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# KNOWLEDGE BASED ECONOMY, SMALL AND MEDIUM ENTERPRISES DEVELOPMENT: A STUDY OF LAGOS STATE NIGERIA

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## ABSTRACT

*Knowledge is power and vital to success, it exudes brilliance and excellence. The human knowledge has imparted its great and distinctive resources on individuals, organizations and nations. Knowledge economy or Knowledge based jobs have created a shift in employment structures from the traditional office procedures to a more elastic work structure of a technology substratum. Knowledge based labour has a more diversified market that has produced innovative products and services of great magnitude which have positively impacted the global economic resources. Hence, this study empirically aims on the nexus connecting knowledge economy and small and medium enterprises (SMEs) development. Case study: Lagos Nigeria. Sixty (60) selected SMEs in Lagos State served as the target population. The study adopted a non-probability sampling technique to administered two copies of questionnaire to each of the firms with the aid of a convenience sampling method. Upon data retrieval and clean-up, one hundred and seven copies were used for the analysis. Kendall tau-b was used for the analysis. The results are 0.086 and 0.061 respectively; which implies that knowledge economy has significant and positive association with SMEs development through the dimensions. Knowledge based economy is extremely germane in Lagos state and the whole of Nigeria. This paper recommends that Knowledge-based economy propensity has opportunities and unprecedented challenges for SMEs in Lagos state, Nigeria. However, the state government must form an alliance with its SMEs and make concerted efforts to build significant human capabilities and capacities through enterprise upgrades and technology innovations.*

**KEY WORDS:** *Knowledge Economy, Knowledge Investment, Knowledge Stocks and Flows, SMEs Development*

## 1.0 INTRODUCTION

In Nigeria and Lagos State to be precise, globalization and increased technological prominence have altered the contemporary economies to human capital development economy now known as knowledge economy or technology economy Shahrazad (2017). The author theorizes that knowledge economy has become excessively essential, serving as one of the major sources of economic growth and competitive strengths to all

sectors of the economy. In this economy, new forms of firms and work pattern direct the flow of world businesses; thus, it has demanded for rapid development of skills, solid knowledge as well as greater responsibility Shahrazad(2017). Therefore, contemporary businesses must adapt to the yearnings of the society by learning's that focused at creating enabling environment where people (employees' per se) can add to the development of their core competences towards attaining corporate objectives.

An illustration of a knowledge-based economy is that of the internet markets, in dissimilarity to the conventional markets where traders must open stores in their locations or explore the streets to buy and sell their goods. The internet markets offer an array of goods and services globally which can be operated within the confines of consumers' rooms.

As stated by Fritz Machlup (2014) the necessity for an enhanced workforce created knowledge economy. The information and communication technology revolution support businesses and nations' economies to most countries that have incorporated their industries into the knowledge resources. Countries like China, Japan, India, United States and other developed nations have increased efficiency of productive factors from incorporating knowledge-based economy into production and manufacturing. This has encouraged business competitiveness and fundamental growths in their capital markets, Onuoha (2012)

According to Suciu (2004), knowledge economy is a construct seen as highly complex, dynamic, which lies on new e-commerce and other modern e-development tools that supports competitive advantage on multi-functional teams. Shahrazad (2017), argued that knowledge economy provides intangible assets, knowledge and information management, have served as the core competences. In this economy, intellectual capital is the focal point for firms, where new ideas are the drivers of entrepreneurial development, which can lead small and medium enterprises development. According to Shahrazad (2017), knowledge-based firms have gained capacities that can be utilized to arouse a new entrepreneurial spirit. It inspires managers to be more concerned with transforming the company into an enterprise with potentials, embracing and developing value owing to implementation of working technologies.

Knowledge based economy according to Drucker (2014), "is the original element of production, the human capital market and the basis of the modern economy currently downgrading other systems of labour, economy and capital resources". Also, Grady (2013) acknowledged knowledge-based economy as a new business strategy fashioned on innovative concepts of information and communication technology. Often these businesses start as small and medium enterprises with innovative and knowledge embedded workers who are professionals with corporate strategic and managerial skills. these knowledge-based workers' contributions are more of intellectual inputs than of physical labour". Knowledge based professionals like Mark Zuckerberg, Bill Gate and Warren Buffet are employing information technology to generate wealth. This buttresses the importance of acquiring

relevant knowledge with reference to the entrepreneurs of our time.

Likewise, small and medium enterprises (SMEs) have been accepted all over the world as a powerful apparatus towards rapid economic development and growth. In lieu of its perceived importance, government of nations especially in the developing countries have made much effort to support the establishment of policies that boost the capacities of small and medium enterprises (Moses, Alexander and Ransford, 2014). For example, it was argued that among the entire nation's development strategies in Ghana, the one centred on the development of SMEs have gained more prominence in their plans in recent years. In like manner, SMEs in Nigeria have also witnessed great attention of government, NGOs, individuals and academic scholars due to the huge impact made by SMEs by contributing in providing job opportunities as well as improving economic well-being of the nation at large and households.

Small and medium enterprises have served catalyst to the socio-economic development of any nation Moses et al(2014). They back our initial assertion, when they add that SMEs have proven to be a veritable pathway for the attainment of national microeconomic objectives in the areas of employment generation at low cost investment and improvement of apprenticeship training. Also,Obob (2004), SMEs development have generally been tagged as the route to sustainable economic development. Odeh (2005) and Tolentino (1996) contribute to the enhancement in per capital income and output, encourages the development of indigenous entrepreneurship, improves regional economic balance via industrial spreading, and assists in promoting effective resource usage.

However, one thing is pertinent to the development of small and medium scale enterprises in any economic system; such factor(s) must be present in the life of an entrepreneur before an SME can be developed. It is important to identify this factor for clarity regarding this paper; is Knowledge Based Economy. This economy employs relevant cognitive knowledge and skills mandatory for the development of an enterprise phenomenal output. Thus; several authors have talked discussed extensively on the concept under investigation (knowledge economy) without making emphases on its importance to SME development. For example, Kenway, Bullen and Robb (2004), wrote on "knowledge economy, the techno-preneur and problematic future of the university in Australia". Also, Sonna, Mark, Ralph, Stefano and Mathew (2017), studied "engagement in the knowledge economy: regional pattern of content creation with a focus on Sub-Saharan Africa". Similarly, Gipu, Badea, Rutz and Pena (2010), investigated "knowledge management-the key resource in the

knowledge economy". Ghirmai (2010), evaluated "knowledge-based economy and society has become a vital commodity to countries.

The gap in this study is the quest to deviate from what above scholars did, by trying to find a connection between knowledge economy and small and medium enterprises development in Lagos State Nigeria. Filling the identified gap serves as the paper's point of departure. Therefore, the problem of this study is embedded on the fact that several individuals have skills, knowledge and different resources but do not know how to put them to use. From the idea of knowledge economy, people have developed avenues to enhance their competences toward business and value creation but are struggling with its implementation. hence, knowledge must be harnessed and transformed to assets in the society. Premised on the above, the paper aims at investigating the connection between knowledge economy and small and medium enterprises development in Lagos State Nigeria. Thus; the following hypotheses were formulated as:

H0<sub>1</sub>: Knowledge investment and SMEs development do not significant relate in Lagos State Nigeria.

H0<sub>2</sub>: There exist no significant connection between knowledge stocks and flows of SMEs in Lagos State Nigeria.

## 2.0 LITERATURE REVIEW

### 2.1 Theoretical Foundation

The baseline theory for this paper is Activity Theory, and has enthused theoretical evidence in array of fields, especially in psychology, education, management, culture, and information systems, fields which generally integrate approaches involving human activity. Scholars agreed to the richness of the theory in appreciating how people do things together with the assistance of sophisticated tools in such complex and dynamic environments Crawford & Hasan, 2006; Hakkinen & Korpela, 2006; Hasan, 1998; Korpela, Mursu & Soriyan, 2002; Liaw, Huang & Chen, 2007; Scanlon & Issroff, 2005; Zurita & Nussbaum, (2007).

Activity theory was drawn from the work of Vygotski and his student Leont'ev, cultural-historical psychology in the 1920s Verenikina (2001). "Activity theory is a conceptual framework which idea is that activity is key, that exploit is the result knowledge acquisition, thinking and application, that goals, images, cognitive models, intentions, and abstract notions like "definition" and "determinant" grow out of people doing things" Morf and Weber(2000).

The idea theory emanated through an understanding of human consciousness as it has been fashioned by experience and the subjectivity of human knowledge. An activity is the basic unit of analysis which is used to comprehend people's

actions. Activity Theory is a valuable tool for researchers to fit in into their repertoire as it enables a means of discovering new knowledge in humans Hashim and Jones (2014)

In this study, the theory can be related to how knowledge can be acquired and put to work in order to create and deliver values. When a related knowledge is acquired, entrepreneurs try to exploit what they have gotten by way of developing new businesses.

### 2.2 Knowledge Economy

As time progresses, human resources are very fundamental for companies; thereby, making knowledge in the contemporary economies a force for companies' success. Knowledge economy involves scenarios where organizations and individuals acquire, create, disseminate and use knowledge more effectively towards enhanced economic and social development Ghirmai (2010). This aspect of human activity is very significant to nation and companies by helping to strengthen their social and economic development; by creating opportunities for improved and more efficient means of producing products and services and distributing them in effective and low cost to teeming number of customers Ghirmai (2010).

Ghirmai (2010), opined that use of human knowledge for wealth creation is rapidly diminishing the impact of using extraction and processing of natural resources for creating wealth; that knowledge has become increasingly important means for value creation. The author added that human knowledge has the capacity of assisting countries to achieve their developmental goals. Knowledge-based economy includes situations where ideas and technologies are ingredients, intellectual property as the merchandise; where people expect smarter products with convenience

The term knowledge economy was derived from OECD (1996) and defined it as an economy which is directly based on the production, delivery and use of knowledge and information Attacit Global(2004). Several academic studies have been conducted focusing on the idea of knowledge economy, especially in academic, business and field of policy Powell and Snellman(2004). According to Sonna et al (2017), various arguments on knowledge economy have focused on the role of knowledge which serve as an economic output in itself, as well as input that solidifies various economic processes Lundvall and Johnson (1994). Scholars have also argued that developing countries and companies have undertaken some actions geared towards transforming into knowledge economy and wait for the benefits attainable through various transformation journeys Murenzi and Hughes (2006), Udo and Edoho(2000). Skrodzka (2016), asserted that knowledge economy assists corporations to promote innovation, initiative, entrepreneurship, and

dynamism, being an economy who's one the most important factor for production is knowledge. It implies that, for a firm to solidly stand out in their respective industries like the small and medium enterprises, they must make every effort continuously to develop the knowledge-base of the stakeholders, since what it requires to wrought exploit is knowledge.

For the purpose of this study, every exchange-driven and service sector need to be deeply involved in this economy to be able to provide quality and differentiated services to their customers. Entrepreneurs most importantly, must depend on this economy to remain innovative. In fact, they must always press on for more knowledge because, productivity and value levels stop where knowledge ends.

**2.3 Small and Medium Enterprises (SMEs) Development**

Improved technology, increased consumer demand, globalization and changes in the nature of products and services demands have influenced different form of business development. To adequately respond to these changes which include increased competitive force, firms and individual have begun to innovate and establish new companies with ideas that can help to produce and deliver values to curb these challenges. The aim of the rapid response is to increase productivity and efficiency through diversification in some cases. Therefore,

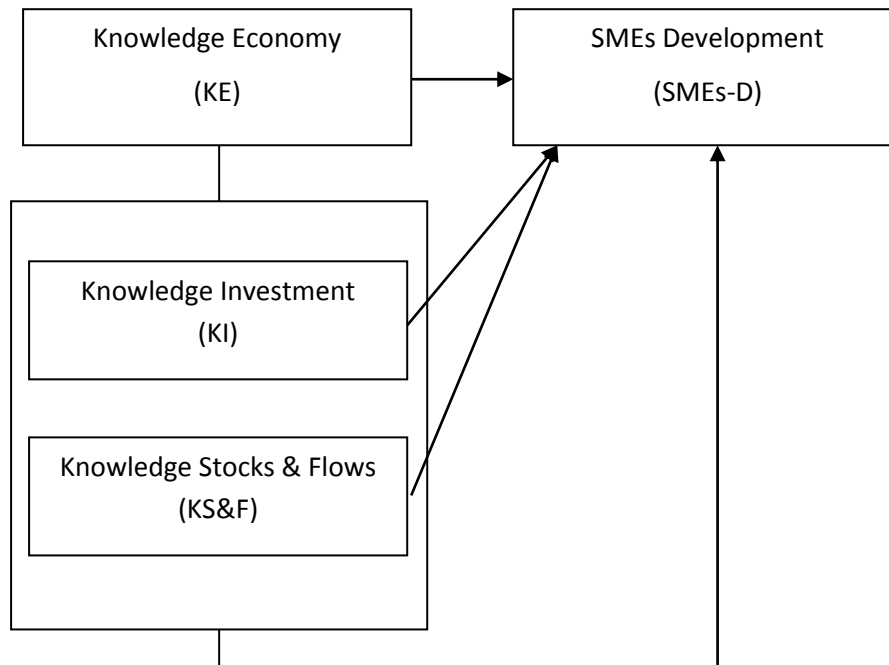
Golibjon (2016) stated that acompany's ability to develop, innovate and produce products with high value, and the introduction of mechanisms that will enhance production processes is the pathway to success.

Thus; Golibjon (2016) opined that enterprises development importance comes on the basis that that small and medium enterprises have higher share and contributions to the general well-being of any economy, especially, the economies of developing countries.

Presently in Nigeria according to Moses et al. (2014), much emphasis is being focused on SMEs development because of its importance to job creation and its impact on the nation GDP. Despite the increased role of SMEs, Waithaka et al (2014) noted that favourable government policies and financial supports have been denied them, particularly credit from institutionalized financial services administrations in charge of providing funds for start-ups.

The key influencer of small and medium enterprises development is acquisition on related knowledge. In this regard, people must aspire for knowledge in technology to aid in getting skills through trainings crucial for an enterprise development. Government and private companies must as a matter of necessity develop policies that will enhance constant employees' development which could emanate from regular trainings.

**Conceptual Framework**



**Table 1: Conceptual Framework of Knowledge Investment and SMEs Development**

Source: Desk Research, 2018

## 2.4 Knowledge Economy and SMEs Development

Marek and Tomasz (2015), in their study, averred that knowledge presents the basis of all forms of organized activities occurring in any socio-economic system, and helps to identify the best fit for strategy formulation and implementation; that knowledge is the principal factor in the process of generating value, serves as the key driver to business development, growth and sustenance.

Kruja (2013), asserted that entrepreneurs are individuals who introduce new products, services and technologies; and the foundation for these developments are function of one's knowledge. Increased wealth creation through various enterprises developments are the aftermath of generation and exploitation of knowledge which do not only involve science and technology but include practice of knowledge required to produce economic value. Stam and Garnsey(2007; Gibbons et al., (1994)stated that knowledge intrinsic in the life individual, group and technology is central to economic and enterprises development all over the world.

According to Audretsch and Thurik (2001), migrating to knowledge-based economy is perceived to influence the emergence of entrepreneurial economy, it is the key driving force that business owner use to create and deliver values. It was argued that an economy with increased number of knowledge-based firms strive for professionalism and expertise needed for the future during which emerging technologies will be scattered through other parts of the economy. Similarly, Stam and Garnsey (2007) and Shane (2000) studies have shown that enterprise development is conscious efforts of people who invest in new knowledge and ideas on one part, on the other hand, it is the amassing of knowledge in individuals and firms.

## 2.5 Knowledge Investment and SMEs Development

Quite a few people have presently ventured into private businesses, and this has rapidly taken solid position in the life of many who want to make a difference in their respective field. Entrepreneurs have been faced with challenges of identifying the right course to follow, the risk involved, the amount of capital required, and maintenance and sustainability skills needed for the business to be successful. While many are out there searching for paid jobs, others with knowledge and skills engaged with the challenge of developing their own businesses no matter how small.

In the face of economic turmoil that has overwhelmed the Nigerian populace, it's one's ability to think and act out of the box that matters. To

overcome the challenge for survival, what make the difference is to invest in knowledge. It is defined as set of skills and know-how that allow individuals to make informed decisions. "Therefore, this aspect of investment in the life of people is very essential company's success" Maizee et al(2014); or attracts long-term organizational productivity and efficiency. An argument exists which holds that lack of knowledge and experience leads to poor or zero innovative outcomes, and exposure to higher risk. Thus, "the higher the risk, the more chances that quality decisions, innovation and productivity would be present as well as SMEs development" Mustabsar, et al(2016).

Investments in knowledge is a company's move to acquire intangible assets that creates potential benefits for companies, serve as a key contributor to economic growth to advanced nations and increased productivity through entrepreneurial ideas OECD (2013). According to Dirk and Dimo (2007), knowledge investment is very important since it serves as a key driver of value creation, and brings about productive opportunities to organizations, and strengthens the ability to fully exploit those set of opportunities. By implication, it means that "firm's performance is a function of knowledge exploitation" Zahra and George(2002).

Armstrong (2016) and Alzbeta (2018) theorizedthatKnowledge investment is thus, a mechanism for human capital development, which is a combination of skills, abilities and experiences inherent in humans, and can be acquired and sustained during life time

## 2.6 Knowledge Stocks and SMEs Development

In years past, "knowledge management has been regarded as one the most essential discuss in business performance analysis" Cricelli and Grimaldi, (2008). Scholars have argued that knowledge has presented itself as a strategic resource for organizations; "the challenge in the market has created awareness of the primary function of knowledge assets towards the actualization of a distinct position" Skyrme, (2000) and Zack(2000).

Companies have been exposed to several assets that can be used to achieve a task or attain stated objectives. Presently, "these assets are very important to organizations for survival and to remain competitive in their industry of operation. Precisely, these set of assets are mostly intangible and can be grouped into stock and flows"Bassi and Van Buren(2000). Accordingly, knowledge stock is used to mean available level of knowledge within a company; while flows indicate the outcome of the knowledge processes in the interaction of the stock.

“Knowledge stock is a concept which expressly focused on the level of intellectual capital that can be seen and described as economic value categorized in three aspects of intangible assets” Bontis et al.(1999) and Chatzkel(2001): The Human capital which represents the knowledge, generated and owned by an individual denotes their know-how, capabilities, skills, proficiency and their structural capital. This also embraces the available capabilities and the gained knowledge interest mastered by the organizational structure itself, such as patents, processes and culture. The human capital is a relational capital, which links all external relationships with stakeholders, such as customers and suppliers (Cricelli and Grimaldi, 2008: p4).

The shift in knowledge pay its attention to the value the knowledge that can be used to produce or be created directly or indirectly. According to Kyriakos and Ko (2004), knowledge stocks and flows contribute prominently to organizational activities. Smith et al. (2005), opined that knowledge generated newly is transformed to stock of knowledge which augments the growth of the knowledge stock. Also, knowledge stock or existing knowledge contributions influences the degree to which new knowledge is generated. this helps to facilitate business conceptions (Hargadon and Faneli, 2002). On the contrary, Roper and Hewitt-Dundas (2015), found that existing knowledge stocks have weak negative rather than positive influence on company’s innovative output.

Lee (2010), stated that knowledge stocks add directly to novelty and complexity of new innovation. This paper takes knowledge stock to mean quality and sum of knowledge available to organizations, while flows deal with how the stocks are put to work. Knowledge at one’s disposal helps to create value; creating value mean that new products and services emanate from available knowledge. Hence, stocks and flows of knowledge are described to be instrumental to small and medium enterprises development.

**3.0 METHODOLOGY**

This is a survey study, which empirically evaluated the nexus between knowledge economy and small and medium enterprises development. Case study: Lagos State Nigeria. The paper adopted a quasi-experimental design; cross sectional survey was used to obtain data for the study. The population involved sixty (60) selected SMEs in Lagos State Nigeria, and the study covered Ikeja, Apapa, Surulere, Victoria Island, and Festac areas of the State were covered. The paper adopted a non-probability sampling technique, through the aid of a convenience sampling method to issue two copies of questionnaire to each of the studied SMEs. A five point-Likert scale by Levitt and Walton (1975), was used to structure the questionnaire for the study. Kendall’s Tau\_b analysis technique was used to test the hypotheses. Upon data retrieval and clean-up, one hundred and thirty copies were found usable.

**4.0 ANALYSIS AND DISCUSSION**

**Table 2: Knowledge investment and SMEs development do not significant relate in Lagos State Nigeria. Correlations**

		Knowledge Investment	SMEs Development
Kendall's Tau_b	Correlation Coefficient	1.000	.086
	Sig. (1-tailed)	.	.000
	N	113	113
	Correlation Coefficient	.086	1.000
SMEs Development	Sig. (1-tailed)	.000	.
	N	113	113

\*. Correlation is significant at the 0.05 level (1-tailed).  
 Source: Field Survey Data, 2018, SPSS 21 Output

**Decision:** Table 1.1 above reveals a Kendall’s correlation coefficient of 0.086 and probability value of 0.00 (PV< 0.05). This result indicates that there is a strong positive significant relationship between

knowledge investment and SMEs Development in Lagos State, Nigeria. Consequently, rejecting the null hypothesis and accommodating the alternate hypothesis.

**Table 1.2 There exist no significant connection between knowledge stocks and flows of SMEs in Lagos State Nigeria. Correlations**

			Sticks	Flows
Kendall's Tau_b	Knowledge Stocks and Flows	Correlation Coefficient	1.000	.061
		Sig. (1-tailed)	.	.000
	SMEs Development	N	113	113
		Correlation Coefficient	.061	1.000
		Sig. (1-tailed)	.000	.
		N	113	113

\*. Correlation is significant at the 0.05 level (1-tailed).

Source: Field Survey Data, 2018, SPSS 21 Output

**Decision:** Table 1.2 above reveals a Kendall’s correlation coefficient of 0. 061 and probability value of 0.00 (**PV < 0.05**). This result indicates that there is a strong positive significant relationship between knowledge stock and flows of SMEs in Lagos State, Nigeria. Hence, the null hypothesis is consequently discarded and the alternate hypothesis accepted.

**5.0 DISCUSSION AND CONCLUSION**

The above findings are in agreement with previous studies’ findings and assertions about knowledge economy. For instance, Ghirmai (2010) argued that knowledge economy involves situations where companies and individuals acquire, create, propagate and use knowledge more effectively towards upgrading economic and social development. The author added that human knowledge has the capacity of assisting organizations to achieve their developmental goals as well as creation of new businesses.

According to Kyriakos and Ko (2004), knowledge stocks and flows contribute prominently to organizational activities. Smith et al. (2005), opined that knowledge generated newly is transformed to stock of knowledge which enhances the growth of the knowledge stock. Similarly, Marek and Tomasz (2015), averred that knowledge presents the foundation for all forms of organized activities occurring in any socio-economic system, and helps to identify the best fit for strategy formulation and implementation; that knowledge is the most important factor in the process of generating value, serves as the key driver to business development, growth and sustenance. Also, Kruja (2013), asserted that entrepreneurs are individuals who introduce new products, services and technologies; and the foundation for these developments are functions of one’s knowledge.

Conclusively, knowledge economy has direct link with small and medium enterprises development through its sub-variables. This is evidently essential

in the operations of the organizations in Nigeria and Lagos State in particular,

**5.1 RECOMMENDATIONS**

Reviewed literatures and our findings in the study have shown how important knowledge is the organizations.

- Therefore, it is opined that Lagos state government should provide access to capital for start-ups through grants and flexible loan schemes
- This paper also recommends that governments and SMEs should have a collaborative partnership for sustainable development through an interchange of technological competitive advantage
- Corporate bodies should design and create avenues that will build capacity of their workforce.
- It is equally proposed that the Nigerian government should adjust its policies to allow SMEs needing endorsements for new inventions and ideas to benefit from the flexibility of the tax systems.

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