for generational changes, translated into historical events such as the industrial revolution, which marked the beginning of the application of new production techniques and enhanced the wealth of countries with technology.

Electronic commerce is now an undeniable and irreversible fact, with a great impact on economic activities and on the social framework in which they develop. Although it maintains certain analogies and similarities with traditional commerce, within its context the actors begin to fulfill new roles, operating in a new environment and following the guidelines of new principles.

The study's general objective was to diagnose the positioning of e-commerce in companies in the productive sector of Cuenca. To achieve this, it was necessary to set the following specific objectives:

- Review the fundamental concepts related to e-commerce and the variables involved in the diagnosis of its positioning.
- Conduct a qualitative and quantitative study on the use of electronic commerce.
- Determine the variables to be analyzed.
- Apply the research model and execute results.

CHAPTER I: Electronic Commerce in the international context

1.1. Electronic Commerce

1.1.1. Definition

E-commerce is rapidly transforming the way businesses interact with each other, as well as with consumers and Governments. As a result of changes in the ICT landscape, e-commerce is growing rapidly in several emerging markets and developing economies (Gaffar Khan, 2016).

This new form of trade, which uses technology as an operating tool, requires not only the analysis of new special processes but also the rethinking of traditional processes and the elaboration of a new legal framework. For a market without limits and that extends to all corners of the planet, a new form of commerce is presented under the concept of "electronic commerce", which makes it virtually possible to overcome the barriers of time and space (Gariboldi, 1999).

Today, the rise and growth of e-commerce are irreversible. Not only is this the case,but it is expected to continue to grow in the coming years, generating large revenues through the network and exerting its impact on economic activities and society. Therefore, both commercially, technically, and socially, at the individual, corporate and governmental levels, it will be necessary to become aware of this new reality; hence the importance of being prepared to compete in the market and to capitalize on the various benefits that e- commerce offers (Gariboldi, 1999).

Electronic commerce is a legal concept that presents a series of particularities and difficulties; the first of these is that it is evident when defining it, differentiating it from traditional commerce, classifying it, and inducing its characteristics. In the second place, there are regulatory gaps in tax matters, in conflicts of laws, in the resolution of disputes, in intellectual property, and contractual matters. The term electronic commerce does not

referto a class of transactions or contracts, but to legal acts carried out through instruments that allow the transmission of information through electricity. In general, the term 'electronic media' includes telegraph, telephone, fax, and television, to name a few, but is often identified or associated with the Internet. E-commerce, which is carried out via the internet, is defined as any form of transaction or exchange of commercial information based on the transmission of data through this communication network (Ríos Ruiz, 2014).

Originally the term "e-commerce" or e-commerce, meant "electronic purchase" or "online sale". With the passing of the years and considering the rapid technological advance, the following definitions are available:

- "E-commerce is the process of buying and selling goods and services electronically, through transactions over the Internet, networks and otherdigital technologies" (Laudon & Laudon, 2002, p. 25).

- "We define electronic commerce as the use of computers to facilitate all the operations of the company. Many of the operations are internal: they are carried out within the company, in the functional areas of finance, human resources, information services, manufacturing, and marketing. Other operations involve the company's interfaces with the eight elements of the environment" (McLeod, 2000, p. 56).

It should be noted, on the one hand, that if e-commerce is understood simply as an online sale, it would be said that the purchase/sale of products and services is made, being able to be these physical or digital products, making use of the so-called 'teletiendas' (SilvaMurillo, 2009).

1.1.2. Electronic business

The incorporation and development of e-business have fostered new organizational behaviors aimed at innovating in the production and distribution of

products and

services. Business experience shows that it is essential to know what are the factors that influence the adoption of this tool to optimize its use. E-business enables the company to execute electronic transactions throughout the value chain activities, including sales, customer service, contracting, information, and coordination with business partners. In this way, e-business includes all the applications and processes that allow a company to carry out business transactions. Thus, e-business is not only e-commerce transactions but constitutes a whole strategy of redefinition of traditional business models (García Moreno et al., 2016).

Within the virtual market, many models are applied in the medium, but unlike the types of business, the model is inclined to generate income and profits. By identifying the type of business, the company plans how to reach its customers, the strategy to implement, and the development of loyalty methods. We must also take into account that each business model has its virtues and weaknesses, as well as its characteristics, none has the key to success, on the contrary, are routes that mark the path of the entrepreneur to develop the business idea (Astudillo Mamarandi et al., 2020).

E-business makes it possible to increase the competitiveness of organizations, facilitate their interaction with customers and business partners, improve their supply chain and minimize their costs in business transactions. They are defined as the application of digital technologies in companies to perform productive and administrative functions that facilitate the purchase and sale of goods and services, and the exchange of information through digital channels (Perdigón Llanes, 2020).

The term encompasses activities such as e-commerce, digital marketing, and electronic banking. These businesses are an important component of companies' business strategies because they are a driver of their economic development. The actors involved in the exchange or negotiation, and how they are carried out, define the existing e-business models; among the most popular are: enterprise-enterprise (B2B), enterprise-client (B2C), and client-client (C2C). The term B2B refers to business relations between enterprises through digital platforms, B2C covers electronic negotiations between enterprises and final

customers, In other words, people and C2C define the exchange that takes place only between clients (Perdigón Llanes, 2020).

1.1.3. History of Electronic Commerce

Though perhaps the trade is as old as man, it is also fair to say that it arose with barter, when the first men made it to exchange some goods for others and, even more, for others that, in turn, served them to acquire any kind of satisfiers, as a remote background tothe coin. It is now known that these primitive means of change were, first, certain grains and vegetables; later, pieces of some metals and, subsequently, specimens of productive or edible cattle, that in more evolved civilizations they found graphic reproduction on certain coins. Over time, trade in goods was acquiring new forms and means of payment. Historical events such as the closure of the eastern roads and the occupation of the Holy Land by the Turks gave rise to commercial institutions such as the cheque, which allowed acts of commerce to be carried out without the physical presence of a sum of money.

Likewise, the discovery of America marked the commercial relations by exchanging new products and species, never before seen in each continent (Ríos Ruiz, 2014).

Although the origin of electronic commerce dates back to 1948, nowadays, the development of Information Technologies next to the Internet has resulted in the rapid positioning of electronic commerce as an alternative to buy and sell for users. Latin American countries, such as Mexico, Argentina, and Brazil, have positioned themselves as potential markets due to their market sizes and online market attractiveness score, demonstrating significant growth with the countries that lead the listings for this practice. As an important part of the global technological transition, trade has evolved to adapt to new human needs. Cyberspace is now the place where everyday life is most easily done forthe user; however, the elements that make traditional trade possible have also had to be adapted to work in the new context (Ríos Ruíz, 2019).

Its origin dates back to 1948, standardizing in the 1970s with the implementation of EDI (Electronic Data Interchange). But it will not be until the creation of the web technology WWW (World Wide Web) in 1992, along with the introduction in 1996 of the security encryption SSL 3.0 (Secure Sockets Layer), that the exponential expansion of e-commerce occurs, This is accompanied by a significant development of ICT. Circumstances have generated millions of customers in online commerce. These innovations produce effects in organizations, even generating changes that improve the organizational structure, management decisions, productivity, effectiveness, and competitive advantages, as well as the processes through their simplification (Fernández Portillo et al., 2015).

E-commerce has been hailed by many as an opportunity for developing countries to gain astronger foothold in the multilateral trading system. E-commerce can play a key role in helping the economy to benefit more from trade (WTO-2013). The growing use of the Internet, tablets, and smartphones along with increased consumer confidence will continueto evolve and expand e-commerce (Abdul Gaffar, 2016).

1.1.4. Benefits of E-commerce

While access to the internet is a boost to global growth, it also brings a greater risk of economic marginalization for countries that cannot access it effectively. Despite the rapid and steady growth of the Internet worldwide, this has not ensured equitable distribution in different regions of the world. Today, the industrialized countries continue to be those that cover the largest number of Internet users. For example, in 1999, 30 percent of US residents were reported to be in the United States. had Internet access, compared to 0.5 percent in sub-Saharan Africa (Gaffar Khan, 2016).

This is one way or another generates a differentiation between the different regions of the world; that is why, then, the advantages presented about electronic commerce are mentioned, differentiating between those in developed and non-developed countries (Mann,2000):

The main benefit from the point of view of the customers is a significant increase since it saves time and facilitates access from anywhere in the world. The customer can place a purchase order at any time.

- Reduced transaction costs to participate in market exchange.
- Greater convenience: transactions can be made 24 hours a day, without require physical interaction with the business organization.
- Time-saving: the customer can buy or sell any product at any time with the help of theInternet.
- Rapid and continuous access to information. The customer will have easier access toinformation and consult on different websites with the click of a button.
- Convenience: All purchases and sales can be made from the comfort of a home or workplace or from the place a customer wants.
- Switching to other companies: the customer can change companies at any time if theservice of a company is unsatisfactory.
- The customer can buy a product that is not available in the local or national market, which gives the customer a wider range of access to the product than before.
- A customer can put review comments on a product and can see what others are buying orsee other customers' review comments before making a final purchase.

The main benefits of e-commerce from the vendors' point of view are to increase revenues and reduce operating and maintenance costs over the internet; thus, these include the following (Abdul Gaffar, 2016):

- Increases the income.
- Reduces operation and maintenance costs. - Reduces purchase and acquisition costs.
- Increases customer loyalty and retention. - Reduces transportation costs.
- Develops relationships with customers and suppliers. - Improves the speed of the salesprocess.
- Improves internal and external communication.
- Develops the image and brand of the company.

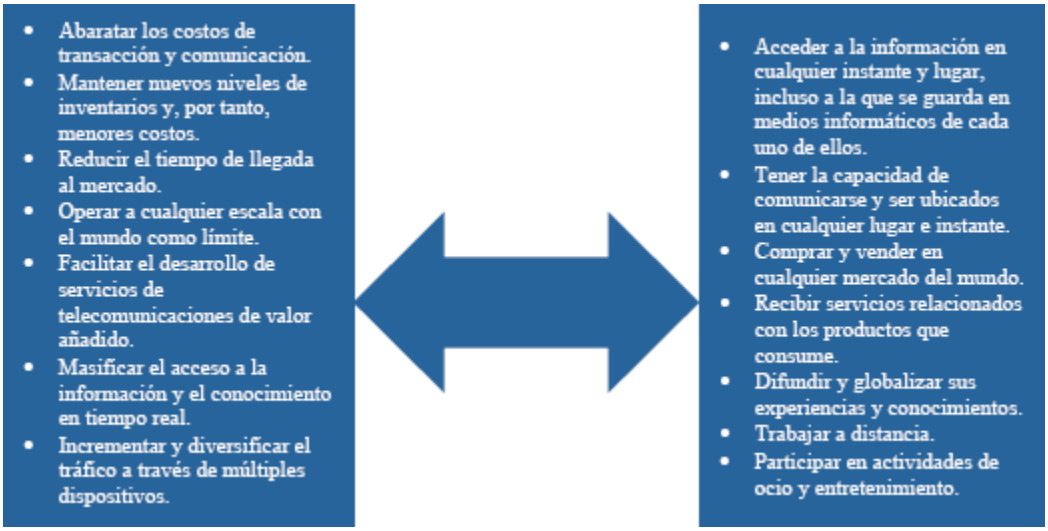


Figure 1 Benefits that are exchanged between companies and customers. Source: Barrientos Felipa (2017)

Proper management of these variables allows the product to be positioned in the target market. Today, if you want to develop a business strategy, you have to consider e-commerce thinking. The Internet has become an intangible input to any strategy to reach the customer; it is, in turn, a medium that can be used by both large and small businesses. As can be seen in the figure, both the company and the client receive a variety of benefits (Barrientos Felipa, 2017).

E-commerce can be used in any environment where documents are exchanged between companies: purchases or acquisitions, finance, industry, transport, health, legislation, and revenue or tax collection. The benefits are several benefits, including reduced administrative work, immediate and accurate business transactions, easy access to information, and reduced need to rewrite the information in information systems. E-commerce, therefore, provides the appropriate and necessary means to achieve this market segmentation, considering linkages, attitudes, and socio-cultural aspects. Among which can be mentioned: Advertising, information, marketing, new markets, global reach, ease of purchase, customer service, competitive advantage, and pre and after-sales service (Andrea Verenice Basantes Andrade et al., 2016).

1.1.4.1. Benefits of Electronic Commerce in Developed Countries

According to an article published by the World Bank, called Electronic Commerce and Developing Countries, it is stated that there are some advantages of the implementation and use of electronic commerce in developing or developed countries, which can be summarized as follows (World Bank, 2001):

- Strengthen inventory control.
- Reduces retail or intermediary transactions.
- Provides higher productivity due to the increased efficiency of the procurement system.
- Consumers will benefit from increased competition and market transparency.
- Companies in developing countries that sell differentiated labor-intensive products (such as handicrafts, software, or commercial services, in particular services involving routine remote processing of information) will experience increased demand.
- They provide greater interaction between multinationals and technologically sophisticatedfirms.

On the other hand, it is necessary to mention the benefits mentioned by Turban et al in their book Electronic Commerce 2018. First, they mention the need to differentiate the benefits since they are not the same for consumers, organizations, and for society itself since each one will have a different perspective of it (Turban et al., 2018).

1.1.4.2. Benefits of Electronic Commerce in Organizations

1. Global Reach: Quickly locate customers and business partners to a reasonable costworldwide
2. Cost savings: Lower costs for information processing, storage, and distribution
3. Facilitating problem solving: Complex problems can be solved.

4. Always open business: There is the facility of always open business, that is 24/7/365; noovertime or other associated costs.
5. Supply chain improvements: Helps reduce delays, inventories, and costs
6. Customization: The customer can place the order according to the customer'spreferences
7. Ability to innovate and use new business models: Facilitate innovation and enableunique business models
8. Lower communication costs: The Internet is cheaper than private VAN lines.
9. Efficient procurement: Saves time and reduces costs by enabling electronic procurement.
10. Better customer service and relationship: Direct interaction with customers.
11. Helping SMEs to compete: Small enterprises to compete with large enterprises throughthe use of special business models.
12. Lower inventories: The use of custom inventories can be minimized
13. Lower cost of distribution of digitalized products: Online delivery can be 90% cheaperdue to paperless
14. Provide competitive advantage: Price lower, better service, improve brand image.

1.1.4.3. Benefits for costumers

1. Availability: There is a wide selection to choose from (supplier,products, among other information.
2. Ubiquity: Can be purchased at any time of the day and especially from anywhere.
3. Self-Configuration: Products can be customized to the consumer's liking.
4. You will find offers: By using the comparison engine, you can visualize offers so you pay less.
5. Real-time delivery: Digital products can be downloaded quickly.
6. Sales tax: This tax often varies.

7. Ease of telecommuting: You can work or study at home or anywhere connected to the network.
8. Social interaction and engagement: It's easy to get reviews, recommendations, or ratings through social media.
9. Unique items: Online auctions are held where many times there are collectible items.
10. Comfortable shopping: You can buy in your free time, free of sellers and with availability 24/7.

1.1.4.4. Benefits to society

1. Telecommuting: Facilitates homework, resulting in less traffic and pollution.
2. More and better public services: The government has the facility to provide betterservices to society. For example eHealth.
3. Improving National Security: Helps to facilitate the national security of citizens.
4. Higher standard of living: You can buy more goods or services and cheaper. You canalso get a better education.
5. Closing the digital divide: Allows people in rural areas and developing countries to usemore services and buy what they like
6. Home delivery: Less travel and air pollution.

1.1.5. Types of Electronic Commerce

International electronic commerce refers to transactions that take place over the Internet or any other equivalent network, between an offeror or an acquirer residing in different countries, whether or not the consideration is satisfied through the network. There are several modalities of electronic commerce that have to do with the relationship between users, suppliers, and even governmental organizations that are described below (Gutiérrez Tobar, 2015).

1.1.5.1. Business to business (B2B)

It is carried out between two companies (Ríos Ruiz, 2014). This system, also based on the Web, allows relating to the companies that act as buyers and sellers, through a platform. specially designed for this type of commercial relations with which the electronic treatment of diverse transactions is obtained as purchase orders, authorizations, power of attorney or payments. The aim is to facilitate traditional procedures at all times and to speed up the value chain. This trade offers important savings in intermediation costs and more efficient management of them, by using electronic means for the management of information and payments, transforming completely the internal processes (Gutiérrez Tobar, 2015).

1.1.5.2. Business to Consumer (B2C)

It is the product trade that is established between a company and a consumer (Ríos Ruiz, 2014). Enables companies to market their products directly via the Internet to offer them to end-users by setting up a virtual store or other means on the Internet to showcase their offer and a means of payment system to facilitate the realization of orders and commercial transactions. With this method, companies can expand their customer potential, creating an alternative marketing channel (Gutiérrez Tobar, 2015).

1.1.5.3. Administration to consumers (A2C)

It refers to trade between consumers and administration (Fernández Portillo et al., 2015). This relationship at the moment includes either the proportion of information to citizens or, at best, simple electronic services such as downloading in electronic forms. As in the case of A2B, there is interest on the part of the government and citizens to improve the quantity and sophistication of services offered on the Internet (Guerrero Cuéllar & Rivas Tovar, 2005).

1.1.5.4. Consumer to consumer (C2C)

It involves trade between consumers through a company that only works as a support for exchange (Ríos Ruiz, 2014). Some researchers define the fourth category of e-commerce called consumer-to-consumer that includes individuals who buy and sell items among themselves; it also differs from direct e-commerce, which, by reference to digital goods or services, is entirely concentrated and executed using a computer, of the indirect referring to physical goods or services which, even if they permit a celebration by technological means, require the traditional physical means for their fulfillment (Gutiérrez Tobar, 2015).

1.2. Electronic commerce in the international context

WTO administers a set of multilateral agreements covering different aspects of trade in goods and services. The most relevant to e-commerce are the General Agreement on Tariffs and Trade (GATT), the General Agreement on Trade in Services (GATS), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), and more recently, the Agreement on Trade Facilitation, which entered into force in February 2017.

Another relevant, plurilateral, instrument is the Information Technology Agreement (ITA), concluded in 1996, by which 82 WTO members have to date committed themselves not toapply customs duties on ICT products. WTO agreements are considered 'technologically neutral', meaning that their provisions apply irrespective of how goods or services are traded. Thus, its provisions are in principle fully applicable to electronic commerce. This has been established mainly through dispute settlement in several cases involving trade inservices.

In addition to WTO agreements, there are other multilateral instruments relevant to e- commerce. One of these is the Model Law on Electronic Commerce (LMCE) developed by the United Nations Commission on International Trade Law (UNCITRAL) in 1996,

which builds on the relevant laws of 150 jurisdictions in 71 countries (Herreros, 2019).

1.2.1. Factors influencing the growth of international electronic commerce

While there has been dramatic growth in Internet use in Western economies in recent years,there are still significant disparities between countries. About the percentage of retail outlets selling on the Internet, a study of 1,151 companies in seven countries in the European Union and the United States showed very different results. Thus, while in the United Kingdom 60% of retailers have an internet shop, this percentage falls substantially for Germany (41%), France (34%), Poland (34%), Sweden (33%), Spain (26%) and Italy (9%). The uneven spread of e-commerce has traditionally been explained by environmental, demographic, economic, technological, socio-cultural, and legal factors These factors can have a demand-side effect, That is, they affect the purchasing habits and the degree of use of electronic commerce by consumers, or on the supply side, as they determine the possibilities of a company to implement this technology (Frasquet Deltoro et al., 2012).

1.2.2. Overall trend of financial growth in different countries

With the study of human innovation in recent years and centuries, it can be concluded that the advantages of electronic commerce and its effects on the world of the economy are exceptional. The global capabilities of these models have created opportunities for millions of people's interactive functions and a wide range of their capabilities on the one hand and the rapid expansion of their infrastructure requirements, especially the web has created many potential benefits for businesses, individuals, and society on their part. The benefits that can be mentioned when using the e-commerce application are assessed in the business and organization community and ultimately consumers in developed countries (Kuan-Chou,2014).

A developing country may well seek to modernize itself by introducing e-commerce effectively and efficiently. It will improve your production and lead to your competitive advantage. Information technology (IT) in e-commerce has improved worldwide. It is now

easy to enter a new market and marketers can easily assess the product and performance of the business. A growing number of enterprises in various industries, such as banking, education, trade, tourism, etc. have improved their services by incorporating technologies into their service delivery process. The integration of technology into services is becoming very common; however, very little academic research has been done to examine its influence. E-commerce-related problems are also on the rise, posing a serious threat to their great future and therefore requiring appropriate strategies from marketing specialists (Bhat et al., 2016).

The most advanced electronic markets are the United States and Western Europe. These markets register the most notable trend in the development and popularity of e-commerce. For these reasons it is possible to consider the issue of electronic commerce has great relevance (Fedorko, 2014).

It is also important to take into account the unprecedented growth statistics of e-commerce. According to Osman (2021), "In 2017, e-commerce was responsible for $2.3 trillion in sales, which is expected to nearly double to $4.5 trillion by 2021. It should be mentioned that in the United States alone, online purchases already account for 10% of retail sales and are expected to grow at a year-on-year rate of 15%".

Here it is important to note that only 10% of the world's e-commerce is located in the US, because for the rest of the countries around the world large markets are observed through the Internet, for example in (Osman, 2021):

China: $672 billion

United States: $340 billion

United Kingdom: $99 billion

Japan: $79 billion

Germany: $73 billion

France: $43 billion

South Korea: $37 billion

Canada: $30 billion

Russia: 20 billion dollars
Brazil: $19 billion

As can be seen, the country with the largest financial movement by digital means is China followed by the US, which demonstrates a little of the global trend of the income of dollars by e-commerce in the different countries. In Latin America, there are around 231 million Internet users since 2012. For Latin America as a whole, Internet penetration was 40% in 2012, lower than in North America, 78%, and in Europe, 61%, but higher than in Asia, 23%. Internet penetration has grown exponentially in recent years in all Latin American countries without exception (Ojeda and Bonilla 2016).

A study conducted by Forbes Magazine indicates that the "Latin American Market is very important for e-commerce, basically for two reasons: because it is huge and because Latinos are lovers of the Internet and social networks. With a sum of almost 300 million users of the network, the region has not stopped growing, so it represents a very clear opportunity to do business (Vázquez, 2014).

1.2.3. Current situation of electronic commerce in the world

As an important part of the global technological transition, trade has evolved to adapt to new human needs. Cyberspace is now the place where everyday life is most easily done forthe user; however, the elements that make traditional trade possible have also had to be adapted to function in the new context. It is clear that the regulation of commercial transactions through digital media has been overtaken by the accelerated manner in which the media have approached this new mode of marketing goods, information, and services; The truth is that now we must perfect the legislative works that already exist to meet current needs and lay the foundations to launch an electronic business platform for businesses and consumers (Ríos Ruíz, 2019).

With the growing popularity and importance of the topic of e-commerce, the number of active buyers is also increasing, the number of people active globally in e-

commerce in 2015 amounted to 1.4 billion. The average annual growth in the number of active e- commerce buyers during the monitored period 2015 - 2020 should grow at an average rateof 7.42% based on the forecast (Fedorko, 2014).

Since its inception in the 1990s, e-commerce has grown exponentially worldwide, as moreand more people in the world have access to telematics and internet connections. In the following graph, obtained from the portal of Statista (2021a), it can be evidenced this constant growth of people who use the Internet worldwide, going from 1,100 million users.

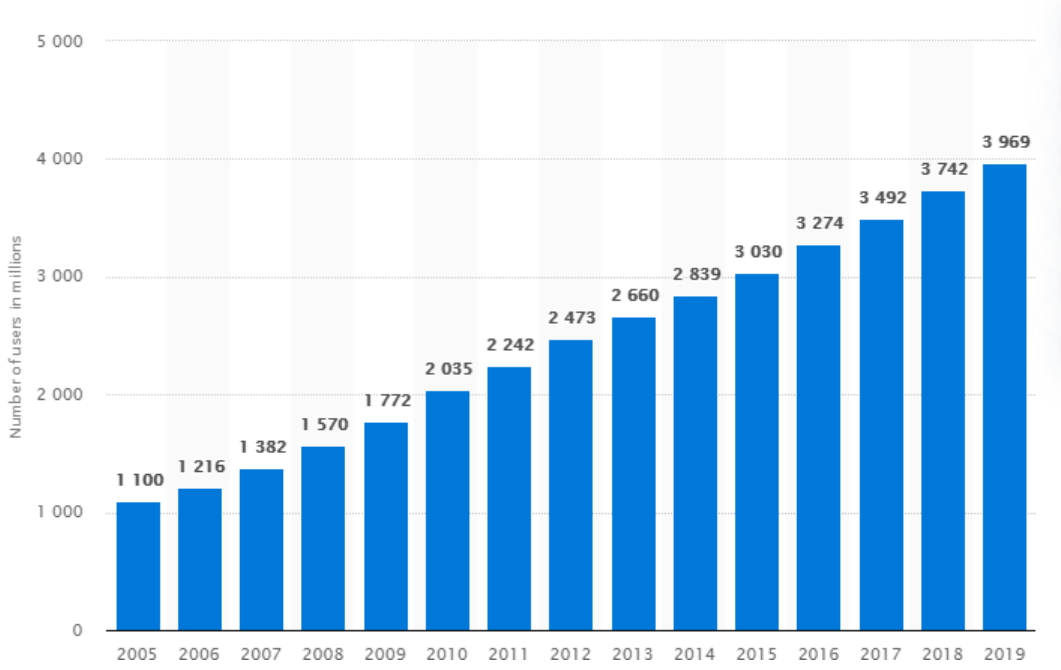


Figure 2 Evolution of the number of Internet users worldwide, 2005-2019.
Source: Statista (2021)

1.3. Electronic Commerce in Ecuador

The insertion of Electronic Commerce in Ecuador has been progressive and it was not until 2002, when the National Congress of Ecuador approved the Law on Electronic Commerce, electronic signatures and data messages, establishing for the first time the regulations on which will govern all commercial operations on the internet and giving support to users which gave them the confidence to make their purchases and transactions on the internet (National Congress of Ecuador 2002).

The Act contains a total of 64 articles which are subdivided into five titles dealing with different chapters and articles related to electronic commerce, electronic signatures, and data messages. Since 2002, Ecuador has had regulatory support for electronic commerce. Companies have found great opportunities in communications developments, noting that communications costs are reduced and that these technologies are available to both large and small businesses.

The development of these technologies and telecommunications has made data exchanges grow at extraordinary levels, becoming more and more simplified and creating new forms of trade, and in this framework, Electronic Commerce is developing. E-commerce has grown greatly because of the Internet. It is important to note that the systems of distance selling that Ecuador has developed are not parallel to those that predominate in countries that are pioneers in this area, is among the most important reasons the trust of Internet users so that with this impulse, accept purchases of items they have not seen or touched (Alvarado Gastiaburo & Vergara Díaz, 2018).

CHAPTER II: Model to use: variables, data

1.1 Type of study:

The research is quantitative, descriptive, and constitutes a field study.

1.2 Business model to be analyzed

The study focuses on the business model of the sale of products and services from manufacturing companies to distributing companies and consumers, therefore, two business models are evaluated business to business (B2B) and business to consumer (B2C).

According to Tamilarasi and Elamathi (2017), the business model is a set of planned activities designed to generate profits in a market and is at the center of the business plan. There are many different types, among which business-to-business (B2B) e-commerce is the type in which companies focus on selling to other companies; while business-to-consumer (B2C) e-commerce where online businesses try to reach individual consumers or end consumers.

1.3 Research methods and techniques

The descriptive method was applied, through which it is proposed to collect theoretical information related to the object of study that in this case is electronic commerce and its importance in the current context. According to Díaz-Narváez and Calzadilla Núñez (2016), the descriptive research allows delineating the particular characteristics discovered by exploratory investigations, those who have built a knowledge of a problem, and by collecting data with which descriptions can be made.

The deductive method is applied in the study. According to Abreu (2014), the deductive method starts from generalities and analyzes whether these are valid for particular cases,

which is typical of quantitative research.

To contextualize and understand the scope of the research, it was necessary to review literature related to the positioning of electronic commerce in companies. In this regard, Ramdhani et al. (2014) assert that a literature review analyses information published in a particular thematic area and, on occasion, information in a particular thematic area within a given period; addresses the need for criticism and the possible re-conceptualization of the expanding and more diversified knowledge base of the topic as it continues to develop.

The survey technique was applied to obtain data and present the results that meet the centralobjective of the investigation. According to Hernández-Sampieri et al. (2014), the survey is used to collect data in the social sphere, which can be systematically organized through the questionnaire as a method of capturing them; With this, it is possible to count categories andmeasure different variables to be processed statistically.

1.4 Population and Sample

1.4.1 Population

The study's target population is constituted by all the companies of the manufacturing sectorof the city of Cuenca that are attached to the Chamber of Industries, Production, and Employment (CIPEM).

1.4.2 Sample

The simple random sampling technique was applied, from the list of manufacturing companies in the study population, resulting in a sample size of 80 companies, according to an $n = \frac{N \cdot Z^2_{\alpha/2} \cdot p \cdot q}{e^2 \cdot (N-1) + Z^2_{\alpha/2} \cdot p \cdot q}$

1.5 Variables to be analyzed

Variable	Definition	Dimension	Measurement
Main economic activity	It is the economic activity on which the largest volume of the company's production or sales is based according to the Extended Classification of Economic Activities (ISIC REV. 4.0)	Economic	Cualitativa / Nominal
Total number ofworkers	It is the total number of people who work in the company, both in the productive areas of manufacturing as in the administrative and any other.	Work	Quantitative / Ordinal 1. <10 workers 2. 10 to 49 workers 3. 50 to 99 workers 4. 100 to 199 workers 5. 200 or more workers
Availability of computers	It refers to the availability of computers within the company.	computer equipment	Qualitative / Nominal 1. Yes, 2. No
Internet service	It is the availability of internet service in the company, by contracting supplier company.	Internet	Qualitative / Nominal 1. Yes, 2. No

Billing type	Means through which the invoicing of the products sold by the company is carried out.	Tax	Qualitative / Nominal 1. Manual (with paper books) 2. Electronic (connected to the CRS with electronic signature)
Specialists in ICTs	Personnel belonging to the company's workforce, who are specialized in computer science or telecommunications.	TIC	Qualitative / Nominal 1. Yes, 2. No
Training sessions onICTs	Training sessions on the useof information technologiesfor workers.	TIC	Qualitative / Nominal 1. Yes, 2. No
Social media accounts	Holding accounts on social networks in a corporate way, that is, with company identity.	Social Media	Qualitative / Nominal 1. Yes, 2. No
Social media accounts	Type of social networks in which the company has accounts.	Social Media	Qualitative / Nominal 1. Facebook 2. Instagram 3. Twitter 4. TikTok 5.YouTube 6. Other (specify)

Own website	It refers to the holding of a company's own corporate website.	website	Qualitative / Nominal 1. Yes, 2. No,
Consider installing a website	If you do not have a website, the company may have the prospect of installing a website in the short or medium term.	website	Qualitative / Nominal 1. Yes, 2. No
Reason for not having a website	This is why the company has not installed a website.	website	Qualitative / Nominal 1. It was not necessary 2. We are not sure of its efficiency 3. We prefer traditional channels 4. For lack of budget 5. It is unsafe 6. We do not know its benefits 7. Other (please specify)

Website administration	Place where the administration of the website is carried out, either within the company or through an external professional service.	Website	Qualitative / Nominal 1. Performed by an employee or department of the company 2. Paid to an undertaking or provided with external computer services
The technology of the website	Type of technology implemented in the construction and management of the company's website.	Website	Qualitative / Nominal 1. By direct programming 2. Made with a content manager (CMS - WordPress or similar) 3. Does not know
Has online store	ownership for e-commerce development.	Online Shop	Qualitative / Nominal 1. Yes, No

Reason for not having an online store	This is why the company has not implemented e-commerce through an online store.	Online Shop	Qualitative / Nominal 1. Not required to sell our products/services 2. We consider it unsafe 3. We are not technologically prepared 4. The market where we operate does not require it 5. Other (please specify)
Consider developing an online store	The current the means the decision of the company to develop an online store in the short or medium term.	Online shop	Qualitative / Nominal 1. Yes, in the short term (less than one year). 2. Yes, in the medium term (after one year) 3. No, we do not consider

Time with the online shop	Time you have the company with online store availability to offer your products.	online store	Quantitative / Ordinal 1. Less than one (1) year 2. From one (1) year to three (3) years 3. Over years (3) years
Forms of payment	Payment methods available to the company's customers through the online store.	Online payments	Qualitative / Nominal 1. Card payment gateway (such as PayPal, Stripe, Paymentez, or other) 2. Bank transfer or deposit 3. Payment in cash 4. Other forms of payment
Company experience	Assessment of the company's experience in the management of e-commerce.	Experience in eCommerce	Quantitative Discrete / Scale 0 to 10

I would recommend the implementation of an online store	The extent to which the company would recommend to other companies the implementation of e-commerce.	eCommerce recommendation	Quantitative Discrete / Scale 0 to 10

1.6. Data Collection

Data collection was carried out using a tool designed to this end, based on the recommendations of Hernández-Sampieri et al. (2014) regarding the construction and use of questionnaires. The instrument is presented in Annex 1.

Once the instrument was applied, the responses were tabulated to a base designed in Microsoft Excel 2016 and exported to SPSS statistical software (Statistical Package for the Social Sciences) version 25, for their respective processing.

1.7. Analysis of data and presentation of results

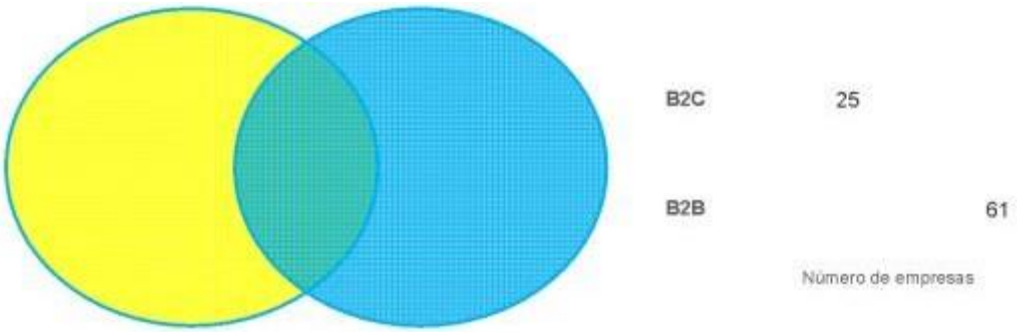
The data were processed in the SPSS v.25 software, in which frequencies and percentages were calculated for categorical and ordinal variables. The results were presented in tables and graphs

Chapter III: Implementation of the model and generation of results

2.1. Application of the Model

This section deals with the analysis of the application of the business model. The companiesthat participated in the research work are located in one type of model or two: the B2B model(enterprise-enterprise) and the B2C model (enterprise-consumer). The following figureshows the distribution of companies surveyed in the study according to the type of model they serve:

Figure 3 Distribution of enterprises according to B2B and B2C model orientation



Source: Surveys carried out

According to the results in Figure 3, 62.1% of the companies surveyed are exclusively within the B2B model, so only 7.6% are dedicated to B2C businesses, while 30.3% cover both models at the same time. On the other hand, it can be seen that the volume of companies oriented to the B2B model is greater than the number of companies that focus on the B2C model; this is because the greater proportion of companies is located in the sector of the production of goods, which are then distributed by other companies.

According to Rėklaitis and Pilelienė (2019), companies strengthen their relationships the predominance of a specific model, whether B2B or B2C; however, there is now a trend towards more flexible trade relations, Many producers and wholesalers have therefore opted to sell part of their products directly to consumers.

Figure 4 Percentage of companies with online stores according to marketing models.

Source: Surveys carried out

According to the results in Figure 4, only 14.6% of B2B companies have an online store. It can also be observed that 60.0% of B2C companies and 50.0% of joint ventures (B2B and B2C) have e-commerce.

2.1.1. Model B2B

The B2B model is the one in which the commercial operations are carried out directly between companies (Pesántez-Calva et al., 2020). This process takes place when a company sells services to another company. For example, a provider requests the website of a business organization. Upon receipt of the goods, the supplier sells them retail to the final consumer. Forrester Research estimated that business-to-business e-commerce would exceed $1 trillion in the United States by 2021 (Taher, 2021).

As seen in the initial section of this chapter, a very low proportion of companies in the industrial sector with an exclusive focus Bon 2B have an online store, representing 14.6%. Hu

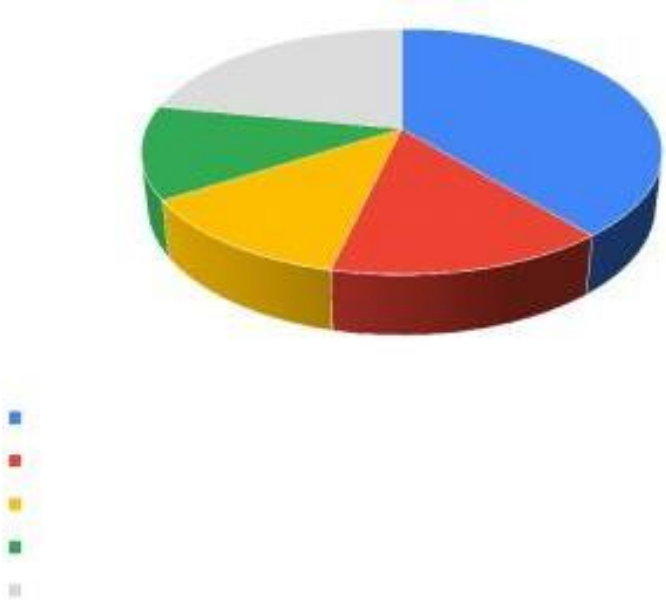
et al. (2019), emphasize that there is still resistance among companies in the industrial sector for the implementation of online stores because most do not consider the relationships between the different levels of adoption of B2B e-commerce and the different types of competitive advantages that can be achieved.

The adoption of business-to-business (B2B) e-commerce has experienced rapid growth in recent times and has become one of the fastest technology adoptions among small and medium-sized enterprises (SMEs) to gain and maintain a competitive advantage (Hu et al., 2019). Despite this, there is strong resistance in B2B companies in Cuenca, given that the degree of adoption of e-commerce is remarkably low.

Different factors may affect management's decision-making for each of the B2B companies that have not opted for e-commerce. According to Samanta and Danson (2014), an e-commerce relationship between two companies occurs when there is a situation of high trust of partners and in high technology. Thus, because the firm relies on the partner and the technology, it will seek to extend the benefits of e-commerce solutions.

In this sense, the following are the reasons why companies with a B2B model do not have online stores:

Figure 5 Percentage of B2B companies without online stores because of not having them.



Source: Surveys carried out

According to the results in Figure 5, 39.0% of companies without online stores consider that they do not have them because the market in which they operate does not requireit and 14.6% claim not to be technologically prepared, these being the main answers.

In this regard, Samanta and Danson (2014) indicate that the key inhibitors of B2B e-commerce is the environment, technological security, business culture, national culture, and political institutions. The organizational readiness to embrace e-commerce is often low, due to business cultures that do not support innovation and the use of new technologies.

In contrast, according to Bertschek et al. (2004), e-commerce between B2B companies promote the growth and improvement of communications, both within companies and between companies, which has a positive impact on the profitability of entities. According to Taher (2021), this type of e-commerce (B2B) would account for more than 12% of business-to-business sales in the United States.

The advantages of business-to-business e-commerce are the increased efficiency in communications and transactions increased sales, as well as various improvements in those associated with customers, and the possibility of greater market penetration (Pesántez-Calva et al., 2020).

12.2% of B2B companies indicate that e-commerce is not necessary for

selling their products or services. In contrast, with the research work of Samanta and Danson (2014), it was found that electronic marketing, through the management of B2B electronic relationships seems to be important, since cooperation with customers and suppliers has a strong impact on product quality and stock retention compared to traditional trade.

Thus, it is possible to improve the management of production and inventories.

Taher (2021) indicates that e-commerce benefits from the administration of "pull" or "pull" type supplies. In this type of management, a business procedure begins at the moment when a customer demand arises and uses a method of "just-in-time manufacturing". This makes the company carry out business transactions more quickly and with lower operating costs, which increases the efficiency of the company.

According to Hu et al. (2019), electronic collaboration is the final stage of

the e-commerce system, where all trading operations with supply chain partners are electronically integrated.

In line with the above, this aspect is very important for the management of

the information, since e-commerce makes it possible to capture more customer data and the characteristics of each purchase, which would be of great relevance for the management of customer relations, take forecasts, identify trends in the market itself and other benefits derived from data management and analysis.

2.1.2. Model B2C

The B2C model is the one in which the marketing relationships are given between businesses and consumers or end-users (Pesántez-Calva et al., 2020). The individual consumer sees the articles published on the website, then chooses an article and asks for it. After an order, the website automatically sends an order request to the company, which processes it and delivers it to the consumer after collecting or establishing credits (Taher, 2021).

The survey showed that only 7.6 percent B2C-oriented businesses, while 30.3% cover both models at the same time (B2B and B2C); on the other hand, 60.0% of B2C companies and 50.0% of joint ventures (B2B and B2C) have online stores. These values are higher than those observed for companies engaged in B2B business exclusively, which suggests that the final consumer is an important factor in deciding to set up e-commerce.

According to Sultan Al-Khaled (2017), more than half of B2C companies in the United States have online stores. Also, according to UNCTAD (2021), retail sales accounted for 14% of revenues in this sector by 2018, while in 2020 the figure reached 19%.

E-commerce generates various advantages for businesses. According to Ferrera and Kessedjian (2019), the online stores that have taken off in recent years incorporate additional features. These include review forums where users can comment, give advice and recommendations about a product, and read what other people think about articles. Internet today is a very popular place and is ideal for advertising. Companies are therefore increasingly using the Internet for advertising purposes.

Taher (2021) states that, like any other business where there are always

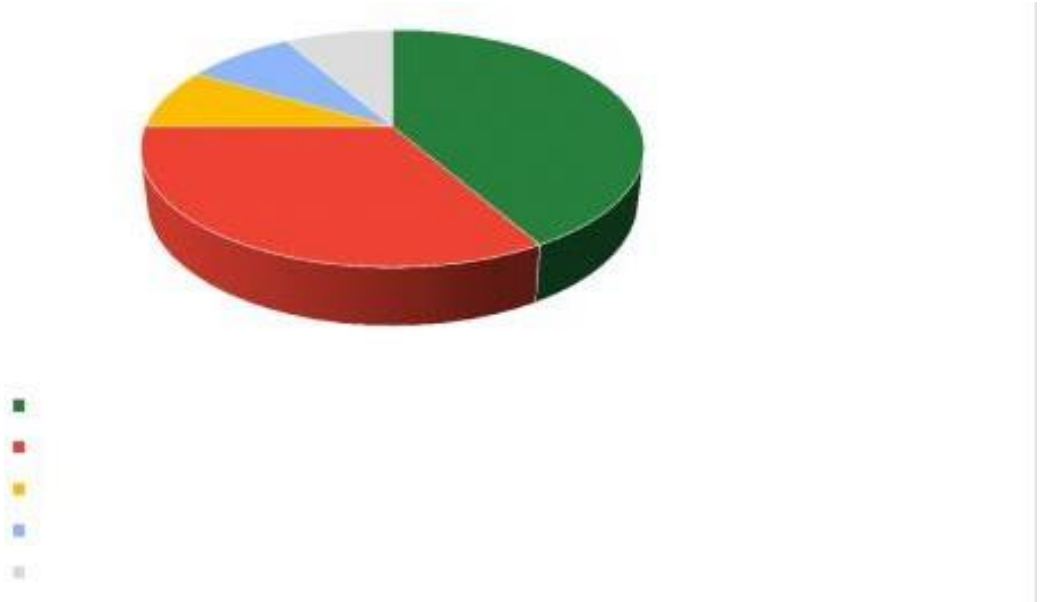
Ups and downs, e-commerce has advantages and downsides, so running this type of business has its challenges. However, being aware of these challenges will help people in charge of this business to avoid common consequences. The disadvantages of electronic commerce can

be classified into two main categories: technical and non-technical.

The technical disadvantages may be safety problems, the need for internet connection, credit card fraud, and software development. The non-technical disadvantages include the inability to test first-hand items before purchasing, lack of personal touch, delay in delivery, comparison of costs and product characteristics, damage during transport and delivery, and restricted consumer services (Taher, 2021).

The following figure shows the distribution of B2C companies without online stores according to reasons not to have them:

Figure 6 Percentage of B2C companies without online stores because of not having them.



Source: Surveys carried out

Figure 6 shows that 41.7 percent of B2C companies without online stores claim that they are not technologically prepared, while 33.3 percent report that they do not need to sell their products or services

In the research work of Villa et al. (2018), it was found that among the factors conducive to the adoption of electronic commerce were identified following: previous use of Information and Communication Technologies (ICT) in the company's staff, the existence of national policies to support e-commerce, the size of companies, the level of maturity in the implementation of ICT in organizations, the provision of financial and technological resources for the implementation process of e-commerce, the external pressure to be part of this type of trade and the possibilities of external assistance (advice or support) to implement e-commerce platforms.

Kalinic (2014), points out that e-commerce offers several benefits, for businesses and customers alike. For companies, it reduces operating costs, expands the scope of the market, reduces entry barriers, and, consequently, intensifies competition. Several OECD surveys have confirmed that enterprises that rely on e-commerce tend to be more successful compared to their peers with limited use of e-commerce. New Internet-based channels are complementing or replace channels in all the steps of the seller-buyer relationship.

2.2. Statistical generation of results

The results of the survey on a final sample of 66 enterprises are presented below

Table 1 Distribution of the 66 companies in the sample by economic activity.

Economic Activity	Frequency	Percentage
Manufacturing	38	57.6%
Services	14	21.2%
Trade	13	19.7%
Agriculture	1	1.5%
Total	66	100%

According to the results in Table 1, 57.6% of the firms in the study belong to the manufacturing sector, followed by 21.2% in the service sector and 19.7% in trade. In the study conducted by Gutiérrez Tobar (2015), in a sample of 53 Colombian companies, it was found that 34% belong to the manufacturing sector, 9.6% services, 22.6% commercial, and 3.8% agricultural.

Table 2 Distribution of the 66 companies in the sample according to the size of the company according to the number of workers.

Company Size	**Frequency**	**Percentage**
<10 Workers	6	9.1%
10 to 49 workers	23	34.8%
50 a 99 workers	10	15.2%
100 to 199 workers	4	6.1%
200 or more workers	23	34.8%
TOTAL	66	100%

Table 2 shows that 34.8% of companies have between 10 and 49 workers and another 34.8%have 200 or more workers.

Table 3 Distribution of the 66 companies in the sample according to computer layout.

Does the company have computers (PC, Mac, Laptop)?	Frequency	Percentage
Yes	66	100%
No	0	0%
TOTAL	66	100%

Table 3 shows that all companies have computers

Table 4 Distribution of the 66 companies in the sample according to Internet service ownership.

Does the company have internet service?	**Frequency**	**Percentage**
Yes	66	100%
No	0	0%
Total	66	100%

According to Table 4, 100.0% of companies have Internet service.

Table 5 Distribution of the 66 companies in the sample by way of billing.

Does the company have internet service?	**Frequency**	**Percentage**
Electronic (connected to CRS with electronic signature)	65	100%
Manual (with paper checkbooks)	2	1,5%
Total	66	100%

According to Table 5, 98.5% of companies do electronic invoicing, while only 1.5% do it manually.

Table 6 Distribution of the 66 companies in the sample according to the employment of specialists in information technologies (ICTs).

Does the company employ technology specialists of information (ICTs)?	**Frequency**	**Percentage**
Yes	57	86.4%
No	9	13.6%
Total	66	100%

According to the results in Table 6, 86.4% of companies employ IT, specialists.

Table 7 Distribution of the 66 companies in the sample according to the realization of training days in information technologies (ICTs) for their employees.

Does the company carry out training sessions in information technologies (ICTs) for their employees?	**Frequency**	**Percentage**
Yes	44	66.7%
No	22	33.3%
Total	66	100%

Table 7 shows that 66.7% of companies have training days in information technologies (ICTs) for their employees.

Table 8 Distribution of the 66 companies in the sample according to ownership of brand users on social media.

Has Social Networks?	**Frequency**	**Percentage**
Yes	66	100%
No	0	0%
Total	66	100%

According to Table 8, 100.0% of companies have branded users on social networks.

Table 9 Distribution of the 66 companies in the sample by type of social networks

Social Networks	**Frequency**	**Percentage**
Facebook	66	100%
Instagram	60	90.9%
Twitter	19	28.8%
Youtube	13	19.7%
LinkedIn	11	16.7%
Tik Tok	10	15.2%

In table 9, it can be seen that 100.0% of companies are present on Facebook, 90.9% have users on Instagram and 28.8% on Twitter.

Table 10 Distribution of the 66 companies in the sample according to ownership of their website.

Does the company have its own website?	**Frequency**	**Percentage**
Yes	59	89.4%
No	7	10.6%
Total	66	100%

According to Table 10, 89.4% of companies have their own website.

Table 11 Distribution of the 7 companies in the sample without a website according to the installation of a website

Have you considered installing a website?	**Frequency**	**Percentage**
Yes	7	100%
No	0	0%
Total	7	100%

In table 11, you can see that, all companies that do not have a website have considered installing a website.

Table 12 Distribution of the 59 sample companies with a website according to the company's website administration.

Who manages the company's website?	**Frequency**	**Percentage**
Performed by an employee or department of the company	41	69.5%
If a company pays the services provided by external computer services	15	25.4%
It is done by an employee or department of the company. It pays to a company or provided external computer services	3	5.1%
TOTAL	59	100%

According to Table 12, in 69.5% of companies the administration of the website is carried out by an employee or department.

Table 13 Distribution of the 59 companies in the sample with a website according to thetype of technology with which the website was designed and supported.

The technology with which the website was designed and supported is:	**Frequency**	**Percentage**
By direct programming	20	33.9%
Made with a content manager (CMS - WordPress or similar)	20	33.9%
By direct programming, Made with a content manager (CMS - WordPress or similar)	3	5.1%
Doesn't know	16	27.1%
TOTAL	**59**	**100%**

In table 13, it can be seen that 33.9% of companies with a website used direct programming, while the other 33.9% used a content manager like WordPress or similar.

Table 14 Distribution of 59 sample companies with website according to online store tenure.

Currently, does the company have an online store (online) where they sell their products?	**Frequency**	**Percentage**
Yes	19	32.2%
No	40	67.8%
Total	59	100%

In table 14, it can be seen that 32.2% of companies with websites have an online store for e-commerce. According to the statistical portal Statista (2021b), currently, 16.8% of retail companies worldwide have an online store, and is expected to reach 21.8% by 2024.

Table 15 Distribution of the 47 sample companies without online store according to the reason of not having an online store.

Why doesn't the company have an online store? (Accepts multiple responses)	Frequency	Percentage
The market where we operate does not require it	13	68.4%
We are not technologically prepared	9	47.4%
Not required to sell our products / services	9	47.4%
We consider it unsafe	6	31.6%
The online page is in maintenance	1	5.3%

The market where we operate does not require	5	26.3%
We do not sell to final consumer	2	10.5%
We are in testing to add this option	1	5.3%
Investment required	1	5.3%
We do not have payment button or management of digital warehouses, but we do make digital sales and we have a team for it	1	5.3%
You have retail points (distribution)	1	5.3%
The store will be implemented in linear	1	5.3%

According to Table 15, 68.4% of companies say that the market in which they operate does not require e-commerce or online shops. On the other hand, 47.4% say that they are not technologically prepared and another 47.4% maintain that it is not necessary for the marketing of their products or services.

According to Kabugumila et al. (2016), many companies in the production sector tend to maintain the idea that their businesses do not need online stores, but that it is enough to continue with the traditional model. However, there have been numerous cases in which companies, both in the industrial sector and those selling to the consumer.

Table 16 Distribution of the 47 companies in the sample without a website according to online store ownership.

Do you consider developing an online store in the short or medium-term?	**Frequency**	**Percentage**
Yes, in the medium term (after one year)	24	51.1%
Yes, in the short term (less than one year)	10	21.3%
No, we have not considered	13	27.7%
TOTAL	47	100%

According to Table 16, 72.4% of companies consider developing an online store in the short term, of which 51.1% are those entities that plan to do so after a year and 21.3% in less than a year. On the other hand, 27.7% of companies have not considered the development of an online store.

Table 17 Distribution of the 19 sample companies with online store according to time of creation of the online store.

If you have an online store: Since when is the online store available for the sale of your products?	**Frequency**	**Percentage**
More than three (3) years	6	31,6%
From one (1) year to three (3) years	10	52.6%
Less than one (1) year	3	15.8%
TOTAL	19	100%

In table 17, it can be seen that 52.6% of the companies have had the online store since a period of between 1 and 3 years, while 31.6% have had the online store for more than 3 years.

Table 18 Distribution of the 19 sample companies with online store according to payment methods available in the online store.

What forms of payment are available in the company's online store?	**Frequency**	**Percentage**
Payment gateway with cards (Paypal, Stripe, Paymentez u other)	13	68.4%
Bank transfer or deposit	11	57.9%
Cash payments	5	26.3%
Other methods of payment	4	21.1%
TOTAL	19	100%

According to the results of Table 18, 68.4% of the companies in the study's online stores have payment gateways with cards, 57.9% accept payments through bank transfers or deposits, and 26.3% accept cash payments.

Table 19 Distribution of the 19 companies in the sample with online shop according to valuation of the company's experience with the online store.

How would you rate the company's experience with the online store? (1 unsatisfactory - 10 very satisfactory)	**Frequency**	**Percentage**
1	**0**	**0%**
2	**0**	**0%**
3	**0**	**0%**
4	**0**	**0%**

5	**0**	**0%**
6	**1**	**5.3%**
7	**3**	**15.8%**
8	**0**	**0%**
9	**2**	**10.5%**
10	**13**	**68.4%**
TOTAL	**19**	**100%**

According to Table 19, 68.4% of companies with online stores state that the experience with online stores is very satisfactory

Table 20 Distribution of the 19 sample companies with online stores according to odds of recommending the implementation of an online store to other companies.

How would you rate the company's experience with the online store? (1 unsatisfactory - 10 very satisfactory)	**Frequency**	**Percentage**
1	**0**	**0%**
2	**0**	**0%**
3	**0**	**0%**
4	**1**	**5.3%**
5	**1**	**5.3%**
6	**0**	**0%**
7	**1**	**5.3%**

8	**1**	**5.3%**
9	**3**	**5.3%**
10	**12**	**15.8%**
TOTAL	**19**	**100%**

According to Table 20, 63.2% of companies with online stores would most likely recommend the implementation of online stores to other companies

2.3. Conclusions and recommendations

The research work allowed us to obtain a broad and precise understanding of e-commerce and the characteristics of its positioning in the companies of the productive sector of Cuenca. Based on the specific objectives set, the collection of information, and the processing of theresults, the following conclusions and recommendations are presented:

2.3.1. Conclusions

Business models vary among types of enterprises, due to the quality of the products and services they produce, as well as who is the main buyer or customer of such products. In thisway it is usual to find companies that
sell to businesses (B2B) and businesses selling to consumers (B2C); these relationships are maintained under different mechanisms for the exchange of goods and services, such as traditional forms of buying and selling, and innovative online shops, which are carried out over the Internet. Thus, e-commerce consists of buying and selling through digital media.

E-commerce consists of transactions that go beyond the boundaries of enterprises; it involves the application of digital technologies to business processes within the enterprise; has spread rapidly over the decade and is expected to expand even further at this rate or more. In the consulted academic literature, it was found that among the most important variables involved in the diagnosis of its positioning are: own website with online store and

make purchase and sale transactions between

companies and customers. The different studies showed that companies that position themselves within e-commerce have up-to-date websites, in which the e-commerce platform is linked through an online store, where orders are placed and transactions are formalized through payment gateways.

The companies of the productive sector of Cuenca present a great diversity in the business models they use to sell their products or services. The application of the survey to a sample of 66 companies registered with the Chamber of Commerce of Cuenca showed that the largest proportion belongs to the manufacturing sector (57.6%), followed by the services sector (21.2%), commerce (19.7%), and agriculture (1.5%).

Most of the companies surveyed focus exclusively on the B2B model (62.1%), followed by B2C businesses (7.6%) and those covering both models at the same time (30.3%). On the other hand, it was found that 60.0% of B2C companies and 50.0% of joint ventures (B2B and B2C) have online stores, while only 14.6% of B2B companies have this technology.

There are different barriers in the adoption of e-commerce by companies in Cuenca. Fears are highlighted about the lack of knowledge of technology and beliefs about maintaining the traditional means of conducting sales transactions for products and services

2.3.2. Recommendations

Companies that do not yet have a website are advised to seek technical advice and hire the services of a web programmer or company to do so, thereby increasing the company's chances of being seen by a larger number of potential customers, with which soon they can increase their sales and strengthen their market position.

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Companies need to be encouraged to set up online stores to increase the levels of connectivity between the company and its customers.

Finally, it is recommended to develop new research that includes the analysis of payment gateway platforms and data protection, which offers security to the company and customers.

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Appendix

SURVEY

Diagnosis of the positioning of the Electronic Commerce of the companies of the Productive Sector of Cuenca.

The Chamber of Industries of Cuenca in conjunction with the School of International Studies of the University of Azuay are developing this project with the purpose of diagnosing what is the positioning of electronic commerce in affiliated companies

Mail:

Name of the Company:

Main economic activity:

ISIC code:

The total number of workers:

>10 workers

10 to 49 workers

50 to 99 workers

100 to 199 workers 200
or more workers

Does the company have computers (PC, Mac, Laptop)?

YesNot

Does the company have internet service?

YesNot

How does the company do its billing?

Manual (with paper checkbooks)

Electronic (connected to CRS with electronic signature)

Does the company employ information technology (ICT) specialists?

YesNot

Does the company carry out training sessions in information technologies (ICTs) forits employees?

If Not

Does the company have social media accounts?

YesNot

Please indicate in which social networks you have accounts (Accept multiple responses):

- Facebook
- Instagram
- Twitter
- Tik Tok
- Youtube channel
- Other:

Does the company have its own website?

YesNot

If you have a website

Who manages the company's website?

- Performed by an employee or department of the company

- Paid to an undertaking or provided with external computer services

The technology with which the website was designed and supported is:

- By direct programming

- Made with a content manager (CMS - WordPress or similar)

- Does not know

If you don't have a website

Have you considered installing a website?Yes
Not

Why doesn't the company have a website? (Accepts multiple responses)

-It was not necessary

-We are not sure of its efficiency

-We prefer traditional channels

-For lack of budget

-It is unsafe

-We do not know its benefits

-Another:

Online store

Currently, does the company have an online store (online) where they sell theirproducts?
YesNot

If you have an online store. Since when is the online store available for the sale of your products?

- Less than one year

- 1 to 3 years

- more than 3 years

What payments methods are available in the company's online store?

- Card payment gateway (Paypal, Stripe, Paymentez or other)

- Bank transfer or deposit

- Cash payment

- Other forms of payment

How would you rate the company's experience with the online store? (1 unsatisfactory - 10 very satisfactory)

Unsatisfactory 1 2 3 4 5 6 7 8 9 10 Satisfactory

Considering the company's experience with the online store? What are the odds of recommending the implementation of an online store to other companies?

Unsatisfactory 1 2 3 4 5 6 7 8 9 10 Satisfactory

If you don't have an online store

Why doesn't the company have an online store? (Accepts multiple responses)

- Not required to sell our products/services

- We consider it unsafe

- We are not technologically prepared

- The market where we operate does not require it

- Other:

Do you consider developing an online store in the short or medium-term?

Yes, in the short term (less than one year)Yes,
in the medium term (after one year) No, we
have not considered.