



**CROSS BORDER E-COMMERCE ADOPTION
DRIVERS, INHIBITORS AND IMPACT IN
SMES OF THE AGROINDUSTRIAL SECTOR**

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SMEs of the Agroindustrial Sector**

has been approved.

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EXECUTIVE SUMMARY

Degree: Master in Management
Thesis name: Cross Border E-Commerce Adoption Drivers, Inhibitors and Impact in SMEs of the Agroindustrial Sector
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Summary:

Organizational transformation is, without a doubt, one of the biggest challenges for today's companies, particularly when it is driven by technologies and information. Additionally, taking in account the relevance and challenges of SMEs and exporting companies in Peru, a study in adopting Cross Border E-Commerce (CBEC) technologies is developed, since the competitiveness of the market is remarkably high and little academic literature has been developed for this topic, particularly in a developing country like Peru.

Thus, this study has been developed as an exploratory research, to understand which factors were the drivers and inhibitors to adopt CBEC. For this purpose, the following questions are set:

- Why do Peruvian SMEs adopt Cross Border E-Commerce platforms and which implications they have in the organization?
- Which are significant drivers and inhibitors for SMEs adopt CBEC platforms?

The data from this project has been gathered from owners in charge of CBEC of Peruvian SMEs in the agro-industrial sector that use Alibaba as the CBEC platform, which were validated by being Alibaba Global Gold Suppliers.

The Technology–Organization–Environment (TOE) Framework was established to conduct this research because it gave the project a structure to lean on, which explains that three different contexts of a firm (technological, organizational and environmental) influence adoption decisions.

The results indicated that the technological context, the perceived benefits and perceived compatibility were indicated as drivers, because they are expected to facilitate the market penetration and increasing the overall efficiency and margins. The cost of implementation was indistinct as a consequence of its expected positive return on investment.

In the organization context, technology readiness was considered as a driver despite its low lever because of the support and initiative of the head of the firm. Additionally, firm size was considered as an indistinct factor, due to its action scope which doesn't involve further resources.

The environmental context was a relevant one due to the significance of different stakeholders. Consumer, supplier and competitor influence the decision of adopting e-commerce due to the industry pressure. Conversely, the influence of the government has an indistinct to inhibitor influence as a consequence of their limited action field.

For further research, as the factors have been classified, quantitative research is suggested to measure the impact of each variable identified in the project.

CHAPTER I. INTRODUCTION

At the present time, it is undeniable to argue that an organizational transformation, “in general, entails changes in strategy, structure, and power distribution domains” (Romanelli & Tushman, 2018). However, despite the heightened research interests and increased research efforts in this area in recent years, there still exist many gaps in our understanding of IT-enabled organizational transformation, especially of digital transformations instigated by e-commerce and other Internet-related technologies (Besson & Rowe, 2012).

“Organizational Transformation is a term referring collectively to such activities as reengineering, redesigning and redefining business systems.” The dominant enabling technology in transforming organization is information and technology.” Being that said, with the arrival of e-commerce, markets dynamics have changed. (Sila, 2013).

Albastroiu (2007) argues that: electronic commerce is the key for enterprises’ competitiveness in this informational era, ensuring the access to new market segments, increasing the speed of developing business, the increased flexibility of commercial policies, decreasing the provisioning, sale and advertising costs, simplifying the procedures etc. The impact of the electronic commerce upon the companies and upon society will be of great importance both as extent and as intensity.

For instance, e-commerce is increasing its relevance in global markets, according to Statista Digital Market Outlook – Market Report, (2018), in 2018, Global B2C electronic commerce market revenue was of 1,785.7 billion US\$ with a forecasted Compound Annual Growth Rate (CAGR) for the next 5 years of 9%. Likewise, Statista Digital Market Report – Trend Report, (2018) adds that, Global B2B electronic commerce, gross merchandise value revenue was of 10,606 billion US\$ with an historical average growth rate of 13% since 2013

The figures below illustrate the composition of the Global B2C commerce revenue forecast by category of goods and the continental categorization of the gross merchandise value of the Global B2B commerce.

Global¹ eCommerce revenue forecast in billion US\$

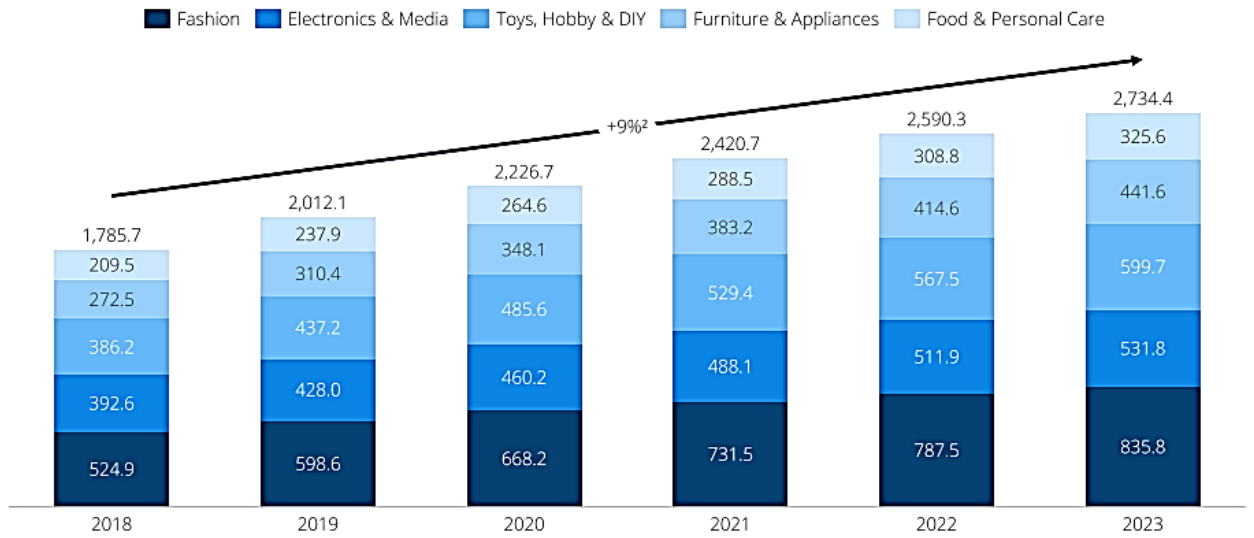
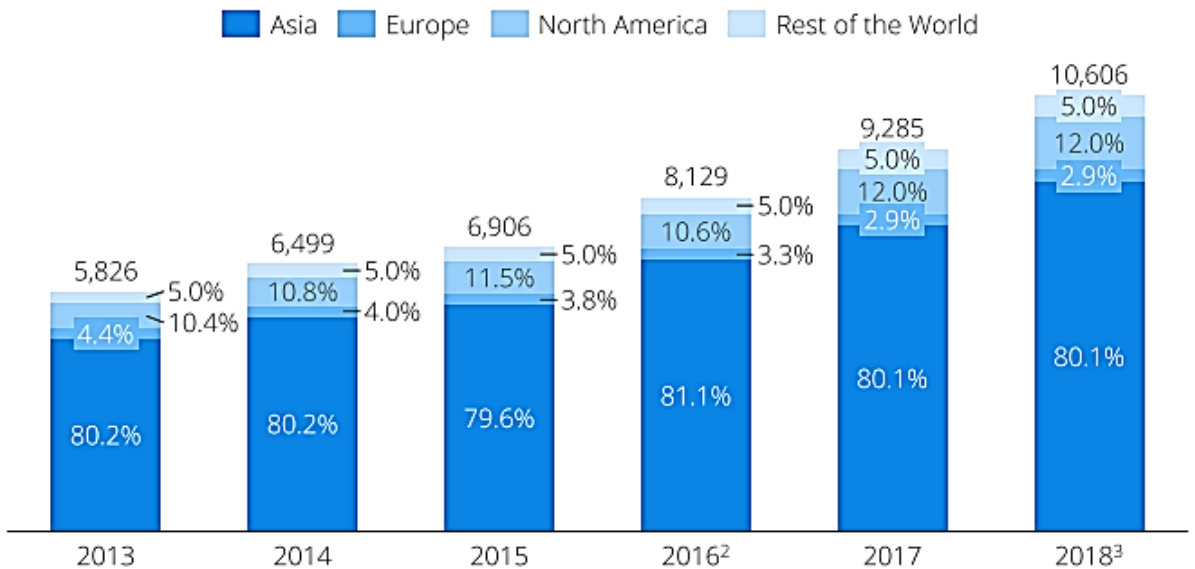


Figure 1: Global E-Commerce revenue forecast in billion US\$. (Statista Digital Market Outlook – Market Report, 2018)

B2B eCommerce GMV² in billion US\$



Source: Statista analysis

Figure 2: B2B E-Commerce GMV in billion US\$. (Statista Digital Market Report – Trend Report, 2018)

Cross-border e-commerce has quietly gained momentum as customers buy products from outside their borders. “When it comes to cross-border ecommerce, the term generally defines international online trade. It entails the sale or purchase of products via online shops across national borders. Buyer and seller are not located in the same country and are often not ruled by the same jurisdiction, use different currencies, and speak different languages.” (DPD Nederland BV, n.d.).

Globally “SMEs account for 60 to 70 per cent of jobs in most OECD countries”. The relevance of SMEs in Peru is relies on its importance on economic development, where (Pantigoso, 2015) states that “micro, small and medium enterprises represent 99.6% of all businesses in the country, which produce 47% of GDP”, and employment, because they provide employment for 75% of the economically active population (PEA).(Peruano, 2018)

Further, there are 3,600 small and medium export companies in Peru, of which 1,000 belong to the agricultural sector, which denotes its importance in boosting the Peruvian economy, said the General Manager of the Foreign Trade Society, Jessica Luna. (Diario el Economista, 2015).

However, this promising overview is not free of challenges and discouraging facts. A good example of this can be found by the declarations of the president of the Small Business Guild of the Chamber of Commerce of Lima (CCL), Jorge Ochoa, who pointed out that 62% of small and medium enterprises (SMEs) in the country, are informal. (Chau Suero, 2018). And, in addition, “the deaths of SMEs that enter the export activity have exceeded those that enter, said yesterday the vice minister of SMEs and Industry Juan Carlos Mathews in a conference before journalists” (Diario Gestión, 2016)

The evidence presented above, verifies the need to work on important points such as formalization, digitalization, research and development (R&D), financing, productivity, human capital and their capabilities. (Cañari, 2017)

With these issues identified, (PQS, n.d.-a) the Ministry of Foreign Trade and Tourism (MINCETUR) and the Commission for the Promotion of Peru for Exports and Tourism (PROMPERÚ) have been carrying out sustained work to achieve the development of the export sector, specifically in three strategic objectives which are:

- Deepen the internationalization of companies.

- Increase in a sustainable and diversified way the exports of goods and services with added value.
- Improve the competitiveness of the export sector.

In year 2016, MINCETUR launched the "Support Program for Internationalization" for companies, which has a fund of S/ 25 million to boost the internationalization. This fund is non-refundable and co-finances in two stages the process of internationalization. The amounts that can be accessed by companies under the contest range from S/ 70 thousand to S/ 300 thousand, according to the modality to which the company applies.

In theory, SMEs may finance, market studies, internationalization plans, hiring of exporting tutors, participation in commercial promotion activities, accounting and financial advice.(PQS, n.d.-b)

While this phenomena of adopting technologies in SMEs in countries where the E-Commerce solutions are more consolidated has been identified and studied in previous research, there is a lack of understanding of it in a context of a developing country as Peru, which one of the main difficulties is the complicated access to national and international markets.

The purpose of this research is to comprehend why do Peruvian small and medium enterprises (SMEs) of the agroindustrial sector adopt Cross Border E-Commerce and to determine which are the implications it has on the organization.

This project intends to provide entrepreneurs, SMEs owners, SMEs executives and national officers an elementary understanding of the factors that influence the adoption of CBEC platforms and identify the implications they have in the organization. This has the final objective to determine and enable policies and actions to develop the competitiveness of Peruvian SMEs in international markets.

CHAPTER II. LITERATURE REVIEW AND HYPOTHESIS

2.1 Digital transformation

Digital transformation is defined “as a sustainable, company-level transformation via revised or newly created business operations and business models achieved through value-added digitization initiatives, ultimately resulting in improved profitability” (Schallmo & Williams, 2018)

2.2 E-Commerce & Cross Border E-Commerce (CBEC)

E-commerce is defined as “the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business.” (Rouse, n.d.)

“When online deals and transactions are conducted in different areas or countries by using information and communication technology (ICT), it is called cross-border e-commerce” (Ding, Huo, & Campos, n.d.)

2.3 Small and Medium Enterprises

Defined by Peruvian law N°30056; which purpose is to establish the legal framework for the promotion of competitiveness, formalization and development of micro, small and medium enterprises, establishing policies of general scope and the creation of support and promotion instruments; encouraging private investment, production, access to internal and external markets and other policies that promote entrepreneurship and allow the improvement of business organization along with the sustained growth of these economic units; the categorization of enterprises is defined by its yearly sales income without limit of workers. (Diario El Peruano, 2013)

- Microenterprises: annual sales up to the maximum amount of 150 Taxation Units.
- Small-sized Enterprises: annual sales over 150 UIT and up to the maximum amount of 1700 Taxation Units.
- Medium-sized Enterprises: annual sales exceeding 1700 Taxation Units and up to the maximum amount of 2300 Taxation Units

For year 2019 the Taxation Unit imposed by SUNAT, the organization which enforces customs and taxation in Peru, is S/ 4,200.00 (Peruvian currency). (SUNAT, n.d.)

2.4 PromPeru

The Commission for the Promotion of Peru Exports and Tourism - PROMPERÚ is a specialized technical organism that possesses functional, technical, economic, financial, budgetary and administrative autonomy. It is attached to the Ministry of Foreign Trade and Tourism. It is competent to formulate, approve, execute and evaluate strategies and plans for the promotion of exportable goods and services, as well as internal and receptive tourism, promoting and disseminating the Peru image in tourism and exports, in accordance with sector policies, strategies and objectives. (“PROMPERÚ - Comisión de Promoción del Perú para la Exportación y el Turismo,” n.d.)

2.5 The Technology–Organization–Environment (TOE) Framework

Baker (2012) explains that the TOE framework represents how the firm context influences the adoption and implementation of innovations. This is a theory that explains that three different elements of a firm’s context influence adoption decisions. These three elements are the *technological context*, the *organizational context*, and the *environmental context*. All three are posited to influence technological innovation.

2.5.1 The Technological Context

The technological context includes all of the technologies that are relevant to the firm – both technologies that are already in use at the firm as well as those that are available in the marketplace but not currently in use. A firm’s existing technologies are important in the adoption process because they set a broad limit on the scope and pace of technological change that a firm can undertake (Collins et al. 1988)

The technological context refers to those aspects such as perceived benefit, compatibility, and cost, that influence the adoption of e-commerce technology. (Rahayu & Day, 2015)

2.5.2 The Organizational Context

The organizational context refers to the characteristics and resources of the firm, including linking structures between employees, intra-firm communication processes, firm size, and the amount of slack resources.(Baker, 2012)

Technology readiness is one of the organizational contexts proposed in this study as a determinant factor that influences SMEs in adopting e-commerce. Technology readiness refers to what extent the technology infrastructure, relevant systems and technical skills in business can support e-commerce adoption.

Another factor in organizational context that is identified as a determinant factor of e-commerce adoption by SMEs is firm size. This is because firm size is related to the ability of business to provide certain resources, both financial and human resources. (Rahayu & Day, 2015)

2.5.3 The Environmental Context

The environmental context includes the structure of the industry, the presence or absence of technology service providers, and the regulatory environment. Industry structure has been investigated in several ways. (Rahayu & Day, 2015)

CHAPTER III. METHODOLOGY

3.1 Research setting

The research data in this project is drawn from owners in charge of CBEC of Peruvian SMEs in the agroindustrial sector that use Alibaba as the platform for CBEC who were qualified to speak about the addressed topic, which provided meaningful information to the project. The information provided gave an overview about the dynamics of the industry regarding to e-commerce and their own experience as firm owners of this industry.

Criteria for selecting the subjects was being a “Alibaba Global Gold Supplier”, which means that the SMEs “must complete an authentication and verification process by a reputable third-party security service provider appointed by Alibaba.com” (Alibaba.com, n.d.) to ensure their credibility and trustworthiness. Due to practical constraints, the number of interviews was limited to two companies. From now on, the first company is represented by *Owner 1* and the second one by *Owner 2*.

The products on the portfolio of the companies include grapes, mangoes, bananas, avocados, pomegranates, blueberries, tangerine, lemon, garlic, coffee beans, quinoa among others. Each one of these products had their own varieties of the specie and also were classified in organic and not-organic, with the respective certifications to be allowed to access to certain markets.

The principal markets for both companies were China, United States of America, Netherlands and France; also both are developing new businesses in South Korea and Japan. Regarding the billing of companies, one of the interviewees was classified as a small enterprise and the other one as a medium enterprise.

3.2 Data collection

Qualitative research facilitates academics to cultivate a deeper understanding of experiences, procedures, difficulties, and events. (Bluhm, Harman, Lee, & Mitchell, 2011). Under the determined circumstances, due to the nature of the research problem, the methodological approach taken in this study is qualitative. The method was selected to address the following research questions:

- Which are significant drivers and inhibitors for SMEs adopt CBEC platforms?
- Which implications (advantages or disadvantages) it had on the organizations?

In this research based in a qualitative approach, semi-structured telephone interviews were designed and conducted, which allowed interviewers to clarify

questions to ensure accurate and meaningful responses. Hopper (1967) stated that “telephones may allow respondents to disclose sensitive information more freely, and telephone conversation has been reported to contain several features that render it particularly suitable for research interviews. Moreover, “little evidence that data loss or distortion occurs, or that interpretation or quality of findings is compromised when interview data are collected by telephone.” (Novick, 2008).

In this study, the technology, organizational, and environmental (TOE) framework developed by Tornatzky and Fleischer (1990) is used. Scupola (2009) indicates that “previous studies have used this framework in the context of IT adoption in SMEs (e.g. Ramdani and Kawalek, 2007; Scupola, 2003; Lertwongsatien and Wongpinunwatana, 2003; Premkumar, 2003; Kuan and Chau, 2001)”. Scupola (2009) adds that the relevance of these mentioned studies is because they theoretically and empirically identify a number of factors affecting IT and e-commerce adoption in SMEs. The interview guide with its corresponding questions can be found in the Annex 1 at the bottom of the document.

3.3 Data analysis

Data analysis started with description of the cases. Digital transformation was described for each analyzed SME regarding the foundation before the transformation and the adoption and use of CBEC.

”The transformation of qualitative data obtained in interviews, autobiographies, free-answer responses to open-ended questions, projective materials, and observation of group situations into a form which renders them susceptible to quantitative treatment constitutes coding” (Guetzkow, 1950). In this project, coding was used to identify concepts and linking between them to examine relationships to get a comprehensive understanding about the topic.

CHAPTER IV. RESULTS

4.1 Technological Context:

The findings related to the technological context suggest that the main drivers prior to the adoption of CBEC considered by SMEs are the ease on the access to international markets and the optimization of margins and resources. For this, both owners agreed on the same benefits and explained:

«One of the main drivers is that we live in a globalized world, where now the commercial breaches are getting shorter. There are few companies that invest heavily in travelling and participating in international fairs to try to get customers. So, one of the main ways which allows you to maintain contact with foreign customers are digital. In this case, if I have a website to showcase my products then I make the following question: How do I generate leads? There is the relevance of Alibaba. » (Owner 1)

« The main benefit is that it is a low investment to put products in different countries. That is, customers in countries to which you want to export. The product now doesn't need to be put in shops, supermarkets or retails by the producers, which generated many obstacles in Peruvian SMEs. » (Owner 2)

Increased margins are evident by suppressing intermediaries and related costs. It is a relatively different business model for the company. For this, Owner 1 states that thanks to CBEC, SMEs *« break the schemes of participating in fairs or by having several intermediaries such as broker dealers, potentially reaching a final customer, which finally allows you to have greater margins. »*

To emphasize the previous arguments, the Owner 1 added: *« when you go to these fairs if you are a SME, you're almost never the focus, and attention is not given to you just because you're not big. If I try to join PromPerú to participate in the stand of Peru Superfoods, prices are extremely high, which makes SMEs to struggle to be part of it. So usually when you see Peru Superfoods stand, you will find the largest Peruvian companies. So, the benefits of these platforms are that first, you severely reduce costs; second, have more commercial opportunities by offering your products to foreign customers; and third, because it allows you to manage the selling terms set on the platform. »*. In the same way, Owner 2 explained *« SMEs generally go to missions, business conferences and fairs, but then, many companies are faced with a lack of professional education, do not speak foreign languages, have no solid notion of exports*

or know Incoterms prices to negotiate. Having e-commerce facilitates that commercial process. »

By contrast, before adopting Alibaba, owners acknowledged different deterrent factors. Basically, the one that fits in the technology category, is that a significant number of suppliers exist in these platforms and a growing competition from national markets is emerging. Owner 1 explained that *« The downside is that there is a great volume of suppliers of these products. The probability someone buys from you by the platform is very low. If you can put fresh products (fruit and vegetables) you can find suppliers who have very good rating but they also offer the same thing, then the capacity of decision client out clearly linked to 3 factors: price, delivery time and certifications. »*. He also added, *«Your customer exposure is relatively low because there is plenty of competitors and the other is that your target market may not necessarily be on Alibaba. »*. Owner 2 added, *« If I put my company in Alibaba I'm competing with 400 more companies offering the same product, probably I will not have much chance for my first year. »*

Perceived compatibility also is considered a driver that eases the adoption of e-commerce by the SME. By that, the technological infrastructure of the company is an important investment that has been done by companies not only to enhance e-commerce activities, but it has been done to improve actual business processes and its overall efficiency.

« The technological infrastructure is an investment that is being done not only for the CBEC but also for the implementation of ERPs, CRM, accounting and stock control. Regarding the culture, value and practices, it is very clear since they we are members of SEDEX (SMETA) is a trade organization that has 4 pillars, among which is the ethics of foreign trade. We are members and we're working towards SMETA. Our management is based on good agricultural practices, good management practices and good manufacturing practices; as well as the TQM, which puts a committed worker with values before anything else » (Owner 1).

The cost of implementation does not influence the decision of adopting CBEC because it is perceived that a positive return on investment is expected. In fact, Owner 1 says about the cost that *« It is not so significant compared with participation in an international fair. The difference is that CBEC will have a ROI above 100%, but you cannot expect and immediate ROI. If it's your first year of operations, investing in the*

CBEC not going to be as profitable as the results seen at a fair. It has a justified profitability but in a long run when a solid relationship with customers is established.»

4.2 Organizational Context

This study has shown that SMEs studied were experienced in the traditional way of doing businesses, but CBEC was more complicated than registering and using the Alibaba platform. Entrepreneurs were not quite prepared to transit to CBEC, and all the SMEs had a difficult time using the Alibaba platform when they started. Most entrepreneurs in the SMEs were not well prepared nor did they have experience in e-commerce.

The results of the organizational context in the enterprises has shown that owner's support is the fundamental organizational factor in adoption and implementation of e-commerce. It was emphasized from the interviewees that all Peruvian companies of the industry who decide to adopt e-commerce had made the decision by owners. As Owner 2 explains, a big difficulty is to *« change the mindsets of the heads of organizations. Many people start in the agroindustry business because they saw the chance to invest and profit from it. But many of these owners have not had a formal academic preparation so they do neither have managerial know how. For the same reason, many businesses do not grow at the pace they wish for cultural theme. »*

In terms of technical skills, they considered that necessary competencies demanded for the implementation and start-up were not found in the actual organization. This in general terms is considered as an inhibitor because an upfront investment and related cost had to be done in order to achieve the goal. For that, interviewees pointed out that companies that opted for the decision of the implementation of CBEC basically had two alternatives: train the employees, which generally is done by enrolling relevant staff into an institution to train them, or hire new already qualified staff. Owner 2 commented about that: *« We hired staff dedicated to receiving data, emails, orders. »*

It is also observed that the studied SMEs do not recognize the firm size as a determinant factor that influences adoption of e-commerce, so it does not have a character of driver nor an inhibitor for the study. In fact, Owner 1 indicated; *«Firm size does not hinder the adoption of electronic commerce. Above all the decision to adopt e-commerce it is more linked to what I said earlier., how effective can be the concretization sales with it. »*. Similarly, Owner 2 added, *« I do not consider that*

resources related to the firm size impede the transition to a business model that add CBEC within their operations. »

4.3 Environmental Context

The relevance of the environmental is clearly supported by the current findings. In the experience of the interviewees, customer pressure is limited in the sense that buyers of the SMEs generally are provisioned in a very traditional way. This means that buyers use Alibaba as a platform to be aware of the products and providers, and if they are interested, the buyer directly contacts the supplier of the product (the SMEs) through their website, e-mail, telephone or face to face. In this sense, the expected outcome of the implementation of the CBEC platform was not foreseeable as its intended result was about selling more through the platform. Despite that, with the use of Alibaba, SMEs are generating additional leads and sales through the commercial approach of the platform has taken.

Although, the literature proposes a research for the influence of suppliers, it is not possible to make this consideration because SMEs are their own suppliers for traditional products due to the fact that they own the lands and are responsible for their products. In addition, it is important to add that when they are short of a product or intermediate goods, SMEs resort to the use of other providers which could be found through their network or by researching on the internet, even using Alibaba.

The scenario is different for nontraditional. As added value processes are required, SMEs tend to import large quantities of these items for the production process, since the final product require inputs, investment and logistics. For this, Owner 2 explained *« From last year we have dried herbs in our product portfolio and we had a hard time to acquire supplies for the final product (a special fabric had to be cut to becomes a filter, which demands time and human resources). We tried to look for suppliers and then we searched in Alibaba from the client side to request quotes from different providers and found out that if we had these suppliers the product will be more profitable. This is something our competitors have been doing. For the moment, domestic suppliers are not the best in terms of price, for that reason we're considering getting these products from China.*

The results about competitor influence indicate competitor pressure positively influences the adoption of e-commerce by the SME. The explanation for this is that several local and international companies are adopting e-commerce as a way to increase

its presence in global markets. For this reason, Peruvian SMEs are making use of these technologies to increase their competitiveness to avoid to be left behind. Owner 2 explained « *there are currently 4 processing companies of certain product. We're one of them. Two of them have included the e-commerce in international trade. We know that we have a better product and we're not having a better position in the international market. There is a lot of pressure to adapt to e-commerce in business strategy.* »

This study has shown that external support is a limited driver on the influence of the adoption of e-commerce. Even though that Government institutions have programs that provide training and funding to internationalize companies to increase the competitiveness in international markets, the impact it is having does not result generally in the use of this CBEC platforms. That is mainly because of government focus in on big companies rather than SMEs. In fact, Owner 1 stated government « *does not give any incentive. They can offer tools and the whole subject but do not give any incentives. They say they provide talks and training to adopt e-commerce and digital tools but, in the end, it does not have an impact on the company.* » Similarly, Owner 2 explained he « *do not consider that the government helps because PromPeru has only one platform held annually to support the internationalization, but only helps large companies. There is big difference because governments like Chile, Ecuador and Brazil have their trade promotion organization highly developed. For instance, LAP Chile, was born as an initiative of the State and was separated from the government to be more competitive. As a private company helps many more companies around the world. I believe the government should imitate those organizations that have come forward to help SMEs.* ». Finally, interviewees acknowledged that no other third parties are involved in the adoption of CBEC.

CHAPTER V. CONCLUSION

The present study was designed to present and determine which are the drivers and inhibitors for Peruvian SMEs to adopt CBEC platforms. The aim of this study is to shine new light providing SMEs decision takers and national officers to improve in their action field efforts to promote the adoption of CBEC.

Interestingly, it's a worldwide tendency for SMEs to adopt e-commerce. That thought drove the investigation of this project because, as companies become more informed about these new alternatives, it is expected to see what is behind this decision-making process and which are the drivers and inhibitors and at the same time which were the perceived advantages and disadvantages of the resolution.

Despite that studies of adoption of CBEC by SMEs have been done in developing countries in the past; the value of this analysis is that it hasn't been made in a Peruvian context, in which internal and external factors are completely different from others developing countries.

The analysis showed that the technological factors that contribute to the adoption of CBEC are perceived benefits. Owners asserted that by using the platform it will provide them capabilities to penetrate in new international markets and the optimization of margins by reducing costs. In addition, the perceived compatibility was relevant as a driver, because established technology infrastructure, culture, value, and work practice lays the foundation for the transformation of the organization.

Interestingly, the most striking result to emerge from collected data is that cost is not a relevant factor for the SME to adopt CBEC. That is because owners assume a positive ROI. Finally, for the technological context, what discourage enterprises is the fact that they know that a considerable number of suppliers of the same product may be on the platform.

One of the more significant findings to emerge from this study are related to the organizational factors. In SMEs, digital transformations are initiated and driven by the entrepreneurs. For that reason, it is deducted that owner's encouragement to implement CBEC is the fundamental aspect in this category. Firm size is not considered as a relevant driver nor inhibitor of CBEC adoption-

Additionally, analysis shows that environmental factors are considerably relevant for the adoption of e-commerce. For instance, competitor pressure stimulates companies

to adopt CBEC because as they are taking advantage of electronic channels, they need to keep pace with them.

Influence of suppliers not a relevant environmental factor. If it is a traditional product, it does not have a significant impact because they produce their own products, although for nontraditional goods, while they don't have pressure from suppliers to use CBEC, SMEs use it for acquiring product that are in the production process.

External support resulted to be poorly meaningful even though government attempts are being made. This is because the focus of the government are big companies and is divorced to their goals of internationalization. SMEs opinions about it seem to be consistent about its dissatisfaction.

It is necessary to indicate the limitations of this investigation, as this is a first approach with different constrains that were part of the development of this project.

Due to practical constraints, as it was mentioned previously, the number companies studied was limited to two. Also, this paper cannot provide a comprehensive contrast between the information retrieved with the interviewees and operational employees who execute the daily tasks. Additionally, companies that were part of the research considered that some information was quite sensitive and were reluctant to explain in depth. So, these results therefore need to be interpreted with caution

As this is a first approach to this topic to understand what moves the behavior of the studied companies, it is suggested to ministries and annexed organizations to use these results for purposes they deem appropriate, as creating policies and programs that foster competitiveness to increase its relevance and presence of SMEs in global markets.

What is not yet completely clear is the impact of each variable in the overall decision of adopting CBEC. More broadly, a quantitative study is needed to address the impact of each factor.

Although many similarities were found in the application of e-commerce in developing countries, the scope of the project does not consider that findings are applicable in a political, economic, social, technological and environmental and cultural context of countries different than Peru. Further research is needed to consolidate and determine if these findings are replicated in others developing countries.

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