

Digitalization Effect on Enterprise Internationalization: Western Balkans perspective

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Abstract Business all over the world try to gain knowledge in order to improve their net income through new products, new markets, and new distribution channels. Since the invention of the first computer progressive steps are made from businesses to adapt the opportunities raised from the usage of new technology solutions. This study consists on identifying the link and the extend to which digitalization helped businesses to expand their activity. Not only in their domestic market but further in the international market. Since the digitalization process keeps evolving it has been a great opportunity for business especially small and medium size enterprises. For this reason through this study we aim to identify the relationship between digitalization and SME internationalization, through literature review. The study is based on a bibliometric review of papers published from 2015 to 2020. In this way we are trying to understand through what the existing results comes from digitalization, internationalization and Small Medium Enterprises. How does the digitalization process affects SME; what are the advantages and disadvantages that arise from adopting new technologies; how are the business models and value chain is affected. Also the literature on Digitalization, Internationalization, and SMEs is increasingly focusing on the impact of digital technologies' adoption in enterprises' strategies, focusing on business model innovation, global value chains, and performance. A future research will focus on the application of the findings in the Western Balkan countries context, using the database from Enterprise Survey from 2018-2020.

Keywords: SME; Digitalization ;Innovation ;Entrepreneurship
JEL Classification: L25, L26, J23, L21

1 Introduction

Digital transformation is a phenomenon dated since the invention of the first computers. These inventions fostered the need to adapt new perspectives and insights from both the society and business actors all over the world.

Some enterprises have joined rapidly the trend and adoption of new technologies in order to improve their strategic and operational goals and some others fail due to their old business models, traditional organizational behavior and lack of innovation attitude.

The impact of digitalization of services and internal management models will foster the development of businesses to a new phase. The impact will affect the supply chain in one hand and exploring new market possibilities on the other.

The new pandemic Covid19 proved to be the one from which society in general searched for new possibilities to exchange information, goods, services and so on. That led in emphasizing new perspectives, not just how to survive to the period but also how to integrate new insight to their sustainability business models.

Since the pandemic was an unpredictable situation the society was unprepared to face these new needs. The business faced its challenges since the adoption of new technologies was a rapid process, one day the employees were presented the new tools and the next they have to use it. So, in the situation stated there was a lot of pressure from all to all. That pressure was even before the pandemic but it took time to adopt and to be convinced about the opportunities that digitalization offers.

Many researchers, in their papers have stated and studied the effect that digitalization have on productivity and performance in micro and macro level.

Since yet not discovered in total dimensions, our study focuses on Western Balkans. Most of the companies are organized as SME in this region though having a significant impact on overall countries' GDP. The Western Balkans, comprise of six countries have their own piece of cake in this process. Although the number of enterprises is smaller than compared to other regions of Europe, still it is important to investigate the level of digitalization adoption and its effect, since some countries that lie in this area have made some progress toward EU member admission.

This paper tries to have a better understanding of how the digitalization process affected the internationalization of SME, through the investigation of recent literature on the matter.

2 Literature Review

2.1 Digitalization, Business Models and Value Chain

According to Brennen and Kreiss (2016) digitalization is referred to as the “adoption or increase in the use of digital or computer technology by an organization, industry, country”. According to Sebastian et al (2017), Vial 2019 digitalization refers to the process of organizational transformation through the adoption of digital technologies. This refers to digital platforms, digital infrastructure and internal management tools that support internal decision making and performance evaluation.

Digital technologies are a mix of computerized information and communication technologies (Sturgeon 2019) and can be classified into seven types: social, mobile, big data, cloud computing, Internet of Things (IoT), platform development, and AI-related technologies (Sebastian et al. 2017; Vial 2019).

So knowing that recently there is a rush in adopting new technologies and thus digital solutions, the following section debate consists on explaining how digitalization effects the business models, their digital strategy and global value chain.

Business models describe an architecture for how companies design and conduct activities in order to offer value to their customers, how they are compensated by them, as well as how they interact with their stakeholders (suppliers, partners, and customers) (Müller et al., 2018).

During the last decade business models have increasingly become a source of innovation and competitive advantage (Rachinger, Rauter, Müller, Vorraber, & Schirgi, 2019). In this way online sales, e-commerce represented a new window to the business, connecting directly the demand and offer, connecting customers and companies, connecting different stakeholders in a fraction of time. In this way enabling new communication channels that leded in offering new products. The Industry 4.0, known as the fourth revolution, was a stepping stone for companies to grow their added value to customers. Products and goods are added new services, known as servitization process, adding in this way more value to customer eye.

Though flexible or innovative business models, offering new insights of how the business must be organized, what must improve day after day, need to be supported by new technologies. Chesbrough (2010) argues that having an innovative and suitable business model is as essential as having new and innovative technologies for firms to be successful in the digital world.

We can find three ways of how digitalization effects the business models: first, digitization of the product or service, resulting on a cost optimization of the existing business model; second, digital processes and decision making, reconfiguring the existing business models with the support of Big Data or artificial intelligence; and

third, development of a new business model, with the transformation of the value proposition and operating model (Berman, 2012; Matzler, Bailom, von den Eichen, & Anschober, 2016; Rachinger et al., 2019). According to Ritter and Pedersen (2020), enterprises improve first their actual business models, and lately change to more innovative ones.

On the other hand exists a new perspective how the firms organize for value creation and delivery, affecting all value chain activities, including the design of the product, production, logistics, marketing and sales, and the after-sales service (Karlsson & Rundcrantz, 2017; Porter, 2001).

The value chain involves activities from research and development to customer services after sale, thus an enterprise can evaluate which activities of their value chain create value to customers, through management accounting tools. In this way determining their weak points or strengths in this context, they can gain competitive advantage above others in the same industry. All this process need to be converted in information which must be processed, and communicated. Thus information technologies (IT) play a vital role in the value chain (Porter, 2001).

Digital transformation goes further, enabling production within value chains to become more efficient, flexible, and consequently allowing enterprises to produce smaller batches to niche markets (Rüßmann et al., 2015; Strange & Zucchella, 2017).

2.2 Digitalization and Internationalization

Internationalization is used as a sinonim of the foreign expansion of firms' business activities (Ruzzier, Hisrich, & Antoncic, 2006). Exports and how to be internationally exposed has been one of the trend topics on research in the past few decades. Mainly the issue was related to SMEs, once they are facing international constraints similar to the ones faced by larger firms, due to today's international marketplace (Ruzzier et al., 2006).

According to Dethine et al (2020) Digitalization has been identified as an element that fosters the internationalization of SMEs.

Most of the research is oriented through the effect of digitalization on SMEs performance and growth, and few research is made upon the effect on the internationalization side of the SMEs.

According to the World Trade Organization (2016), once SMEs engage in internationalization and have already acquired experience and obtain a network of partners and customers, this experience becomes a capability, and a source of competitive advantage. But having new technologies it is not enough to enter in global markets.

According to Leonidou (2004), difficulties in engaging in a global market are related to enterprises' internal and external characteristics. Internal aspects refer to the resources, organization capabilities, and company's vision, notably lack of financial resources, skills or time, and knowledge about the foreign markets, and in the same time the vision of the owners. The external difficulties are related to the internal or external business environment, political situation, the stability of the tax system and custom's law. In context of Western Balkan Countries, where the external factors play an important role, the strategy and business models of the enterprise are effected mainly due to unsecure political situation. .

2.3 SME in Western Balkans

SMEs play a major role in most economies, accounting for most businesses all over the world. In 2018, European SMEs accounted for 99.8% of all enterprises, generating, on average, 56.4% of the value-added and 66.6% of the employment (EC, 2019). As the context of this study is perform to investigate at a second future research in Western Balkans, lets have some figures and data to better understand at what extend SME are important for this region.

According to the annual Report (2022) from Western Balkans Enterprise Development and Innovation Facility (WB EDIF), small businesses form the backbone of the Western Balkan economies and are the stepping stone to their economic convergence and path towards the EU accession. Small and Medium-Sized Enterprises (SMEs) employ between 60% and 80% of the active population in the region, which is on average higher than in the EU.

SMEs in Albania in 2020 represented 99.8% of all enterprises and employed 81.9% of the working population. In 2020, Albania's 102 405 micro, small and medium-sized enterprises represented 99.8% of all enterprises in the economy. According to WB EDIF, SMEs enjoyed the highest share of exports in the region, accounting to 64% in 2020. Data for 2020 shows that the largest share of SMEs is in the trade sector (39%), followed by the newly introduced category of accommodation and restaurants (16.4%) and transport, information and communication (8%)(INSTAT).

In 2020, Bosnia and Herzegovina's 31 726 SMEs accounted for 99.46% of all enterprises in the economy. In 2020, SMEs represented 63.14% of employment in the business sector (Statistical offices of the FBiH and the Republica Serpska). The breakdown of enterprises by size in Kosovo was 91.9% microenterprises, 6.8% small, 0.15% medium and only 0.66% large enterprises in 2020. SMEs also increased employment, accounting for 75.5% of total employment in the economy. (Statistical Office of Kosovo). The breakdown of North Macedonian enterprises by size was 99.3% micro and small enterprises, 0.6% medium enterprises and only 0.1% large enterprises in 2020 (MAKStat, 2021). In 2020, 74% of North Macedonia's formal

workforce was employed by micro, small and medium-sized enterprises (MSMEs) and created approximately 68% of the total value in the business sector (MAKStat, 2021).

Almost all the countries refer to the same way how they classify SME, conform EU standards with any exception due to accounting indicators like turnover and asset size.

3 Methodology

After reviewing the main topics that relates digitalization, SMEs and internationalization, we try to evaluate the depth of research in the field through a bibliometric analysis. First of all there were determined the key words; internationalization, digitalization, small and medium enterprises, and subkeywords that better represents the main words of the study. The subkeywords consists on the dimensions that specifically represent the keyword.

We searched only online for the papers from World Bank database papers, published in their website, for books, journals or conference papers published through GoogleScholar, IDEAS/REPEC, Web of Science and some free journals listed in Scopus. Also there are analysed different journal of European universities which have ISSN code. The databases selected represent a large coverage of published scientific and academic work. They go through paper review and offer the times the papers are cited by other authors and researchers. Web of science and Scopus represent the most valuable database since they have high citation index.

The search in the databases go through some set filters like the kind of journal or conference papers which was limited in Business, Management, Finance and Accounting areas of study.

Since manufacturing SMEs tend to expand their businesses internationally, firstly as direct or indirect exporters, the two entry modes with less risk involved, and secondly through FDI (EC, 2014). That's the reason why we choose to use subkeywords to conduct the search.

The search was initiated first on selecting the subkeywords set for the digitalization like website, Internet of things, Smart solutions, Industry 4.0, Smart manufacturing; Internationalization referred as exports, FDI (to catch any % of foreign ownership), outsourcing; and SME. The analysis followed any dublication published by different journals. The first result was about 250 papers that linked any of the subkeywords. After reviewing their abstracts, only 25 of them relates to our topic. So the second search was limited strictly on the link between the keywords alltogether.

4 Results and Discussion

The first search resulted in 250 papers published in journals and conference proceedings. Any of them were working papers from European Commission and World Bank. From them 65% resulted in studying the link between digitization or digitalization and SME, 25% studied internationalization and SME and only 10% have uncommon the three main keywords.

These 25 papers that were the aim of our search are gone through full analysis in order to detect the following features:

1. The publication trend of the topic
2. The methodology used
3. The number of publications by geographical area
4. The main platform used for publish

We noticed that the publication of the related papers recently signed an increasing number. Perhaps that's the pandemic Covid19 that affected mostly the international profile of SME, followed lately by the Russia-Ukraine War. Since Ukraine supplied with raw materials like grain mostly the biggest part of Europe, made a domino effect in the prices of goods. That's why SMEs were faced with a new kind of risk now. So if we compare 2015 to 2020, there is a geometric increase of publications related to the topic.

Relating to the methodology used, from the papers selected we detected three kinds of methodology: (1) theoretical, (2) empirical and (3) mixed methods. From the observation results that the percentage of theoretical and empirical studies is similar and a few studies use mix methodology. On the other hand the multivariate models follow the previous results. These papers were mostly based on regression analysis and factor analysis.

Meanwhile, descriptive and exploratory analysis were based on statistical methods, such as distribution, ANOVA, correlation tests, and cross-tabulation measures. There were no observed or detected surveys in these kind of papers. If we refer to the countries studied the trend consists on analysing one country. There are few studies that cover more than one country, meanwhile as per Europe the first paper was published in 2016 "Effects of the use of the Internet and ICTs on Export performances of the EU" developed by Akhvlediani and Katarzyna. After this publication, others have been developed also focusing on EU and European countries mainly from EU members. There is a vast research papers which studied the issue under non EU members, like Western Balkan countries. The papers most cited come from Scopus and Web of Science with the high citation index, compared to others in the set.

5 Conclusions

The current paper represents a first attempt to address how digitalization affects SMEs' strategies. We argue that further research examining Digitalization, Internationalization, and SMEs may shed light on empirically understanding the adoption of digitalization by traditional SMEs and its impact on their internationalization strategies, namely enterprises' entry modes and business models. Clarifying the relationship between SMEs' digital maturity and their international strategies should also be addressed in further investigations, as well as the impact of digitalization on internationalization and, consequently, SMEs' performance. Much work remains to be done before a full understanding of the extent of the impact of Digitalization on SMEs' strategies, notably internationalization, is established. So this study must be followed by an empirical analysis on the context of Western Balkan Countries to understand at what extent the SME, which are at another dimension compared to European Union SMEs, were able to match digital advantages to international opportunities. The study must be conducted mainly pre and post Covid to catch any changes due to health crises and perhaps compare to war Crises. As for the limitations of the present study, we must emphasize that the literature on the relationship between Digitalization and SMEs' internationalization is still in its early stage and due to financial constraints not all the papers that come from the search were possible to be analysed other than the abstract.

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