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TOWARDS ENSURING THE SUSTAINABILITY OF SOUTH AFRICAN SMALL AND MEDIUM ENTERPRISES IN THE FOURTH INDUSTRIAL REVOLUTION ERA

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Abstract

The reality of the presence of disruptive technologies of the fourth industrial revolution (4IR) era has dawned on everyone. However, the narratives have centered on how these technologies will aid the production and delivery of goods and services in a more efficient and transparent manner based on increased data accumulation and analysis. The focus of these technologies has been on how large manufacturing and service organizations can automate the development of processes, products and services. The question is "how will the small and medium enterprises survive in the 4IR era?" This paper will attempt to answer this question by considering and examining how the South African small and medium enterprises can seize the opportunities provided by the technologies of the fourth industrial revolution era for their development and sustainability thereby contributing to the socio-economic development and growth of the South African nation. The findings show that in spite of the concerns with respect to perceived threats of loss of jobs, increase in inequality, unemployment and poverty in view of the emerging technologies of the 4IR, the development of a well-articulated policy directions and strategy on the fourth industrial revolution by government coupled with a positive response by the business community will afford the entrepreneurs the opportunity to participate in the newly created supply chains and markets. Furthermore, the new technologies of the 4IR will result in the expansion of labor demand through increased productivity thereby creating new jobs that will far outweigh the old jobs lost through digitalization.

Keywords: Small and Medium Enterprises (SMEs), Disruptive Technologies, Fourth Industrial Revolution, Sustainability, Socio-Economic Development, South Africa

1. Introduction

Discussions surrounding the opportunities provided by the Fourth Industrial Revolution have centered much on how established manufacturing and service industries will adopt these emerging technologies to affect positive changes in the way goods are manufactured and the way services are being rendered. No doubt, these established firms will have greater advantage because of their huge capital base and the opportunities to secure more capital for technical and technological expansion. It is equally important to initiate high-level discussions on how the SMEs can also benefit from these emerging technologies with the understanding that SMEs play a

significant role in the growth and development of developing economies – the group to which must economies in the African continent belong. The question that this paper seeks to answer is "how will the small and medium enterprises survive in the fourth industrial revolution era?" This question is pertinent because of the major roles that SMEs play in the socio-economic development of many African countries and because it is necessary to expose the current and prospective entrepreneurs to these emerging technologies.

The main objective of this paper is to reflect on how the SMEs could make maximum use of the opportunities provided by the current and emerging technologies of the Fourth Industrial Revolution. The paper will therefore do a brief review of the Small and Medium Enterprises in South Africa followed by a brief review of the Fourth Industrial Revolution and its associated technologies. This study is motivated by the fact that SMEs play significant role in job creation and consequently have the capacity to assist the government in providing solutions to the main problems of unemployment, inequality and poverty being faced by developing countries including South Africa. Furthermore, less emphasis has been placed on how the technologies of the fourth industrial revolution era could be relevant to small businesses as against big corporations and enterprises. This next section deals with the South African SME landscape, followed by the analysis and results section. Lastly, we conclude with some recommendations both for the current and prospective entrepreneurs as well as for the governments in terms of policy directions.

2. SME landscape in South Africa

SMEs play a very important role in South Africa because they are key drivers of job creation, economic growth and innovation. The Government of the Republic of South Africa recognized the role of the SMEs with the establishment of the Ministry of New Business Development in 2014. The ministry had the mandate of facilitating the promotion and development of small businesses in South Africa. The White paper on Small, Medium and Micro Enterprises (SMEs) issued by Government in 1995 provided the following action plans for the development and growth of SMEs:

- · increasing the financial and non-financial support,
- creating a demand for the products and services provided by the SMEs,
- reducing regulatory constraints (DTI, 2008).

In order to implement the strategy for SME's development and growth, a number of government agencies were established. Such agencies include the Small Enterprise Development Agency (SEDA); the Small Enterprise Finance Agency (SEFA) and the National Youth Development Agency (NYDA); the Technology and Innovation Agency (TIA) and the National Empowerment Fund (NEF).

The South Africa's National Development Plan (NDP 2030) identified the SMEs as an important sector in the economy because of its potential to stimulate employment and drive economic growth. In the SME landscape report on "An assessment of South Africa's SME Landscape: Challenges, Opportunities, Risks & Next Steps' 2018/2019". This survey report focused on the assessment of the condition of the South Africa's SMEs with emphasis on opportunities, risks and challenges. The report also proposed various actions aimed at creating more opportunities and mitigating the challenges facing the SMEs.

The survey was conducted with 1157 SME owners in the database of SMEs in South Africa. The report indicated that the majority of SME's in SA (60% and 70%) are at their early stages having being in business for about three to five years. This has affected the level of revenue generated, which was reported to be in the range of R200, 000 and R1million on an annual basis. The report further stated that about 50% of the SMEs have just between 3-5 employees, about 10% have 6-10 employees, about 5% have 11-20 employees while 30% are owner managed enterprises.

However, the report showed that the SMEs have the potential to make significant positive impact on the SA economy. This is because over 70% of the surveyed SMEs indicated that their major goal for launching into entrepreneurship was to have a positive impact on the South African

society in particular. Over 60% of the SME owners were of the opinion that their major drive was to be creative while about 60% said that they just wanted to make a living for themselves.

The report also shows that SMEs owners are facing challenges ranging from access to funding from the financial services providers and the government, red-tapism and harsh government regulations as well as access to markets. However, majority of the SMEs owners indicated that there exist great opportunities for entrance and growth in many other sectors in the economy (Adclick Africa Media Group, 2019).

Institute of Directors (2002) stated that one of the ways of redressing the unequal distribution of ownership, management and control of the economic and financial resources in South Africa is black economic empowerment. This will ensure that a good number of black South Africans participate in both informal and formal economies thereby achieving sustainable economic development and prosperity. As a follow-up, Institute of Directors (2016) emphasized the need for the development of business models that will influence positively on the South African society and environment and consequently improve the quality of life of the South African citizens.

Lewis and Gasealahwe (2017) suggested that there was an increase in the unemployment rate from 25% to 27% and the reasons adduced for this increase amongst others were income inequalities and economic slowdown. A major proposition of this report was entrepreneurship as a means of increasing job creation in South Africa.

Francke and Alexander (2019), motivated by the fact that efforts on black empowerment have not yielded expected results, suggested that the lives of the black majority in South Africa have not been affected on a larger scale. They were of the opinion that one of the ways to develop entrepreneurship is through innovative model that would transform their applications into concrete business realities.

After some years of underperformance, the SA economy witnessed some signs of progress in the second quarter of 2018. To confirm this, Statistics South Africa supplied the data, which points to a 2.2% growth in the economy (Maruzzi, 2019). This scenario has consequently led to an increase in opportunities for small and medium enterprises. The report also indicated that already established SMEs in sectors such as tourism, manufacturing, agriculture, data and information technology now have opportunities to grow their businesses. Technology has also influenced the South African travel and tourism sector and consequently providing new opportunities for SMEs in South Africa.

Many articles and reports have been published on the challenges and risks facing the SMMEs in South Africa. We summarize some of the issues raised in this section as follows:

- Lack of easy access to finance and credit facilities. This is because SA banks are
 reluctant to extend credit facilities to SMEs particularly the start-up ones. The GEM South
 Africa report highlighted poor outlook in terms of profitability, poor business plan, poor
 market research, unviable business ideas, lack of credit history and inadequate collateral
 security as some of the reasons the SA's banks apparent lack of excitement in offering
 credit facilities to the SMEs (Herrington et al. 2014).
- Lack of access to infrastructure in the form of land and space, transportation and communication as well as professional infrastructure in the form of accounting and legal services which are critical to the sustainability of existing SMEs and the establishment of new ones (BER, 2016).
- Low level of research and development into new and innovative ways of running the SMEs. This challenge has prevented the SA SMEs from plugging into new innovations that could lead to their development and growth.
- Labor laws in South Africa gives more power to the employee than the employer in that it
 is difficult to lay off staff once employed even if their performances are below satisfactory
 level. Furthermore, the SMEs may not be able to afford the minimum wage fixed for the
 workers by the government. In addition, the bureaucracy attached to the process of
 registering businesses and obtaining permits have hindered the establishment of new
 businesses and the management of existing ones. The delays are also occasioned by
 duplication of process by various agencies of government.

- Related to this is the shortage of skilled labor force to drive the process of development and growth of the SMEs.
- Socio-economic factor in the form of high level of violence and crime which consequently
 increases the cost of running business in terms of increased security expenditure as
 observed by the OECD in the economic survey of South Africa in 2015. Another socioeconomic factor is lack of access to markets, which is one of the reasons why banks are
 constrained to offer credit facilities to start-up and existing SMMEs.

The effect of the factors listed above is that SA SMMEs rarely survive their early period of establishment. It was noted that only few SMMEs in SA survive beyond the first three and a half years of establishment and operation (DTI, 2008).

3. The fourth industrial revolution

The World Economic Forum has described the Fourth Industrial Revolution as the period characterized by a fusion of technologies that is blurring the lines between the physical, digital and biological spheres (Schwab, 2016). Table 1 shows a summary of the characteristics and the driving force behind these revolutions:

Industrial Revolution Characteristics Drivers First Mechanized production Water and Steam Second Mass production Electricity Third Automated production Information Communication Technology physical. Artificial Intelligence: Machine Fourth Convergence of digital and biological worlds Learning, Block chain and other distributed ledger technologies; Internet of Things (IoT); Robotics;3-D printing; Nanotechnology and Biotechnology.

Table 1. Characteristics and the drivers of Industrial revolutions

Although, the digitalization of the third industrial revolution like the previous revolution has brought significant changes in the mode of production and consumption of goods and services. Technological developments of the third industrial revolution have influenced services in the areas of transportation, accommodation, entertainment, purchases, payments, teaching and learning. However, the combination of these earlier technologies with the emerging technologies in the fourth industrial revolution will affect the way and manner in which businesses are conducted and every facet of human life be it health, education, recreation, culture and governance.

Like other continents in the world, the advent of the Fourth Industrial Revolution has led to a new era of economic disruptions and uncertainties. However, the continent could reap the benefits of this revolution by focusing on digital revolution (International Telecommunications Union, 2017). GSM Association (2019) indicated that a total of 1.7 million formal and informal jobs have been created through mobile technology services and has also contributed an economic value worth of about \$144 billion.

Furthermore, digital technologies could assist in fighting poverty and reducing inequality by enabling access to information on jobs and available services thereby improving the standard of living of the African populace. A clear example is the transaction of financial services through mobile banking applications such as M-Pesa powered by Vodafone, which provides a safe, secure and affordable way to make financial transactions to about 41.5 million people across the African continent with the aid of their mobile phones despite the fact that they do not have bank accounts.

The 4IR also provides a platform for the African continent to reinvent skills, labor and production. According to Nsengimana (2018), African continent will have one of the largest

potential workforce by the year 2030. The workforce of the future will therefore need to the equipped with relevant skills on digital and technological innovations of the fourth industrial innovation for socio-economic growth. Digital technologies will propel entrepreneurs to develop business models, design products and engage in online trading that will affect the lives of the populace and the economy.

4. Methodology

The methodology revolves around the review of the 2018/2019 South Africa's Small and Medium Enterprises' landscape survey results with the aim of identifying the significant roles of the SMEs in the South African economy; to identify the challenges facing the SMEs and lastly to highlight how these SMEs can overcome some of these challenges through the adoption and deployment of technologies of the fourth industrial revolution. The Fourth Industrial Revolution is at its nascent stage but countries all over the world are busy developing strategies to cope with the unprecedented disruptions that will accompany this revolution. Many countries including South Africa have identified SMEs as catalyst for social and economic development because of its ability to generate employment and therefore reduce the level of poverty and inequality. It is therefore important to focus on how these SMEs will survive in this new era. This is also important because one could be tempted to focus the debate and discussions on the Fourth Industrial Revolution the big high technology firms around the world thereby leaving out the baseline of economic development that is the Small and Medium Enterprises.

5. Analysis and discussion

Small Business Institute (SBI, 2016) was the first comprehensive study of small businesses in South Africa with its main objective stated as to galvanize a new compact based on solid evidence, to fulfil the President's wish to place small business at the center stage in the nation's economic recovery and to help build the SME community to play a role in the societal transformation. Major findings from the SBI are as follows:

- South Africa's formal employing SME segment in the economy is much, much smaller than originally thought, consisting of just over 250,000 businesses – far off the mark of current estimates:
- While formal SMEs contribute nearly 98.5% of the number of formal firms in the economy, they only account for 28% of the jobs. Based on international trends, this should be about 60% to 70%:
- The majority, 56% of jobs in South Africa, come from only 1000 larger employers, including the government – and these jobs are growing at a faster rate than what SMEs are creating;
- Small firms pay more to retain staff than the larger firms (as a percentage of turnover) but are not employing people at a desirable rate.

It was also reported that there were 176,333 firms defined as micro (66%); 68,494 small firms (26%); 17,397 medium (6.5%). It is important to note that the understanding of the number, size and characteristics of SMEs is a key to solving the problems of low rate of job creation and economic growth.

Small-scale businesses face so many problems including low capital base, access to funding, technology, and management and governance issues. The resources for solving these are beyond the reach of a single individual or a few group of individuals. It may therefore be necessary to pool resources together through cooperative projects or joint venture companies.

One of the most critical needs of our society today is access to technology. A significant avenue for job creation is technological innovation because today's innovation is yesterday's invention automated intelligently. Another major need of SME owners is education and training. Educational institutions and training centers as well as government can assist by providing

courses appropriate to SMEs. The South African Training, Vocational and Educational Training Colleges may be very relevant in this area.

Another way of assisting the SMEs is to provide shared consulting services, shared facilities and facilitating the successful startup and growth of small businesses. For example, a cluster of buildings as an office complex may also have centrally shared facilities and services such as accounting, legal, purchasing and laboratory services. Other shared services may include computer-based education, computer services and technology transfer services. In this case, the occupants of the center enjoy economies of scale with the needed services and facilities, which are of a higher quality and for a considerably lower cost than what, could have been incurred on an individual basis.

It may also be more economical for SMEs to develop cooperative ventures to develop new technological innovations and deployment, which may consequently lead to provision of jobs in the relevant sectors such as food production, education and social services, housing, health care, processing and distribution services as well as waste management. It is also possible for the technologies of one company to be used by other non-competitive smaller companies. For instance, large companies in Japan assist in the establishment of small ones to serve as component suppliers through the provision of technology, finance and management.

The followings are some of the digital trends that could transform and increase the operational efficiency and growth of SA's SMEs:

- Chatbots: Because of low capital base, SMEs cannot afford a large sales team or a call
 center for handling sales and support. Chatbots could be a way out for SMEs in that it
 enables automatic answers to simple queries in addition to the provision of quick
 responses to customers.
- Voice-optimized interfaces: A search-optimized frequently asked questions page can be built with alignment to likely questions that could be asked by users (similar to Siri- a voice assistant).
- Live video: Live videos covering important events in one's business life could be placed online. This may create greater awareness for your enterprise.
- Virtual Reality/Augmented Reality content: VR/AR have the capability to produce a blend your real world and the digital presence and therefore might create new opportunities for engagement with customers.

Despite the immeasurable benefits of technology to all the industrial and service sectors all over the world, a major hindrance to the growth of SA SMEs is technology limitations arising from lack of access to digital education and training, inability to maximize the little digital education, e-commerce and cloud services as well as lack of reliable internet access. In its bid to stimulate the growth of SA SMEs in the Fourth Industrial Revolution, Vodacom adopted some initiatives as follows:

- Conducting small business workshops, centered on digital tools training. Majority of SMEs owners have keyed into this initiative and learning fast new and more efficient ways of conducting businesses with a tendency to disrupt their respective industries through technology.
- Operation of incubator program in collaboration with the SA's Department of Trade and Industry aimed at creating and upskilling companies that will manufacture branded merchandise.
- Establishment of four companies employing 28 previously unemployed young people in order to support SMEs in the start-up stage and guard against high SME failure rate.
- Launching of an online trade portal to all existing suppliers of Vodacom. The portal makes
 it possible for the SMEs to have access to advertised contract opportunities as well as
 market their products and services. The portal provides an enabling environment for
 SMEs to trade with one another.

According to Vodacom's Managing Executive: Fixed and Mobile Products Services, one way of removing the obstacles against the growth of SMEs is by given them the 'opportunity to benefit from the digital tools now accessible as a result of the disruptive technologies of the Fourth Industrial Revolution'. She noted that the business sector in South Africa should be alerted of their responsibility of developing 'tailored roadmaps that SMEs can adopt to navigate their growth, and in turn, the country's progressive development'.

Apart from South Africa, some other West and East African countries are already enjoying some benefits of the fourth industrial revolution. For instance, Kenya has deployed Blockchain technology for the expansion of access to credit and the verification of property transactions and records (Gebre, 2018). This could be a breakthrough for the continent by providing great opportunities for job creation more so as the informal sector constitutes about 55% of the gross domestic product of Sub-saharan Africa (United Nations Economic Commission for Africa, 2015). Another critical area where African nations can benefit from the fourth industrial revolution is the agricultural and agro-industrial sectors. In the Sub-saharan Africa particularly in countries like Tanzania, Nigeria, Malawi and Ethiopia, small and medium agricultural enterprises account for about 60% of total employment and this is expected to increase significantly within the next five years (Ehui, 2018; Food and Agriculture Organisation of the United Nations, 2017).

6. Conclusion and recommendations

One major point in the report of SMEs landscape report is the fact that technological limitations remain an impediment to the growth and development of the SMEs. We are of the opinion that with adequate knowledge and understanding coupled with deployment of the technologies of the fourth industrial revolution, there are great possibilities for SMEs to grow their businesses and contribute significantly to job creation and economic growth.

It was noted that SMEs are important business sector in any economy. Therefore, the owners and employees of SMEs should be exposed to the implications of the Fourth Industrial Revolution and how they can make use of the opportunities it provides to improve their operations and consequently make greater contribution to the economy. Some of the big companies are already making efforts to incorporate the SMEs into their vision for taking advantage of the perceived opportunities and mitigating envisaged threats of the Fourth Industrial Revolution era. We also hope that the SMEs on their own part will see the need to form alliances and partnerships that will serve as a platform for them to enjoy the benefits of the Fourth Industrial Revolution.

The Government of South Africa could support these SMEs by providing funding opportunities to start-ups and existing SMEs to enable them participate in processes of technology acquisition and technological development. In addition, the start-ups and SMEs will require expertise and training about these emerging technologies and how they could be deployed to lower production costs and increase revenue. Government should also be interested in facilitating collaborations among existing big enterprises and small enterprises as well as universities and research institutes to gain the advantage of experience and new innovative ideas. The Governmental could also provide access to platforms that provide opportunities for businesses to understand and undertake technological and digital transformation programs for long-term sustainability. Lastly, Government should formulate policies, make regulations and develop strategies aimed at reducing bureaucracy and removing barriers for SMEs growth and expansion. The Government also stand to gain increased tax revenue from businesses and consequently have increase funding for creating additional jobs and for the development of other sectors such as agriculture, health, education and housing (Zervoudi, 2019).

According to Marwala (2020), the South African Government must provide a platform for the collection of relevant data on issues of national importance and be prepared to provide enabling infrastructure for the 4IR while ensuring that workforce training and education is provided to cover reskilling and upskilling. Above all, the Government should make regulations and policies that will drive the 4IR in South Africa.

Although, there are concerns about the threats these emerging technologies of the Fourth Industrial Revolution presents particularly with respect to loss of jobs, increase in inequality, unemployment and poverty. It is advisable for governments and entrepreneurs to look beyond

these threats and seize the opportunities it provides in terms of socioeconomic development and growth. The combined efforts of a well-articulated policy directions and strategy on the part of government and positive response business community will afford the entrepreneurs the opportunity to participate in the newly created supply chains and markets that would have been difficult if not impossible without the advancement of the emerging technologies of the 4IR. In addition, these new technologies have the capacity to expand labor demand through increased productivity thereby creating new jobs that will far outweigh the old jobs lost through digitalization. Automation will eventually create more jobs thereby reducing unemployment, poverty and inequality.

Furthermore, the quality of human life will also improve due to expansion in the range of good and services available to consumers and the opportunities to get these services at a faster and efficient rate. Good and well-paid jobs will also improve the quality of human life. In addition to access to a wide variety of goods and services, these emerging technologies also provide access to education thereby enabling the development of their mental capacity, knowledge and skills through the platform of open, distance and e-learning. The goals of reskilling and upskilling could easily be achieved so that there is competitiveness in the labor and skill market (Zervoudi, 2019).

Agriculture is a critical sector in which advancement of technology will be of great assistance to the entrepreneurs. Technological advancement in the form of smart farming will facilitate a more effective and efficient farming techniques that will ensure consistent food supply even in times of drought and in places that are affected by drought. Emerging technologies such as AI could be deployed to identify which particular crop can be cultivated on a piece of land at a particular period to produce maximum yield (Marwala, 2020). Further research may consider how big corporations and enterprises could assist the Small and Medium scale enterprises to leverage on the technologies of the fourth industrial revolution to drive a sustainable socio-economic growth in African nations.

The world is moving into a fourth industrial revolution that will have a significant effect on businesses, institutions, human life, nature of work, health, education, agriculture, entertainment and governance (Younger, 2019). According to Schwab (2016), people experience a technological revolution that will dramatically change the way they live, work etc. In its scope, the transformation will be totally different from what has been experiences before. People do not yet know just how it will unfold, but one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global governance, including public and private sectors, academia and civil society and so on.

References

- Adclick Africa Media Group, 2019. 2018/2019 SME South Africa's SME landscape survey results. [online]. Available at: https://www.bizcommunity.com/Article/196/713/184864.html [Accessed on 20 October 2020]
- Bureau for Economic Research (BER), 2016. The small, medium and micro enterprise sector of South Africa. Research Note 2016, No 1.
- DTI, 2008. *Annual review of small business in South Africa 2005 2007.* Pretoria: Department of Trade and Industry.
- Ehui, S., 2018. Why technology will disrupt and transform Africa's agriculture sector in a good way. In: B. S. Coulibaly, ed. 2018. *Foresight Africa: Top priorities for the continent in 2018.* Washington, D.C.: Brookings Institution. pp. 96-98.
- Food and Agriculture Organisation of the United Nations, 2017. The state of food and agriculture leveraging food and agriculture: Leveraging food items for inclusive rural transformation. Rome: Food and Agriculture Organisation of the United Nations.
- Francke, E. and Alexander, B., 2019. Entrepreneurial development in South Africa through innovation: A model for poverty innovation. *Acta Commercii*, 19(1), p. a631. https://doi.org/10.4102/ac.v19i1.631

- Gebre, S., 2018. Blockchain opens up Kenya's \$20 billion informal economy. Bloomberg, June 13, 2018.
- Herrington, M., Kew, J. and Kew, P., 2014. South Africa: The crossroads a goldmine or a time bomb? GEM South Africa Report. Available at https://www.researchgate.net/profile/Jacqui-Kew/publication/317565999_GEM_South_Africa_2014_Report/links/593ff8b70f7e9bf16 7f1cc45/GEM-South-Africa-2014-Report.pdf. [Accessed on 20 July, 2020].
- GSM Association, 2019. The mobile economy: Sub-Saharan Africa 2019. London: GSM Association.
- Institute of Directors, 2002. King Report on Corporate Governance. South Africa.
- Institute of Directors, 2016. King Report on Corporate Governance. South Africa.
- International Telecommunications Union, 2017. International Telecommunications Union's Information and Communication Technology Development Index Conceptual Framework and Methodology. [online]. Available at: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2017/methodology.aspx [Accessed on 24 December 2020].
- Lewis, C. & Gasealahwe, B. 2017. Lowering barriers to entrepreneurship and promoting small business growth in South Africa. OECD Economics Department Working Papers Available at https://www.oecd-ilibrary.org/economics/lowering-barriers-to-entrepreneurship-and-promoting-small-business-growth-in-south-africa_d60e254f-en {Accessed on 30 December, 2020}
- Marwala, T., 2020. Fourth Industrial Revolution business opportunities in South Africa [online]. Available at: https://www.uj.ac.za/newsandevwnts/Pages/Fourth-industrial-revolution-business-opportunities-in-South-Africa [Accessed on 12 August 2020]
- Maruzzi, S., 2019. 4 digital trends that can be game-changers for SA SMEs. IOL Business Report, April.
- Nsengimana, J. P., 2018. How Africa wins the 4th Industrial Revolution. *Forbes,* October 10, 2018. Organisation for Economic Co-operation and Development (OECD), 2017. OECD Economic surveys: South Africa.
- Schwab, K., 2016. The Fourth Industrial Revolution: what it means, how to respond [online]. Available at: http://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/> [Accessed on 7 September 2020].
- Small Business Institute, 2016. *The number of formal micro, small & medium businesses in South Africa* [online]. Available at: https://www.smallbusinessinstitute.co.za [Accessed on 8 September 2020].
- United Nations Economic Commission for Africa, 2015. Contributions to the 2015 United Nations Economic and Social Council Integration Segment. Addis Ababa: United Nations Economic Commission for Africa.
- Younger, J., 2019. The 4th Industrial Revolution Means Opportunity for Freelancers [online]. Available at: https://www.forbes.com/sites/jonyounger/2019/07/17/the-4th-industrial-revolution-means-opportunity-for-freelancers/> [Accessed on 19 September 2020].
- Zervoudi, E. K., 2019. Fourth Industrial Revolution: Opportunities, Challenges and Proposed Policies. [online]. Available at: http://www.intechopen.com/online-first/fourth-indusrial-revolution-opportunities-challenges-and-proposed-policies [Accessed on 10 August 2020].