

Competitiveness of the SMES: The Factors Influencing Successful Implementation of E-Commerce and E-Supply within Romanian SMES Businesses

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Abstract

There are many ways in which the firms' competitiveness can be understood in the related literature. The main reason for addressing competitiveness at Romanian small and medium-sized businesses level is that, ultimately, competitiveness is measured and generated at the enterprise level, these being main actors of the Romanian economic life. It is one of the most used levels of analysis in the academic literature, due to the continuous desire for economic self-evaluation with the direct competitors in the field, using a series of simple tools that can be easily borrowed between firms. Despite the strong development of the Romanian IT&C sector in the last decade, most small and medium-sized businesses have not taken advantage of this new mode of carrying out business. Given the foregoing, this paper offers some insights into the degree of e-commerce and e-supply strategies within Romanian small and medium-sized businesses. In the given context, this paper focuses on identifying the factors that influenced the success of e-commerce implementation within Romanian small and medium-sized businesses. To achieve the objectives of this research, the data used was collected from April to September 2019 as part of a wider research approach. The article is based on a survey, which was applied to 147 companies that were currently active in Romania, with at least five years' experience. Likewise, the result findings indicate that some of the technological factors, the environmental factors and especially the organizational factors have a direct effect on the competitiveness of the organization and the implementation of e-commerce at the level of small and medium-sized businesses.

Keywords: *E-Commerce, Small and Medium-Sized Enterprise, Competitiveness, Success factors*

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1. Introduction

Electronic Commerce is one of the most important forces shaping business today, according to Watson et. Al., 2000, p.43. After this important change in the

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Romanian economy, which was done in 1989, market globalization played an essential role in all the dramatic changes that have been made in all the Romanian organizations, from SMEs to big companies. In the era before this important change, the term of Small and Medium enterprises didn't exist, because in the Romanian market, there were only large enterprises and state-owned enterprises, where most of the people were employed.

Globalization and all the changes that have been made in the last 30 years, have forced all the new SMEs to be more competitive in the domestic market, in order to achieve the proposed development objectives. In the new market system, to be competitive, as an SME, it's necessary to reduce the cost, to improve quality, to make or sell products with higher performances, and to have a wider range of products or services, and all delivered simultaneously.

2. Literature review and our contribution

Regarding today's intense competition, companies need to improve constantly in different areas, including innovativeness and responsiveness to their customers, together with sustainable and technological development. In such a competitive environment, the ability of a company to remain competitive on the market, to maintain and develop new management structures, is the key to development and sustainability in the medium and long term. In Romania, the major challenge for the SME sector, was until now, to provide some innovative and customized products or services using the best available technological process or resources. A lot of improvements in the SME's market appeared when companies, tried and managed to find ways to implement some modern technological processes, in order to shorten the product life cycles and to expand accessibilities to new technological innovations.

Furthermore, the way how Romanian companies approach the process of learning and implementing organizational and managerial capabilities has a direct impact on the performances of the organizations and on how they resist on the market. As a result, Vos (2005) has identified that a lot of managers of SMEs have poor skills and little knowledge when reflecting on their medium and long-term strategies. Based on this result, it seems that many SMEs, especially in Romania, have failed to innovate in time, staying locked and trying to find the same solutions to different strategical problems. Being fully involved in the operational problems of the companies, especially trying to solve the short-term problems, the managerial group isn't paying enough time on the long-term strategy, thus managing to remain stacked in a vicious circle, where the result is every time the same.

In order to improve their competitiveness in the actual market, where all the companies have been trying to compete on the technological part, the Romanian SMEs have to set their first priority on critical success factors and also on the e-business and e-supply strategy implementation. Recent researches revealed that even the technological development was powerful in the last decade, especially in the electronic markets and Internet commerce, an important number of Romanian SMEs

have not taken advantage of this new opportunity to make business. The best example is that, in 2019, more than 50% of Romanian SMEs do business without even succeeding in creating a presentation site. Most of the time, the success of SMEs is usually accredited to training, education, or managerial skills and not to the hard work and dedication to the businesses. As there are constant changes in the entrepreneurial environment and in the preferences of the clients, it is Romanian SME's need to create knowledge continues to develop new products and services in order to maintain economic sustainability. In order to keep up with the international companies, companies that have managed to actively enter the economic Romanian market, but also to be able to differentiate between companies with the same field of activity, Romanian SMEs are challenged to improve and innovate in every aspect of the business. They need to find new solutions in order to attract other stakeholders to get a better share of the market in which they operate.

Improving the productivity of Romanian SMEs can be best achieved by helping them make some developments in the technological field, especially on the technological decisions. According to Sanchez, 1996. research, a lot of companies showed that it is really important to have top management support, promoting early worker participation in order to obtain better performances in the market. Likewise, flexible manufacturing technologies offer the process capability for the Romanian SMEs to compete against multinationals companies, and to become a reference company in the market. As SME's are frequently faced with unfamiliar processes, they must develop innovative economic strategies to match the development of the products and services in the market. Top management, quality management, teamwork, sense of commitment and systems approach, technological systems, are key requirements in order to develop and implement e-business strategies in the Romania SME's systems.

In Romania, as in the whole world, the Internet is the only technological source that connects all the world economics nodes and establishes some of the closest business connections. Until 2012, due to the lack of access to the information, more than 54% percentage of the SME's, didn't use the Internet as the main source of interaction with the final customer, thus leading to the loss of economic competitiveness but also to the slowing down of the technological development process. As a result of this slow technological start of the SME's, the Ministry of Communications (MCSI), has set goals for the e-business process for the Romanian SMEs. By 2022, its aim was for 225000 SME's to have access to the Internet and to be trading online, where most of the transactions will take place directly business to business or business to consumer. It also intends to use €2.1 million over the next five years, a non-reimbursable fund from the EU, to help SME's get online and to develop their businesses, to be competitive with the large companies.

According to MCSI's studies, Romania is at the bottom of the line regarding online trading and using the internet when we refer to business. The survey found that even the Romanian SMEs are at the bottom line regarding online transactions, 65% of businesses intended to use e-business in the near future, and more than 41% intended to buy online. Nowadays, due to the development of technologies and

mobile apps, most companies migrated and trying to develop some apps for their businesses. Most of the big retailers can be viewed from a more advanced perspective and embrace the concept of e-supply chain management, as a new concept. To be this competitive, many companies, especially the big companies from Romania, tried to develop and implement some different concepts like ECR (efficient consumer response) and CQ (customer quick response), concepts that involved years of hard work and investment in different systems by cutting productions costs. Larger companies, with a lot of financial resources and with technical budgets, are in the control position to implement e-strategies, while Romanian SMEs will continue to find this a challenge due to the lack of money and knowledge. The E-business start-up process will begin with the development of e-commerce skills, investments in staff training, and online development.

Firstly, it seems clear that the first step into the development of an e-business strategy is having its own platforms to start. Secondly, the most important thing in a business partnership is the build great business-to-business relationships, by putting communication in the first place. Only by integrating e-commerce into global strategies, the competitive advantage becomes an equal power for the Romanian SMEs.

3. Research methodology

There were numerous methods applied during the SME researches and growths. But here, it is a different aspect regarding the growth of the e-business sector in Romanian SMEs. Despite this, some of the SMEs tried to take direct action to their future, by set-up some websites and waiting for the magic. Instead of running the website alongside other marketing and supply activities, Romanian SMEs just waited for something to happen and raise the list of the best supplier on Google.

The foregoing situation is the background for this research. This is the reason that this topic has been addressed in the first place, due to the small interest of the local SMEs in utilizing e-commerce as a business and a new developing tool. In order to check the state of the current connectivity within the local SMEs, but also to investigate their social behavior, it is necessary to use carefully the strategies of electronic commerce but also of supply.

A lot of researchers find that, in order to have a successful implementation of e-supply strategies, it is necessary to successfully implement a direct connection with the direct management partners, and this is almost impossible to achieve through a quantitative management method. In order to gain a deeper perspective on the situation at the local level, the problems were analyzed using several exploratory and qualitative approaches to data collection.

First of all, for a deeper understanding of the entire e-business process, it has opted for a simplified map consolidated on the conceptual framework structure and based on the literature analysis that is considered to directly influence e-commerce. Secondly, for a more direct approach and to provide data as accurately as possible, with coherence in the approach, a series of themes were chosen on the basis of which

a series of ideas were formed. Based on these themes, a series of interviews have been developed to ensure that the data obtained are meaningful. The purpose of these interview programs was to demonstrate the acute lack of interest of SMEs in Romania for a large part of the e-business organizational structures. The strategic objectives of the companies participating in the digital world and the opportunities and threats perceived by the SMEs can be important factors in view of the current economic stability.

In addition, the evaluation of relational strategies, the degree of integration of electronic commerce in the framework business had great relevance. Also, a number of factors were identified that promoted the implementation of successful electronic business but especially with a high degree of failure. The target population for this research was extracted from an online public-private partnership database. From the initial database, were extracted all the Romanian SMEs with a turnover of fewer than 500000 euros and also, companies that do not have access to an online platform or have a website address.

For the selection of the sample, 154 SMEs were selected at random from a total of 980 available in the database. For each of the SMEs, a report was sent in which was briefly described the purpose of the project together with a request to accept the participation of every general manager. Out of the 154 e-mails sent, just 35% of the companies decided that they'll take part in this project, more precisely 54 of the Romanian SMEs. From a total of 54 SMEs, 14 interviews were conducted face to face, and the remaining 40 were made based on the e-mail form. In order to obtain an accurate result, all interviews were held with a person within the management of the company or with the general manager, and the interview duration was between thirty minutes and two hours. Based on the answers obtained, a series of research themes were framed, based on the standardized conceptual framework.

4. Type of analyses and interpretation

4.1 Managerial factors

Although eager to explore the potential of e-commerce most of the Romanian SMEs stopped at the idea of implementation, stopping abruptly, though the companies have a degree of entrepreneurial orientation adapted to electronic commerce. Some of the managers interviewed, were quite worried when they were able to take the company virtually to another technological level. One of the most important factors that the managers mentioned in their statements was the level of competence of the employees to face the new technological challenges.

While there are many other methods to escape the worry of developing the technical skills of the employees, by outsourcing the process of e-business, they are reluctant to this change, considering that in the long term, the cost would be much higher, the profit being the economic indicator that would suffer the most. Besides the time that companies have to invest in employee training, another essential problem is the reluctance of the final customer to the development of the online

business market. Over the past few years, there has been a steady increase of physical users on online business platforms, but this presence was not found in the online development of Romanian SMEs.

4.2 Industry factors

Based on the data obtained from the questionnaire applied, the tendency of the development of electronic commerce activities has a great variety depending on the sector. The first important example is represented by the direct relationship between customers and suppliers, a business to business relationship. In order to be able to progress and stay in touch with current customers, but also to attract new ones, Romanian SMEs have had to adapt to new market demands, implementing a series of e-business strategies. Mostly, the relationship between customers and suppliers was a close one, so that the needs of the customer were completely satisfied.

Unsurprisingly, longer-running businesses, like big companies with lots of employees, have much higher chances to conduct business in a virtual environment, due to the financial resources available but also to the close relationship that they have with the final client. Even though they had much more resources than the SMEs, both financial and human, they were directly proactive in developing some internal strategies for the e-business platforms, in order to reach the top of the market. As would be expected, Romanian SMEs with a less developed technological base, have a lower rate of participation in e-business compared to large companies, like multinational companies with developed technological bases, which have foreseen the technological development since the beginnings.

4.3 The positive impact on SMEs performance

Based on the answers obtained, a greater effect of the e-business strategies was identified within the Romanian SMEs with a turnover below one hundred thousand €. Those effects could have a much greater impact on these SMEs where the technological process is not so well developed, leading to the achievement of sustainable development objectives for companies in the business sectors in Romania. Although in an attempt to reach the threshold of economic profitability and optimal technological development, SMEs in Romania are willing to make a series of sacrifices, in this case, the communication paths of the technologically underdeveloped enterprises have remained the standard ones, like e-mails and face to face communication.

Firstly, during the final interviews, managers frequently claimed that electronic communications and the development of the e-business processes reduced the time to reach customers and speeded up the solutions to

customer inquiries. Secondly, regarding the sales performances and customer satisfaction, implementation of e-business could have a beneficial effect on the increasing sales volume by reaching the final customer directly and promptly, without the need for repeated meetings with a major waste of time. Also, customer satisfaction can be increased exponentially together with the volume of sales, by providing information about products, troubleshooting, and service online, in the actual platform. Furthermore, potential clients who are not actively involved in the business unit set can directly establish their relationship with the business on their terms. As a result of these changes that Romanian SMEs could make to the e-business sector, both sales performance and timing performance could directly benefit the future strategy of the organizations.

Going further, it can be observed that with the emergence of success in other Romanian SMEs of the same level in the market, the implementation of e-business appears like the only chance to survive in this new technological era, where Internet it's the "real" market. With the acceptance of a development need, the next step is to take some actions and make some improvements to the e-business strategies. As has been known, e-business is driven just by the customer in the open market, and only by a supplier in the niche market situation. So, the only way for the Romanian SMEs to have security and a part of control in the market is to apply a series of e-business strategies, through technology or re-technology, as the case may be, to attract the customer in his economic comfort zone.

4.4 The positive impact on SMEs performance

Even if the positive influences of the e-business are much better outlined and applied to the Romanian SMEs, some negative aspects can directly influence the strategies of the organizations as well. One of the acute problems for SMEs that the final interview has to identify is when a business unit undertakes some e-commerce initiatives that can be coped better to the environmental changes from the situation of the business environments with better access to information. When uncertainty regarding the market is high, some business systems that have a direct relationship with the final customers, systems that include direct communication and order-taking processes can help the market information and strategy for the other businesses from the system. When uncertainty is high, SMEs tend to collect more information from the marketplace in order to establish better e-business strategies for the future, in order to achieve the set goals. Also, some rapid predictions together with superior coordination and increased intuition would allow the SMEs to react fast and efficiently to the market changes. Unfortunately, few Romanian SMEs have direct access to real information regarding the real market, e-business strategies, and also to some KPIs indicators, which could have direct

effects on the development of their business relationships between final customers and SMEs.

Likewise, e-business adoption could offer greater scalability, defined as one of the best abilities of a company to increase output without corresponding increases in other economic indicators, to a business process. Scalability, together with anxiety about the ability to handle increased business reinforced negative attitudes could conduct to serious problems in the open market. Also, funding was one of the essential problems in the development of business strategies in Romania. All these problems, together, formed a conglomeration of problems that manage to keep the technological and online development to the minimum, for ages, in Romania. Without entrepreneurial training and without the involvement of skilled peoples who can directly help SMEs, the negative effects will not cease to appear in the Romanian business system.

4.5 Cost and return on investment

Firstly, time, material resources, human resources, staff training, and many others are limited resources that are often highlighter as majors factors in the adoption of e-commerce, globally. The Romanian SMEs do not take a break from this rule and as it can be seen from the questionnaire, 77% of the analyzed SMEs do not invest almost at all in these limited resources. Therefore, it has been shown that even in the 21st century, Romanian SMEs are not able to optimize a large part of their activities in order to achieve the fundamental objectives and to develop the limited resources that are needed.

Secondly, the pressure to become profitable in the very short term that is initially set becomes a big problem for SMEs. Despite the fact that medium and long-term thinking would increase the chances of success, 95% of the respondents want to recover the investment but also to double the profit in less than 2 years, which proves to be impossible to achieve. Therefore, the managerial team together with owners are frequently hesitant to make substantial investments when short-term returns are impossible to get. That being said, they are unable to invest in new technologies, training skills, time management, resources that could help put them on an upward curve.

Last but not least, based on information obtained from respondents, it revealed that low use of e-business by the suppliers and the concern about cybersecurity, high costs development, and limited knowledge of electronic business are the principal factors that negatively affect the adoption of the e-commerce system by the Romanian SMEs.

5. Type of analyses and interpretation

This research focused on studying the concept of competitiveness in Romania, especially in the implementation of the influencing factors of e-commerce in Romanian SMEs. A study of the actual business market was

performed firstly, in order to be able to identify what is the long-term goals and how SMEs are implementing the e-commerce strategies in their businesses.

The results obtained, indicated that the Romanian SMEs, especially the managerial

team of the companies, consider that they underperformed and also, they don't have a strategy regarding the implementation of these business strategies. Additionally, companies tend to be concerned about how limited their businesses and how these things will impact them in the long run, especially on a market with the unthinkable potential of development.

From human resources to time and material resources, all these limited assets have a direct impact on the development of these current economic systems. Besides the direct economic impact that these resources could have on their long-term vision, there is a commercial impact on the actual market of the SMEs. Although some fighters are declared against pollution, wishing to improve the working environment and seek sustainable development solutions by identifying new renewable resources to replace the current natural ones, in reality, only a small part of Romanian companies are trying to fight against pollution by reusing recyclable materials as part of the production process.

In other words, although citizens of Romania are stating that they are quite aware and involved in environmental protection, the ecological spirit of economic entities in Romania is still at a very low level, the consumers are not being interested in "green products", not ready and willing to pay more for these, and the manufacturers are not realistic about the harmful impact that they have on the environment. Fear, together with poor information at the national level regarding the environment, makes the economic system in Romania still at the starting line, trying to find its identity.

The research focuses in particular on the Romanian entrepreneurial system, where businesses with an eloquent field of activity, have openly discussed the desire to implement this new ecological development system. The opportunity for this market segment is literally huge, the companies being able to put into practice all the green marketing techniques in order to obtain the best market share, just like big companies, Adidas or Nike, pioneers of this green trend did. Best practices shared by them can be taken as reference, adapted, and implemented by the local companies in order to have a safer and environmentally-wise healthier growth. As a future direction for research, given the complexity of the topic, we would suggest looking more into the strategies followed by companies involved in green marketing, focusing on the Romanian market.

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