

Digitalization and its effect on the performance of small and medium-sized enterprises

Ferdinand Amuzu ^{1,*}, Patrick Korblah Sosu ², Godknows Kwame Agbakpe ¹ and Wright Evans Attipoe ³

¹ College of Distance Education, University of Cape Coast, Cape Coast, Ghana.

² University of Professional Studies, Accra, Ghana.

³ University of Cape Coast, Cape Coast, Ghana.

World Journal of Advanced Research and Reviews, 2024, 23(01), 598–604

Publication history: Received on 23 May 2024; revised on 06 July 2024; accepted on 08 July 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.23.1.2044>

Abstract

The principal aim of this study is to determine the effect of digitalization on the performance of SMEs in the ACCA. Specific research objectives are to: (i) measure the existing level of digitalization among SMEs in the research area; (ii) identify the areas where digitalization helps improve SMEs' performance; (iii) evaluate factors that influence SMEs' decisions to digitize their business models; and (iv) examine barriers to digital technology faced by SMEs. Research questions are formulated for each of the objectives as indicated in Chapter 1 to achieve the overall aim of the study. The study focuses on finding out the use of digital technology among SMEs and its effect on business performance. The study is, however, limited to Accra. The study also reviewed existing literature on the research subject as additional knowledge to buttress the findings of this research. A quantitative research method is adopted for the study, and a survey research design is used for data collection. The development of the survey questionnaire for the study utilizes an adapted research instrument from existing literature. Data collected from respondents are analyzed using the statistical software Statistical Package for the Social Sciences (SPSS) version 20.0. Processed data from SPSS is measured using the adopted measurement model, which is tested for internal consistency, composite reliability, validity, and significance of the constructs of the variables. Based on the findings from the analysis, major findings, implications, and recommendations were extracted from the results.

Keywords: Performance; Small scale business; Medium-Sized Enterprises; Organizational transformation

1. Introduction

The world is undergoing a new industrial revolution, which is the digital revolution (Rindfleisch et al., 2017). This rapid digital transformation is reshaping our global economy, permeating virtually every sector and aspect of daily life, and changing the way we learn, work, trade, socialize, and access public and private services and information (Huawei and Oxford Economics, 2016). Deloitte's research reveals a shift from the traditional view of enterprises as closed entities with rigid organizational structures to the creation of flexible and agile organizational systems and networks (Deloitte, 2017). Global digitalization is causing a digital disruption, displacing traditional businesses with digitalized enterprises (Autio, 2017). According to K.C. Laudon and J.E. Laudon, the ongoing digital transformation of enterprises is all about remote work opportunities (employee mobility), online activities (e-business, e-commerce), low transaction costs, and coordinated activities, all enabled by the digitization of the information sent and the possibility of providing services by electronic means (e-payments), not to mention the possibility of confirming the trustworthiness of documents (Laudon & Laudon, 2000; Vásquez et al., 2018). Digitalization is the process of organizational transformation through the adoption of digital technologies (Sebastian et al. 2017; Vial 2019). This process primarily manifests in organizations as digital artifacts, digital platforms, and digital infrastructures (Briel et al. 2018; Giones and Brem 2017; Nambisan 2017;

* Corresponding author: Amuzu Ferdinand

Nambisan et al. 2019; Yi et al. 2019), as well as digital business and management models (Srinivasan and Venkatraman 2018). Given the changing economic environment, enterprises have had to adapt to the standards of the new digital reality to make business decisions. They need digital tools that are essential for managing an ever-increasing amount of data and carrying out analysis. Digitalization primarily drives these new business support tools (Villa & Taurino, 2019; Oliveira et al., 2021). SMEs are no exception, indicating that digitalization is no longer an option but an imperative for the company if it wants to stay competitive and grow. (Inside Small Business, 2017).

The Organization for Economic Cooperation and Development (OECD, 2005), cited in recent reports, defines small and medium-sized enterprises (SMEs) as “non-subsidiary, independent firms that employ less than a given number of employees.” As often argued by the OECD, the European Union, and national governments, small and medium-sized enterprises (SMEs) are considered the driving force in most economies, responsible for employment, innovation, and growth. (EASME, 2015). The SME sector has an important role to play in economic development, poverty reduction, and employment creation in developing economies. In many countries, the SME sector largely exceeds the average economic growth of national economies and contributes significantly to job creation. (Higdon, 2011). As per the Organization for Economic Cooperation and Development report (OECD, 2019), across its 37 associated member countries, SMEs represent 99% of all enterprises, provide over 50% of employment, and generate over half of the business gross domestic product (GDP). Small and medium enterprises (SMEs) contribute about 70% to the country's GDP and account for about 92% of businesses in developing economies like Ghana. (Villars, 2019). In 2015, the Ghana Statistical Service reported that large, micro, and SMEs comprise the private sector of the Ghanaian economy, with the service industry accounting for the majority. According to the International Trade Center (2016), the private sector of the Ghanaian economy contributed 53% of GDP and has an employment rate of 60% of the country's labor.

According to Fitrisari (2020), SMES must deploy the correct digitalization strategy to ensure it can move on the right pathway.

2. Literature review

2.1. Theoretical Review

2.1.1. *The Resource-Based View/Theory (RBV)*

The Resource-Based View (RBV) holds the view that an enterprise is a bundle of resources and its competitive advantage is based on valuable and rare resources (Barney, 1991). The RBV theory is concerned with how businesses develop a strategic competitive advantage by deploying what Barney (1991) refers to as valuable, unique, non-substitutable, inimitable, and rare resources. According to Barney (1991) and supported afterward by Hoopes et al (2003) and Peteraf & Barney (2003) the RBV theory has two fundamental claims. The first argues that differences among enterprises lie in their resource capabilities. Performance differences among enterprises result from resources that they hold as assets or capabilities and can be used in the creation of inimitable internal capabilities (Murray et al, 2011). The second claim is that the resources of the firms are not always transferable. Thus, RBV is mainly concerned with differences in companies' performance concerning resources and how they can maintain their competitive advantage in harshly competitive environments. Taking critical perspectives, Lockett et al (2009) and Miles (2012) agree that the elements of the RBV theory are repetitive and lack consideration for organizational, contextual strategy, capabilities, and intent factors of enterprises. Fiol (2001) suggests that sustainable competitive advantage is unattainable due to the evolving nature of business realities, He advocates that it is more realistic for firms to focus on developing temporary competitive advantage for a given market condition. With the RBV theory, SMEs benefit from competitive advantage based on the rare and valuable assets they hold. In the era of digital trends and the everyday business changing environment, adapting to digital technologies would be a huge benefit to the performance of small-scale enterprises. For an SME to remain relevant both in the short and long term, employing new digital models and structures is inevitable. Hence proving how relevant the Resource Based View is in achieving targets.

2.1.2. *The Innovation Diffusion Theory (IDT)*

The Innovation Diffusion Theory (IDT) is one of the well-known models described by Rogers in his book, Diffusion of Innovations. IDT is another theory by Rogers that has gained similar attention from scholars in explaining consumer behavior toward new technology (Rogers, 1995). The IDT theory plays an important role in increasing adoption intention and actual adoption of technology among SMEs and other enterprises. IDT considers the social systems and behavioral processes by which people adopt new technologies, stating that perceptions of individuals relative to the advantage, trainability, observability, complexity, and compatibility of technology affect adoption (Rogers, 2003). Other key elements that influence people and businesses to adopt new digital innovations as mentioned in (Rogers, 1995) are

comparability and cost-effectiveness. Compatibility is an important driver of acceptance in consumer contexts (Vijayarathy, 2004). According to Roger (1983), compatibility is the degree to which innovation fits with the potential adopter's existing values, previous practices, and current needs. The greater fit between the individual work style and technology, the more likely acceptance is going to occur (Saaksjarvi, 2003). In this study, compatibility means that if the technology is seen as well-suited to the current way of working, the individual is likely to be motivated to integrate it into their activities (Meuter et al., 2005).

Cost-effectiveness- previous studies have highlighted the importance of cost in the adoption and utilization of technology (Ernst and Young, 2001). Alam and Noor (2009) have found that there is a direct and significant relationship between cost and adoption of technology. Dixon et al (2002) have argued that SMEs will be less likely to adopt ICT if its initial set-up cost is high. However, evidence suggests that SMEs are more likely to be engaged in digital innovation if they perceive that the new technologies will deliver benefits that supersede the benefits from their existing technologies. In addition, new technologies that are perceived to be complex create greater uncertainty regarding their successful assimilation and could deter SMEs from acquiring them (Premkumar & Roberts, 1999). Innovation diffusion theory is the theory that is applied to the adoption of a new or to upgrade the technological system of any firm. SMEs are however very skeptical in terms of cost effectiveness in adopting a new digital model and the delivery that it offers and value creation. SMEs are reviewed in the kinds of literature only and are likely to accept innovation when they are confident it will reap huge benefits. For SMEs, new technology and digitalization are complex so may continue with the traditional business approach in their dealing.

2.2. Empirical Review

Autio (2017) argues that digitalization is transforming entrepreneurship in two ways. The first is the shifting locus of entrepreneurial opportunities in the economy, and the second is the transformation of entrepreneurial practices. The current wave of digitalization is considered by Valenduc and Vendramin (2017) to be the fourth industrial revolution. Autio (2017) uses the term “digital disruption” to describe the transformative impact produced by digital technologies and infrastructures on how business, the economy, and society operate. Such digital disruption creates opportunities for SMEs to grow and internationalize. Autio and Thomas (2016) also argue that digitalized models boost value-creating ability by enhancing accessibility and efficiency, extending beyond the core exchange of goods and services, and enriching them through greater data intensity. This makes digital affordances a potent driver of SMEs' digitalization and innovation. In a handful of studies focusing on the impact of digitalization on SMEs, Gruber (2018) has recently identified four reasons to explain why digital transformation is taking place slowly in SMEs. First, small companies with their specific foci are less exposed to the need for rapid digitalization. Second, small companies often lack the resources and managerial vision to fully understand the impacts of digital transformation. Third, SMEs usually adopt a gradual approach to digitalization compared to larger companies. Finally, digitalization investment within this type of company heavily relies on the firm's financial performance, and it is often the case that they have limited resources to use in this area. According to Jepsen and Drahekoupil (2017), digitalization will transform the demand for labor, skill requirements, work organization, income volatility, and tax bases. However how that digital transformation will affect the performance of the SME still leaves a gap.

However, in developing countries, SMEs are more reluctant to embrace the changes due to financial limitations and a lack of confidence in the enablement of digitalization to yield them returns (Khai et al., 2020). The OECD (2018) report supported this view that, although SMEs are aware of and acknowledge the importance of digitalization, it is not as easy for them to embrace its implementation due to various limitations, such as financial and human resources. It also added that adaptation levels of digitalization vary significantly between countries, but obviously, multinational companies are much more dominant in digitalization than SMEs. Hence, the competitiveness of multinational companies is way ahead of that of SMEs. While the benefits of digitization are certain in some developed economies, the benefits to SMEs in Ghana remain uncertain. Many studies have found that SMEs in Ghana are yet to fully adopt, use, and synergize their operations with digital technologies. Apenteng and Doe (2014) share an interesting observation that more and more people are joining social media forums on a personal level, but unfortunately, SMEs in Ghana are failing to seize the opportunity to present their products on these digital platforms because they lack proper understanding of social media and digital forums about digital business models.

3. Methodology of the study

3.1. Research Design

This study adopts a quantitative research approach. Generally, the quantitative method to provide a summary of data that supports generalization, allowing for greater objectivity and

accuracy of results (Labaree, 2009). design, study area, population, sample and sampling procedures, data collection, and data processing and analysis. The study adopts an online survey research design to assess the effects of digitalization on the performance of SMEs in Accra. The survey was selected for the research design because it provides a quantitative or numeric description of trends, attitudes, or opinions of a population, based on a sample of that population. We adopt a quantitative methodology because it ensures objectivity in the research process. This study is an explanatory one. SMEs located in the greater Accra region.

3.2. Data Analysis

This study employs primary and secondary quantitative techniques to aid in analyzing research data by teasing out relationships, probing issues, and aggregating the data collected. These methods include descriptive methods and statistics, which present the mean demographics and standard deviation of response first edit the collected data to detect and eliminate any errors or omissions. Next, we categorize the data and input it into computers for analysis. Statistical software for the Statistical Package for the Social Sciences (SPSS) version 20.0 performs data analysis. on 20.0. SPSS is an extraordinarily effective tool for altering and decoding survey data because it concentrates on statistical data We use the coefficient of correlation to show the relationship between the collected data and the dependent variables of SMEs' performance. We categorize the independent variables into general internet and technology usage, digital platforms, and digital infrastructure. ructure. We use a regression analysis to ascertain whether all independent variables significantly influence the performance of SMEs. Subsequent chapters detail the study findings, providing the foundation for the conclusions and study recommendations.

3.2.1. Development of the Measurement Model

Table 1 Conceptual Framework of the Study

Dependent Variable	Independent Variables (Categorized)
SMEs Performance	Digital Platforms
	Digital Infrastructure

3.3. Assessment of the Measurement Model

An extensive review of extant literature on several disciplines such as entrepreneurship, digital technology usage, and digital models was conducted to obtain a list of measures from which to develop our measurement model. For instance, regarding how digital systems improve the performance of SMEs, we follow the conceptualization by Bouwman, H., Nikou, S., & de Reuver, M. (2019). They describe areas in the operations of SMEs in which innovation takes place to improve performance. From this, we develop four constructs to measure the use of digital technology in SMEs, relating to performance. To measure the effect of digital technology usage on SMEs, we consider the evidence review of the KfW SME digitalization report of 2018. We derive from Bouwman, H., Nikou, S., & de Reuver, M. (2019), digital models that improve SMEs performance. From BIS Research Paper Number 2444, we borrow the idea that digital capabilities, strategies, support, and digital barriers determine the impact of digital systems on SMEs. These formed our remaining construct of the measurement of the model. To test the measurement model, the dataset was analyzed using SPSS v.20 for internal consistency and composite reliability, construct and convergent validity, and the significance between constructs measured in the model.

3.4. Composite Reliability

Reliability refers to the consistency of the measurements or the degree to which an instrument measures the same with every use under the same conditions. Reliability is usually estimated using internal constituency – the relationship/correlation between different results of a test, or instrument, such as the relationship between the dependent variable and independent variables. Reliability establishes the integrity of research findings and is critical to reading meaning into its empirical outcomes. Cronbach's Alpha is a common test for the internal reliability of latent constructs (Bryman & Bell, 2011) with a recommended value of 0.70 or higher (Hair, Ringle, & Sarstedt, 2011). Composite reliability (CR) examines the internal consistency and reliability of the constructs and it is recommended to be 0.70 or higher (Hair et al., 2011).

3.5. Convergent Validity

Convergent Validity is defined as the extent to which a construct or concept is accurately measured in a study. In essence, it is how well a test or piece of research measures what it is intended to measure. It is the model used in drawing generalizations of the research findings. Convergent validity is achieved by average variance extracted (AVE) values

higher than 0.50 (Hair et al., 2011). This study considers the use of the SPSS statistical tool in data analysis to measure the validity and reliability of the findings.

4. Results

Independent variables such as the general use of the internet, websites, e-commerce, social media, SMEs' digital capabilities, digital strategies, digital support, and barriers to using digital technology measure the performance of SMEs. All of the variables show a positive and direct effect or relationship on SME performance. Thus, a positive indication on any of the variables indicates a positive effect on SME performance, and vice versa. The first discovery of the study reveals that there are more female participants in the small and medium-sized industry than male participants in the municipality, giving a ratio of 62:38. Among these, young people between the ages of 20 and 29 make up a significant percentage. This indicates young people's active involvement in capital entrepreneurship and business development. The study has also revealed that more than half of the SMEs that took part in the survey have been in operation for ten years or less. These SMEs identify themselves as micro-businesses (having employees between 1 and 9) or with no employees at all. SMEs from the trading, retail, and services sectors dominated the survey. Evidence from the study suggests that more than two-thirds of all SMEs surveyed apply IT (i.e., computers, laptops, applications, etc.) to business-related activities. This is the same for the number of SMEs that have their businesses online and who also have fairly good access to the Internet. It is also interesting to note that, when it comes to the general use of the Internet for business purposes, SMEs recorded low percentages for receiving regulatory advice, paying taxes, and conducting other government transactions. Furthermore, a significant proportion of small and medium-sized enterprises (SMEs) operating online do not possess the research evidence to suggest that SMEs with websites have seen an increase in new customers, sales, revenue, and cost reductions, among other things. Although many SMEs do not have websites, a significant number of them do run e-commerce services. They operate these services either through their social media platforms or through third-party websites, as previously mentioned. Those SMEs that do not have e-commerce services also indicate plans to introduce them. Note that the study identified some SMEs who have no specific motivation to consider e-commerce introduction.

Facebook, Instagram, and others (WhatsApp) are the social platforms that SMEs use for business transactions. Meanwhile, a small number of SMEs do not use social media at all, which is consistent with previous evidence of SMEs without online businesses. SMEs go on to reveal that the use of social media has boosted the promotion of goods and services, increased sales, and enhanced good customer relationships, among other things. Findings on SMEs' assessment of their digital capabilities in business technology tasks buttress earlier research results on websites, as a relatively higher percentage of SMEs rated themselves 'poor' on website content creation, ability to update their website, and technological understanding. Last but not least, the results of the research indicate reasons why some SMEs do not operate a website (this is for SMEs without a website); too expensive to set up, not necessary for the business, no knowledge of how to create one, concerns about internet security, and other reasons top the chart of reasons. SMEs identified the cost of training, a lack of knowledge, and the expense of hiring an expert as the primary obstacles that impede the use of digital technology in business, among numerous other barriers.

5. Conclusion

This quantitative study provides an overall picture of how digitalization affects the performance of SMEs in Accra. We measured the primary outcome of interest, the impact of digitalization on SMEs' performance, by examining their use of the internet, business websites, e-commerce, social media, their digital capabilities, digital strategies, digital supports, and the barriers to digital technology on their performance. The statistical analysis of the data led to the formulation of conclusions that addressed the research objectives. The analysis contributes to a better understanding of digital and technology usage among SMEs and provides useful insights into the areas, types, and how different technology adaptations enhance business performance. In general, this study's findings are consistent with existing literature, extend previous findings, and open the door for further research. Although the study has achieved all its objectives, it still faces some limitations. Firstly, the study's scope was insufficient to encompass all SMEs of various sizes operating in diverse sectors. The study was unable to address all digital aspects related to the business operations of small and medium-sized enterprises. Another constraint was its inability to capture in detail and assess the overall effect of specific digital systems and technology used by SMEs of different sizes on their business performance. This is due to the adoption of a quantitative research approach to data collection hindered the capture of specific qualitative information. To note that the study may not represent a true generalization of results due to the restriction on the sample size. Future studies could expand the survey to other regions, the entire country, or different business centers or capitals. Future studies could also look at companies and other bigger institutions to examine how digital technology works and make comparisons to SMEs.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Andriole, S. J. (2017). Five myths about digital transformation. *MIT Sloan Management Review*, 58(3), 20–22.
- [2] Autio, Erkkö. 2017. Digitalization, Ecosystems, Entrepreneurship and Policy. Perspectives into Topical Issues in Society and Ways to Support Political Decision Making. Government's Analysis, Research and Assessment Activities Policy Brief 20/2017. Helsinki: Prime Minister's Office
- [3] Apenteng, S.A. & Doe, N.P. (2014). Social media and business growth: Why small/medium scale enterprises in the developing world should take advantage of it (A Case of the country Ghana). *IOSR Journal of Business and Management*, 16, 76-80.
- [4] Barnes, N. (2010). Tweeting and blogging to the top how do the most successful companies use social media? *Marketing Research*, 22, 8-13.
- [5] Bouwman, H., Nikou, S., & de Reuver, M. (2019). Digitalization, business models, and SMEs: *How do business model innovation practices improve the performance of digitalizing SMEs?* *Telecommunication Policy*, 43(9), [101828]. <https://doi.org/10.1016/j.telpol.2019.101828>
- [6] Bouwman, H., de Reuver, M., & Nikou, S. (2017). The impact of digitalization on business models: How IT artifacts, social media, and big data force firms to innovate their business model. Kyoto, Japan *Proceeding of 14th International Telecommunication Society (ITS) Asia-Pacific Regional Conference: "Mapping ICT into transformation for the next information society* (pp. 24–27). June 2017.
- [7] Berthon, P.R., Pitt, L.F., Plangger, K. & Shapiro, D. (2012). Marketing meets Web 2.0, social media and creative consumers: Implications for international marketing strategy. *Business Horizons*, 55, 261-271.
- [8] Chui, M., Roxburgh, C., Sands, G., Sarrazin, H., Manyika, J., Westergren, M., & Dobbs, R. (2012). *The Social Economy: Unlocking Value and Productivity through Social Technologies*. New York: McKinsey & Company.
- [9] Cohan, M. (2014). Will online marketing work for your business? *Article on Digital and Social*. [Online] Available at <http://www.business2community.com/online-Marketing/will-online-Marketing-work-business-0946846> [Accessed on 13 September 2017].
- [10] Consoli, D. (2012). Literature analysis on determinant factors and the impact of ICT in SMEs. *Procedia – Social and Behavioral Sciences*, 62,93–97. <http://dx.doi.org/10.1016/j.sbspro.2012.09.016>.
- [11] Deloitte, (2017). Thriving in uncertainty in the age of digital disruption. Deloitte's first biennial global cost survey report, December 2017, <https://www2.deloitte.com/content/dam/Deloitte/se/Documents/process-and-operations/GlobalCostSurvey2017.pdf> (14.05.2021).
- [12] Dilhan, O. & Karakadiar, I.S. (2014). Exploring the role of social media for SMEs: As a new marketing strategy tool for the firm performance perspective. *Procedia-Social and Behavioural Sciences*, 150, 511-520.
- [13] Fitrisari, F. (2020). How do Small and Medium Enterprises (SMEs) survive the COVID-19 outbreak? Special Issue of Economic Challenges in COVID-19 Outbreak. Vol 5 No 2.
- [14] Frankenberger, K., Weiblen, T., Csik, M. & Gassmann, O. (2013), "The 4I-framework of business model innovation: a structured view on process phases and challenges", *International Journal of Product Development*, Vol. 18 Nos 3/4, pp. 249-273.
- [15] Gavrila Gavrila, S., & de Lucas Ancillo, A. (2021). Spanish SMEs' digitalization enablers: E-Receipt applications to the offline retail market. *Technological Forecasting and Social Change*, 162, 120381. <https://doi.org/https://doi.org/10.1016/j.techfore.2020.120381>
- [16] Gruber, H. (2018). Proposals for a digital industrial policy for Europe. *Telecommunications Policy*, 43(2), 116–127. <https://doi.org/10.1016/j.telpol.2018.06.003>.

- [17] Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis* (7th Ed.). Englewood Cliffs: Prentice Hall.
- [18] Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151.
- [19] Heikkilä, M., Bouwman, H., & Heikkilä, J. (2018). From strategic goals to business model innovation paths: An exploratory study. *Journal of Small Business and Enterprise Development*, 25(1), 107–128.
- [20] International Trade Centre (2016). SME Competitiveness in Ghana: Alliances for Action. ITC, Geneva. Inside small business (2017) “Small business yet to realize the full potential of digital solutions”, Available: <https://insidesmallbusiness.com.au/sales-marketing/small-business-yet-to-realize-full-potential-of-digital-solutions> (1 August 2017).
- [21] Lambert, S.C. & Davidson, R.A. (2013), “Applications of the business model in studies of enterprise success, innovation, and classification; an analysis of empirical research from 1996 to 2010”, *European Management Journal*, Vol. 31 No. 6, pp. 668-681.
- [22] Higon, D. A. (2011). The impact of ICT on innovation activities: evidence for UK SMEs. *International Small Business Journal*, 30(6), 684–699. <http://dx.doi.org/10.1177/0266242610374484>.
- [23] Marcysiak, A., Pleskacz, Ż. 2021. Determinants of digitization in SMEs. *Entrepreneurship and Sustainability*
- [24] OECD (2015), *The Innovation Imperative: Contributing to Productivity, Growth and Well-Being*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264239814-en>.
- [25] OECD. (2017). *Going Digital: Making the Transformation Work for Growth and Well-Being*. Meeting of the OECD Council at Ministerial Level (pp. 3-30). Paris: OECD. Retrieved from <https://www.oecd.org/mcm/documents/C-MIN-2017-4%20EN.pdf>.
- [26] OECD. (2019). *OECD SME and entrepreneurship outlook 2019*. OECD Publishing. <https://doi.org/10.1787/34907e9c-en>.
- [27] Rindfleisch, A., O’Hern, M., & Sachdev, V. (2017). The digital revolution, 3D printing, and innovation as data. *Journal of Product Innovation Management*, 34(5), 681–690.
- [28] Rogers, E. (1962), *Diffusion of Innovations*, Free Press, New York.
- [29] Sebastian, I., Ross, J., Beath, C., Mocker, M., Moloney, K., & Fonstad, N. (2017). How big Old companies navigate digital transformation. *MIS Quarterly*, 16(3), 197–213.
- [30] Valenduc, G., & Vendramin, P. (2017). Digitalization, between disruption and evolution. *Transfer*, 23. Vásquez, J., Bruno, G., Settineri, L., & Aguirre, S. (2018). Conceptual Framework for Evaluating the Environmental Awareness and Eco-efficiency of SMEs. *Procedia CIRP*, 78, 347–352. <https://doi.org/https://doi.org/10.1016/j.procir.2018.09.062>
- [31] Venkatesh, J. & Kumar, i R.L. (2015). Performance of Mudra Bank: A Study on Financial Assistance to MSME Sector. *International Journal of Research in Economics and Social*
- [32] Ventakesh, V. & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Science*, 39(2), 273-312. *Sciences*, 5(7), 185-191. ISSN - 2249-7382.