

Impact of Entrepreneurial Infrastructure on Profitability of Hotels in Minna, Nigeria

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ABSTRACT

Purpose: This study aims to examine the impact of Entrepreneurial Infrastructure (EI) on profitability of Small and Medium Enterprises (SMEs), focusing on hotels in Minna, Nigeria.

Methodology: Sequential Explanatory Mixed research method was adopted. Purposive Sampling Technique was used to obtain a sample size of 51 out of a population of 70 hotels in Minna for collection of quantitative data via questionnaires, while Simple Random Sampling Technique was used to select 10 interviewees for collection of qualitative data via interviews. Descriptive statistics was employed in analysing the quantitative data, while thematic analysis was used in analysing the qualitative data.

Findings: Quantitative findings revealed that the available EI in Minna had a negative impact on the profitability of hotels, while qualitative findings also revealed that interviewees generally felt a poor impact of EI on the profitability of their hotels.

Practical implications: These findings would be useful to potential and practicing entrepreneurs in the hotel industry, policy makers and the academic community. It is recommended that government at all levels should formulate policies that will address challenges of the deplorable condition of EI in Nigeria.

Paper type: Research paper

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I. INTRODUCTION

Small and Medium Enterprises (SMEs) constitute about 90% of businesses in Nigeria (Abdullah & Ahmad, 2019). A major Critical Success Factor for these SMEs is access to a special kind of infrastructure known as Entrepreneurial Infrastructure (EI). EI refers to the facilities and services that exist within a geographic area which encourage new venture creation and facilitates the growth of existing SMEs (Dopazo & Zivic, 2018; Galkina & Kock, 2011; Ndayishimiye & Kanamugire, 2015). Entrepreneurial Infrastructure exists outside the firm to support entrepreneurs in exploiting investment opportunities (Woolley, 2017). The availability of these entrepreneurial infrastructural facilities raises SMEs' productivity level by bringing down input and production costs (Manggat et al., 2018). It enables them to produce on a large scale and enjoy benefits of 'economies of scale' (Ganau & Pose, 2018). Unfortunately, SMEs in Nigeria are suffering from a deplorable condition of EI (Mawoli, 2014). They are experiencing limited access to financial support services, non availability of business incubation centers, irregular supply of electricity, bad roads, poor water supply, not forgetting unfavourable regulatory/government policies (Abdullah & Ahmad, 2019; Ajayi, 2016; Battistella et al., 2018; ME, 2018; Ormazabal et al., 2018; Sani et al., 2015; Thanki & Thakkar, 2018; Vecchio et al., 2017). All these have led to SMEs' reduced efficiency and productivity, reduced revenue, weaker competitiveness and relatively poor quality of products and services (Okon, 2018).

Despite these overwhelming challenges, the hotels in Minna have been operating and contributing to the economic development of the town. They have contributed in providing facilities for accommodation, restaurant and catering services, recreation, entertainment, meetings, conferences, and employment opportunities for the people (Anunobi & Zubairu, 2015; Ayuba & Agah, 2018; Banki et al., 2016; UKEssays, 2018). The sustained growth of hotels is crucial for the economic development of Minna Metropolis (Anunobi & Zubairu, 2015; Banki et al., 2016). Therefore, in view of their strategic contributions to the economic development of the town despite the myriad of challenges faced, it is deemed necessary to investigate and understand how the existing hotels in Minna are dealing with the challenges of EI deficit, how it is affecting their profitability and how the problems can be overcome.

The aim of this study therefore is to investigate the impact of EI on profitability of hotels in Minna, the capital city of Niger state, Nigeria. The objectives of the study include: i) to assess the impact of physical infrastructure on profitability of hotels; and ii) to analyse the impact of non-physical infrastructure on profitability of hotels. The Central Research Question (CRQ) for this study is: how does EI influence the profitability of hotels? To answer this CRQ, the study had the following specific research questions: i) how does physical infrastructure influence the profitability of hotels; and ii) how does non-physical infrastructure influence the profitability of hotels. The scope of this study covers only profit oriented hotels and, the period under review is three years (2016 - 2019), therefore, the hotels included in this study have operated for not less than three years. This study was not completed without some limitations. Firstly, with thirty-six states in Nigeria, the result of this study covering the state capital of only one of the states cannot be generalised for the entire country, rather it must be taken within the context of the region covered. Secondly, only one industry out of many that make up the Nigeria economy is selected for investigation. Lastly, not all the hotels in Minna were included in the study, only those that have operated for up to three years were included.

II. LITERATURE REVIEW

The concept "Entrepreneurial Infrastructure" was coined by a group of three scholars (Teck-Meng Tan, a Professor of Accounting at Singapore Management University; Wee-Liang Tan, an Associate Professor of Strategic Management from the Singapore Management University and John Young, a Strategic Management scholar from the University of New Mexico) at the 5th World Conference on Entrepreneurship, which took place at Singapore in 1994 (Tan et al., 2000, Tan et al., 1994). They sought to explain why some geographical areas had a higher degree of entrepreneurial activities than others, and therefore used the concept to describe environmental conditions necessary for the birth of new firms and the growth of existing ones (Galkina & Kock, 2011; Ndayishimiye & Kanamugire, 2015). Over the last two decades, several studies have explored the components of EI from different perspectives (Pamić & Belullo, 2018; Woolley, 2017). There is however no consensus on the number of services and facilities that constitute EI as, context and the type of economic activity of the would-be entrepreneur or existing firm determines their infrastructural requirements (Cole et al., 2018; Woolley, 2017).

Spigel (2017) argued that there are eleven conditions necessary for the birth of new firms and growth of existing ones, they include: a supportive culture, a history of entrepreneurship, skilled and unskilled labour force, investment capital, networks, mentors and role models, policy and governance, universities, support services, physical infrastructure, and an open market. As for Bliemel et al. (2019), EI is made up of three components, namely: 1) proprietary functions (which includes financial support, marketing, R&D and new product development); 2) public resource endowments (such as culture, human and social capital) and; 3) institutional arrangements that regulate, legitimate and incentivize entrepreneurship (Bliemel et al., 2019). Additionally, Stam & Ven (2018) agreed with the three components of EI as conceptualized by Bliemel et al. (2019) above, they however added a fourth component to it which they referred to as, market demand of consumers for the products and services offered by entrepreneurs (Stam & Ven, 2018). Lastly, according to Ndayishimiye & Kanamugire (2015), EI is made up of 14 components, namely: financial support, entrepreneurship training, education, network connectivity, assistance with tasks, internal market, access to physical infrastructure, cultural and social norms, entrepreneurship policy, physical resources (industrial parks, business incubators), additional knowledge, information and communications technology, R&D centres and lastly, high-technology (Ndayishimiye & Kanamugire, 2015). In view of the fact that EI takes into account both physical and non-physical infrastructures, prior studies have broadly categorized the components of EI into two, physical and non-physical infrastructures (Bagheri et al., 2018; Islam & Hyland, 2018; Ndayishimiye & Kanamugire, 2015; Skorobogatova & Kuzmina-Merlino, 2017; Wong et al., 2015). The components of physical infrastructure adopted for investigation in this study are road and water infrastructure, while electricity supply and financial support services have been adopted for the non-physical infrastructure components.

This study adopted the Exogenous Growth Theory which was developed by an American professor of economics Robert Marton Solow, with contributions from an Australian economist Swan Trevo Winchester in 1956 (Eke et al., 2018; Pula & Elshani, 2018). The theory was originally a macro-economic theory. In the last decade however, various studies have used the theory at firm level in establishing a link between exogenous factors and firm growth, for example, Li & Pang (2010:375) opined that “Exogenous growth theory emphasizes that enterprises competitive advantage roots in the external environment”. The theory assumes that, the growth of a firm is influenced by factors that are external to the firm (Adegbite, 2012; Bonaiuti, 2018; Mansour, 2017; Olarinde & Yahaya, 2018).

III. METHODOLOGY

The aim of this study is to investigate the impact of EI on profitability of hotels in Minna. To achieve this, Sequential Explanatory Mixed Method of research was employed. This method involved a two phase process where, quantitative data is collected first and followed by qualitative data collection, with the objective of using findings of the qualitative data to explain or interpret findings of the quantitative data (Marasi et al., 2019). This method helps to triangulate findings from the two instruments of data collection, allows the strength of one method to offset the limitations of the other method, ensures extraction of a more detailed and comprehensive response from the respondents, and also allow for the creation of a solid foundation for drawing conclusions (Oteng-Ababio et al., 2019; Sigurðardóttir, 2018).

The population of this study included all the 70 hotels in Minna registered with the Hotel Owners and Managers' Association of Nigeria, Minna branch. For the quantitative part of the study, purposive sampling technique was adopted. The technique was used to select 51 hotels. Adopting purposive sampling technique in this study implied the inclusion of only those hotels that have operated for at least three years as eligible participants in the study. Generally, purposive sampling technique is a non-probability sampling technique which involves the deliberate choice of participants due to certain criteria set by the researcher (Etikan, 2016; Ezenwafor & Ukwuoma, 2017; Hasan et al., 2019; Prasetyani et al., 2019). As for the qualitative part of the study, sample size was determined by interview saturation point. There is a consensus among scholars that, saturation is achieved when input from further interviews do not continue to generate new information (Aguboshim & Miles, 2019; Dwisusanto et al., 2019; Siddiquee et al., 2017). For this study, saturation was achieved after interviewing the tenth participant.

Primary sources of data collection (questionnaire and personal interview) were used. For the quantitative part of the study, data were collected using survey questionnaire adapted from Kyunga (2017), and guided by the four EI components adopted for this study (road infrastructures, water and electricity supply including financial support services). The questionnaire was divided into two main sections: the first section collected demographic data about the firms' age, number of employees and branches, including the respondents' gender and position in the organisation; the second section covered four EI components, where each of the components had four statements developed from them to elicit the desired information about them. There were 21 questionnaire items in all (5 demographic items and 16 infrastructure items). In order to assess respondents' perception on how the EI components have influenced their profitability, they were required to indicate the extent to which they agree or disagree with the statements provided in the questionnaire. The response rate for the questionnaires administered was 100 per cent, meaning that 51 questionnaires were administered and 51 were filled and returned and were thus used for the final analysis. Data collection took four months (May 2019–September 2019). As for the qualitative part of the study, the interviewees were asked to give their perception of how each of the EI components has impacted the profitability of their hotels. Pilot study was conducted using five randomly selected hotels where questionnaires were administered to the respondents and interviews conducted. Thematic analysis of the pilot study revealed findings that necessitated modification of the initial quantitative and interview questions developed for the study.

In order to validate the instruments of data collection, copies of the questionnaire were given to scholars in the Entrepreneurship and Business Studies Department of the Federal University of Technology, Minna, so as to ensure face and content validity. The scholars were requested to read through the questionnaires and make necessary corrections/suggestions especially on grammar, wording, organization of questions and content. The feedback obtained was used to modify the questionnaire before it was administered to respondents. Reliability of the two research instruments used in this study was also tested. For the quantitative instrument (questionnaire), Chronbach's Alpha reliability test was conducted through a pilot study. In conducting the pilot study, copies of the questionnaires were administered to owners/managers of randomly selected five hotels in Minna. Data generated from the pilot study was used to measure the internal consistency of the instrument using Chronbach's Alpha reliability. The result revealed a Chronbach's Alpha coefficient of .89. Internal consistency

is measured on a scale of 0 to 1, and considered satisfactory if the Chronbach's Alpha coefficient is at least 0.7 and excellent if it is above 0.80 (Husmann & O'Loughlin, 2019; Simatupang, 2019; Zia et al., 2019). This result therefore demonstrates an excellent internal consistency. Finally, in order to ascertain reliability of the qualitative instrument, the first and second responses of the interviews conducted within an interval of one month were collated and analyzed. Findings of the thematic analysis of the interviews revealed that the instrument is consistent, predictable, and therefore reliable.

Descriptive statistics was used to analyse the quantitative data collected for this study which was measured using a 5-point likert-scale ranging from 1 point for "strongly disagree" to 5 points for "strongly agree". Furthermore, to interpret results of the mean scores for the descriptive statistics, Table 2 provides a range of values that were used, for example, a mean score of between 0.01 – 1.00 was interpreted as a very poor impact of EI on profitability. On the other hand, a mean score of between 4.01–5.00 was interpreted as an excellent impact of EI on profitability, meaning that the available EI has led to an excellent increment in the profitability of the hotels. Table 1 presents a detailed description and interpretation of the likert-scale.

Table 1: Likert-Scale Description and Interpretation

<i>Likert Scale</i>	<i>Likert Description</i>	<i>Value Allocation</i>	<i>Likert Interpretation</i>
1	<i>Strongly disagree</i>	<i>0.01 – 1.00</i>	<i>Very poor impact</i>
2	<i>Disagree</i>	<i>1.01 – 2.00</i>	<i>Poor impact</i>
3	<i>Undecided</i>	<i>2.01 – 3.00</i>	<i>Average impact</i>
4	<i>Agree</i>	<i>3.01 – 4.00</i>	<i>Good impact</i>
5	<i>Strongly agree</i>	<i>4.01 – 5.00</i>	<i>Excellent impact</i>

Source: Author’s Field Survey, (2019)

As for qualitative part of the study, thematic analysis was used in analysing the transcribed audio recordings of the interviews conducted involving ten randomly selected hotels. The interview sessions which lasted for an average of eight minutes each, were audio recorded with the permission of the interviewees on the condition of anonymity. This study followed “Braun and Clarke's six phase process of thematic analysis” (Saylor et al., 2018:45). The process began with producing a verbatim transcript from the audio recordings and, reading the transcript from a non-critical standpoint just to become familiar with the data. In the second phase, the transcript was re-read after which codes were assigned to the data. Phase three involved the search for patterns, commonalities and identification of themes. The fourth phase involved reviewing and refining of the identified themes. The fifth phase of the analysis involved defining and naming the themes identified. In the last phase of the thematic analysis, a presentation of the thematic findings was done.

IV. RESULTS AND DISCUSSION

A. Demographic profile of the respondents

In describing the demographic characteristics of the hotels investigated, the first item for presentation is gender distribution of the owners/managers of the hotels which revealed that 82 percent of the respondents were male, with only 18 percent being female, showing a clear male dominance of the industry. For the years of existence of the hotels, 43 percent of the hotels had operated for between 4 to 7 years, while 12 percent had operated for between 8 to 11 years. However, 20 percent of the hotels appear highly experienced in the business for they have operated for more than eleven years and, 25 percent of the firms are relatively new in business, for they have only operated for 3 years. As for number of employees 41 percent of the hotels have employee range of 10 to 19, followed by 29 percent of the hotels whose number of employees range between 20 to 29. The relatively smaller of the hotels investigated constitute 18 percent of the hotels having between 1 and 9 number of employees while, 12 percent of them are relatively large, for they have the number of their employees as greater than or equal to 30. Majority of the hotels investigated, exactly 53 percent of them operate from their

headquarters, while 21.5 percent of them have between 1 to 3 branches. Another 21.5 percent of them have between 4 to 6 branches nationwide while only 4 percent of them have more than 7 branches. Position occupied by the respondents is the final demographic profile investigated and, 57 percent of the respondents were managers of the hotels while, 29 percent were owner/managers. Hotel owners constitute 10 percent and, only 4 percent of the respondents were neither managers nor owners of the hotels investigated.

B. Impact of physical infrastructure on the profitability of hotels

Table 2: impact of physical infrastructure on profitability of hotels.

<i>Item</i>	<i>N</i>	<i>X</i>	<i>SD</i>
<i>Impact of physical infrastructure on the profitability of hotels in Minna.</i>	<i>51</i>	<i>2.79</i>	<i>1.56</i>

Source: Author’s Field Survey, (2019)

Table 2 shows the mean score and standard deviation of 51 respondents for the impact of physical infrastructure on profitability of hotels in Minna. It can be observed that the mean score is 2.79 which in Table 1 is interpreted as an “average impact” of physical infrastructure on profitability of hotels. This further means that the hotel owners/managers surveyed in this study felt that the available physical infrastructure in Minna had contributed moderately to their profitability.

1. Thematic analysis of how physical infrastructure influenced profitability of hotels.

In investigating how physical infrastructure influenced the profitability of hotels, the two components of physical infrastructure adopted for this study (water supply and road infrastructures) were used as the sub-themes for analysis, beginning with water supply then road infrastructure. In order to assess how water supply by Niger State Water Board (NSWB) influenced the profitability of hotels, 10 owners/manages of hotels were interviewed and it was found that constant water supply is a critical success factor for the hotels. Unfortunately, the current condition of water supply is not favourable for the profitability of their business. 4 out of the 10 participants (Ps) in the study do not have their hotels connected to the public water source managed by NSWB. In the words of P3 “*Actually, since we started operation, we’ve never had anything like water being supplied from NSWB*”. P6 added that “*most of the pipes have been broken far away from here*”. The remaining 6 of the participants have water supplied to their hotels for few hours once or twice in a week which is perceived to be grossly inadequate. P7 was of the opinion that “*water supply in Minna is not constant, so i am not relying on NSWB for this business*” P1, P8, P9 and P10 could also not agree less. In order to cope with this huge challenge of inadequate water supply, all the 10 interviewees have motorized boreholes as their alternative source of water. In addition to borehole, P8 and P5 also patronize the services of commercial water tankers to augment supply from the boreholes. On how this shortage of water supply affects their profitability, P8 opined that “*If water supply is constant and regular, cost of getting water from other sources would be reduced thereby increasing the profitability of the business*”. Inadequate water supply was found to increase the operational cost of the hotels thereby reducing their profit.

As for how road infrastructure has influenced the profitability of hotels in Minna, it was found that, 4 of the interviewees have their hotels located by major road sides and actually see it as an advantage because it increases customers’ access to their hotels. According to P1 “*the accessibility of our hotel definitely is an advantage to us*. This has helped to increase profitability of their hotels due to higher patronage. However, the remaining 6 have their hotels located in the interior parts of the town with bad roads leading to them. According to P9 “*the road to my hotel is not really good, so it discourages some guests from patronizing my hotel thereby reducing my profit*” It was also found that, of greater concern to the hoteliers is the roads leading to Minna rather than the ones within the town. P6, P7, P8, P9 and P10 all agreed with this opinion.

C. Impact of non-physical infrastructure on profitability of hotels in Minna

Table 3 Impact of Non-Physical Infrastructure on the Profitability of Hotels.

<i>Item</i>	<i>N</i>	<i>X</i>	<i>SD</i>
<i>Impact of non-physical infrastructure on the profitability of hotels</i>	<i>51</i>	<i>1.92</i>	<i>1.38</i>

Source: Author’s Field Survey (2019)

Table 3 shows the mean score of 51 respondents for the impact of non-physical infrastructure on profitability of hotels. It can be observed that the mean score is 1.92 which in table 1 is interpreted as “poor impact”. This further means that hoteliers surveyed felt that the available non-physical infrastructure in Minna had contributed very little positive impact on the profitability of their hotels.

1. Thematic analysis of how non-physical infrastructure influences profitability of hotels in Minna.

The two components of non-physical infrastructure (electricity supply and financial support services) were used as the sub-themes for analysis, beginning with electricity supply then followed by financial support services. Interviews conducted revealed a general consensus among the interviewees that electricity is one of the most critical infrastructures for hotels. In the words of P6, “it is the infrastructure that affects the profitability of hotel business the most”. P7 added that “Without electricity, even the borehole that supplies water does not function”. P7 further said that “public electricity supply is safer for our electronics, it comes with silence, saves our guests the noise of generators and it is cheaper”. Unfortunately, it has generally been in short supply thereby reducing profitability of the hotels in Minna. However, 2 of the 10 interviews conducted revealed a favourable impact of public electricity supply on their profitability, because of the constant power supply to their hotels, but the remaining 8 interviewees revealed that the inadequate power supply has had a very poor impact on the profitability of their hotels. According to P3 constant power failure “made us to run at a loss”. In fact, P10 commented that “electricity alone consumes half of our profit”. As for the alternative sources of power to the hotels, all the interviewees have different sizes of generators used to generate power to serve as alternative to the public power source. In addition to the use of generators, P5 uses solar system while P8 uses inverter to support the generator.

Interviews conducted to assess how financial support services influenced the profitability of hotels in Minna revealed that, 8 of the interviewees have never benefited from any form of financial support from the government, so, financial support services have not made any impact on profitability of their hotels in the last three years. 2 of the interviewees declined to make any comment on the finances of their hotels. P6 commented that, “I don’t think there is any programme on ground that support hotel owners in Minna”. This was found to have slowed down the hotels' growth and expansion projects. P2 also said that, “We have never collected any loan or benefited from any financial support from government, so there is no impact. In trying to know how the hotels have been raising funds to finance the operations of their hotels, it was found that 8 of them raise their funds largely through ploughed-back profits. The remaining 2 as mentioned earlier declined to make any comment on the finances of their hotels. In addition to ploughing back profits, P8 and P9 also rely on personal savings, family members and friends.

D. Impact of EI on Profitability of Hotels in Minna

Table 4 Descriptive Statistics Showing the Impact of EI on the Profitability of Hotels in Minna.

<i>Item</i>	<i>N</i>	<i>X</i>	<i>SD</i>
<i>Impact of Entrepreneurial infrastructure on the profitability of hotels in Minna</i>	<i>51</i>	<i>2.35</i>	<i>1.46</i>

Source: Author’s Field Survey, (2019)

Table 4 shows the mean score of 51 respondents for the impact of EI on profitability of hotels. It can be observed that the mean score is 2.35 which is interpreted in table 1 as “average impact”. This further means that

the hoteliers surveyed generally felt that the available EI in Minna have had a moderate impact on their profitability.

1. Summary of thematic analysis

Entrepreneurial Infrastructure has been found to be a critical success factor for hotels. Its deficit in supply however has been found to reduce profitability of the hotels surveyed within the last three years. This was found to have been caused by the increased cost of operation and service delivery owing to EI deficit. A reasonable part of their profits goes into alternative means of EI in order to meet up with their customers' demand. Interestingly, a disproportionate EI availability was found where, hotels located in some parts of the town have more access to some EI than others, leading to a varying impact on their profitability.

E. Discussion of Findings

In order to answer this study's Central Research Question, both quantitative and qualitative answers to the research question have been discussed in the subsequent paragraphs. A mean score of 2.5 has been used as a criterion for decision to determine a positive or negative impact of EI on profitability. This criterion requires a mean score of at least 2.5 for impact to be considered "positive"; a lower mean score is considered a "negative impact".

Preliminary findings revealed that the interviewees felt that the available physical infrastructure in Minna had contributed moderately to their profitability. They however had a contrary perception on how non-physical infrastructure had influenced the profitability of their hotels as, it was felt that the available non-physical infrastructure had contributed poorly to profitability of their hotels. This finding highlights the dearth of non-physical infrastructure in Minna. It also revealed that, the available physical infrastructure has had a greater impact on profitability of hotels than the available non-physical infrastructure. Furthermore, it also explains which of the two dimensions of EI adds more to the operational costs of running the hotels. The main quantitative finding of how EI influenced profitability of hotels in Minna revealed a mean score of 2.35. By this result, the 2.5 criterion was not met and therefore, there has been a negative impact of EI on profitability of hotels in Minna within the last three years.

As for the qualitative findings of how EI influenced profitability of hotels in Minna, it was found that the interviewees considered EI as a critical success factor for hotels. Its deficit has increased the operational cost of the hotels, led to customer dissatisfaction and reduced profitability of the hotels. A reasonable part of their profits goes into alternative means of EI in order to meet up with customers' demand.

V. CONCLUSION

This study examined the impact of EI on profitability of hotels in Minna, using "sequential explanatory mixed method of research. Findings revealed that there was a negative impact of EI on profitability of hotels, meaning that the available EI in Minna has only contributed little to profitability of the hotels within the last three years (2016-2019). Until and unless the Nigerian government ensures that basic infrastructure becomes completely reliable and available for all business, the dream of a thriving entrepreneurial culture that will serve as the engine of sustainable economic and social growth will remain just a dream. History has shown that all economies that have successful entrepreneurial cultures have taken these basic infrastructure for granted and have begin to focus on more advanced entrepreneurial infrastructure that truly gives businesses sustainable competitive advantages. Nigeria is far away from achieving the level of advancement. First things first, get the basic infrastructure right first and then true entrepreneurial progress can begin.

The findings of this study have shown that owners and managers of hotels in Minna are facing critical EI deficit which is having a negative consequence on their profitability and, of greater concern is the non-physical infrastructure. This implies more expenses on non-physical infrastructure than on physical infrastructure. It also implies general increased operational expenses which reduces profitability and slows down growth rate. By implications also, the findings of this study makes the owners and managers of hotels not only to be aware of the extent of EI deficit in Minna but also the strategies and alternative means to overcome the deficit. Furthermore, findings of this study serve to enlighten policy makers, with respect to the hotels, to formulate policies that will address the challenges of poor water supply, bad roads, constant power failure and poor access to financial support services to facilitate new ventures creation and growth of existing ones.

This study suffered some research limitations. Firstly, with thirty-six states in Nigeria, findings of this study covering the state capital of only one of the states cannot be generalised for the entire country, rather it must be taken within the context of the region covered. Secondly, only one industry out of many that make up the Nigeria economy is selected for investigation. Lastly, not all the hotels in Minna were included in the study,

only those that have operated for up to three years were included. Future studies can bridge this research gaps by carrying out research in other parts of Nigeria on the same subject matter. Further studies could also explore other industries not covered by this study or, the endogenous factors that influence the profitability of SMEs since this study has explored some of the exogenous factors. Despite these limitations, this study contributes to the body of knowledge on the nexus between EI and general performance of SMEs.

REFERENCE

- Abdullah, A., & Ahmad, K. (2019). *Crowdfunding as financial option for small and medium enterprises (SMEs) in Nigeria*. <https://www.semanticscholar.org/paper/Crowdfunding-as-financial-option-for-small-and-in-Abdullah-Ahmad/6cb1e8690006da8e92f67068854b14002219a0c7>
- Adegbite, S. A. (2012). An Evaluation of Technology Innovation on the Performance of Indigenous Textile Weaving Firms in Southwestern Nigeria. *Journal of Business & Management*, 1(1), 1–14. <https://doi.org/10.12735/JBM.V1I1P01>
- Aguboshim, F. C., & Miles, G. (2019). *Well-Defined Interface Development Process: An Important Interface Design Strategy to Create Easy-to-use Banking ATM System Interfaces in Nigeria*. <https://www.semanticscholar.org/paper/Well-Defined-Interface-Development-Process%3A-An-to-Aguboshim-Miles/bef845aa8af5a3e09445c5b129f8eeee9383a7df>
- Ajayi, B. (2016). The Impact of Entrepreneurial Orientation and Networking Capabilities on the Export Performance of Nigerian Agricultural SMEs. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 2(1). <https://doi.org/10.1177/2393957515619720>
- Anunobi, A. I., & Zubairu, S. N. (2015). Post-Occupancy Evaluation of Some Selected Hotels in Minna, North Central Nigeria. *Academic Research International*, 6(6), 94–102. [http://www.savap.org.pk/journals/ARInt./Vol.6\(6\)/2015\(6.6-09\).pdf](http://www.savap.org.pk/journals/ARInt./Vol.6(6)/2015(6.6-09).pdf)
- Ayuba, P., & Agah, F. A. (2018). ASSESSMENT OF FLEXIBLE FEATURES IN THE DESIGN OF EVENT CENTRES IN MINNA, NIGER STATE NIGERIA. *Nigerian Journal of Technology (NIJOTECH)*, 37(3), 587 – 599. [file:///C:/Users/GILANG/Downloads/174969-Article Text-447764-1-10-20180723 \(2\).pdf](file:///C:/Users/GILANG/Downloads/174969-Article%20Text-447764-1-10-20180723%20(2).pdf)
- Bagheri, M., Shojaei, P., & Khorami, M. T. (2018). A comparative survey of the condition of tourism infrastructure in Iranian provinces using VIKOR and TOPSIS. *Decision Science Letters*, 7(1), 87–102. <https://doi.org/10.5267/j.dsl.2017.4.001>
- Banki, M. B., Ismail, H. N. Bin, Danladi, M. H., & Dalil, M. (2016). Measuring Hotels Service Quality in Nigeria: A Case Study of Minna Township. *Journal of Quality Assurance in Hospitality & Tourism*, 17(1), 71–88. <https://doi.org/10.1080/1528008X.2016.1099997>
- Battistella, C., Cagnina, M. R., Cicero, L., & Preghenella, N. (2018). Sustainable Business Models of SMEs: Challenges in Yacht Tourism Sector. *Sustainability*, 10(10). <https://doi.org/10.3390/su10103437>
- Bliemel, M., Flores, R., Klerk, S. De, & Miles, M. P. (2019). Accelerators as start-up infrastructure for entrepreneurial clusters. *Entrepreneurship & Regional Development*, 31(1–2), 133–149. <https://doi.org/https://doi.org/10.1080/08985626.2018.1537152>
- Bonaiuti, M. (2018). Are we entering the age of involuntary degrowth? Promethean technologies and declining returns of innovation. *Journal of Cleaner Production*, 197, 1800–1809. <https://doi.org/10.1016/J.JCLEPRO.2017.02.196>
- Cole, M. A., Elliott, R. J. R., Occhiali, G., & Strobl, E. (2018). Power outages and firm performance in Sub-Saharan Africa. *Journal of Development Economics*, 134(C), 150–159. <https://doi.org/10.1016/j.jdeveco.2018.05.003>
- Dopazo, J. P., & Zivic, F. (2018). *Supporting University Ventures in Nanotechnology, Biomaterials and Magnetic Sensing Applications* (1st ed.). Springer Cham. <https://doi.org/https://doi.org/10.1007/978-3-319-61237-9>
- Dwisusanto, Y. basuki, Lianto, F., & Arifin, L. S. (2019). THE MEANING OF “BOUNDARY LINE” DUE TO THE PRECAST MODULE SYSTEM IN ‘RUSUNAWA’ BUMI CENGKARENG INDAH, JAKARTA, INDONESIA. *DIMENSI (Journal of Architecture and Built Environment)*, 45(2). <https://doi.org/10.9744/dimensi.45.2.173-180>
- Eke, O., Okoye, L. U., & Ebuomwan, G. (2018). A Dynamic Analysis of the Nexus between Entrepreneurship, Human Capital Development and Financial Deepening: Evidence from Selected African Economies | Semantic Scholar. *Journal of Applied Economic Sciences*, 13(5). <https://www.semanticscholar.org/paper/A-Dynamic-Analysis-of-the-Nexus-between-Human-and-Eke-Okoye/6f626f91f5a41126dec6692e43a222ac725818ed>
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1). <https://doi.org/10.11648/j.ajtas.20160501.11>

- Ezenwafor, J. I., & Ukwuoma, A. N. (2017). CONTRIBUTIONS OF THE INTERNET TO THE ACADEMIC DEVELOPMENT OF UNIVERSITY BUSINESS EDUCATION UNDERGRADUATES IN ANAMBRA STATE. *NAU Journal of Technology & Vocational Education*, 2(1), 35–44.
- Galkina, T., & Kock, S. (2011). The influence of entrepreneurial infrastructure on entrepreneur networking: a comparative case study of Russian and Finnish founding teams. *International Journal of Entrepreneurship and Small Business*, 13(3), 238–254. <https://doi.org/10.1504/IJESB.2011.041659>
- Ganau, R., & Pose, A. R. (2018). Industrial clusters, organized crime, and productivity growth in Italian SMEs. *Journal of Regional Science*, 58(2), 363–385. <https://doi.org/10.1111/jors.12354>
- Hasan, H., Sugiharto, D. Y. P., & Sunawan, S. (2019). *Group Counseling of Cognitive Behavior with Self Instruction Technique On Self Efficacy and Academic Burnout*. 8(1). <https://journal.unnes.ac.id/sju/index.php/jubk/article/view/27663>
- Husmann, P. R., & O'Loughlin, V. D. (2019). *Another Nail in the Coffin for Learning Styles? Disparities among Undergraduate Anatomy Students' Study Strategies, Class Performance, and Reported VARK Learning Styles*. 12(1), 6–19. <https://doi.org/10.1002/ase.1777>
- Islam, A., & Hyland, M. (2018). *The Drivers And Impacts of Water Infrastructure Reliability: A Global Analysis of Manufacturing Firms*. <https://doi.org/https://doi.org/10.1596/1813-9450-8637>
- Kyunga, F. K. (2017). *Infrastructural Development and Growth of Small and Micro Enterprises in the Nairobi Section of Thika Road, in Kenya* [University of Nairobi]. <http://erepository.uonbi.ac.ke/handle/11295/102107>
- Li, X., & Pang, L. (2010). Empirical analysis on Chinese self-brand automobile enterprises' competitive advantage. *International Journal of Learning and Intellectual Capital*, 7(3–4), 374–393. <https://doi.org/10.1504/IJLIC.2010.034375>
- Manggat, I., Zain, R., & Jamaluddin, Z. (2018). The Impact of Infrastructure Development on Rural Communities: A Literature Review. *International Journal of Academic Research in Business & Social Sciences*, 8(1), 637–648. <https://doi.org/10.6007/IJARBS/v8-i1/3837>
- Mansour, M. (2017). *What Drives Innovation and Productivity? A Case Study Using Data for German Firms - Research Repository* [University of Gloucestershire]. <https://eprints.glos.ac.uk/5593/>
- Marasi, S., Wall, A., & Wilson, K. (2019). Participant carelessness: Is it a substantial problem with survey data? *Electronic Journal on Business Research Methods*, 17(1), 1–16. https://www.researchgate.net/publication/332145092_Participant_carelessness_Is_it_a_substantial_proble_m_with_survey_data
- Mawoli, M. (2014). Service Quality of Public Utilities in Nigeria: A Survey of Small Business Enterprises Managers in Niger State. *Centerpoint Journal (Humanities Edition)*, 17(1), 1–17. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3065565
- ME, A. (2018). RELEVANCE OF INFORMATION TECHNOLOGY IN THE EFFECTIVE MANAGEMENT OF SELECTED SMES IN LAGOS STATE NIGERIA. *Academy of Strategic Management Journal*, 17(1), 1–15. <https://www.abacademies.org/articles/Relevance-of-information-technology-in-the-effective-management-1939-6104-17-1-174.pdf>
- Ndayishimiye, N., & Kanamugire, N. (2015). *Entrepreneurial Infrastructure for the Development of Entrepreneurs in Rwanda* [Linnaeus University]. <http://www.diva-portal.se/smash/get/diva2:1037281/FULLTEXT01.pdf>
- Okon, E. O. (2018). MSMEs as Engine of Economic Growth in Nigeria: Challenges and Prospects of Scalability. *Australian Finance & Banking Review*, 2(1), 1–10. <https://doi.org/https://doi.org/10.46281/afbr.v2i1.75>
- Olarinde, M. O., & Yahaya, Z. A. (2018). African growth convergence: role of institutions and macroeconomic policies. *International Journal of Development Issues*, 17(3), 346–371. <https://ideas.repec.org/a/eme/ijdipp/ijdi-12-2017-0212.html>
- Ormazabal, M., Prieto-Sandoval, V., Puga-Leal, R., & Jaca, C. (2018). Circular Economy in Spanish SMEs: challenges and opportunities. *Journal of Cleaner Production*, 185(11), 157–167. <https://doi.org/10.1016/j.jclepro.2018.03.031>
- Oteng-Ababio, M., Owusu, G., & Asafo, D. M. (2019). Following the footsteps: Urbanisation of Wa Municipality and its synergism in risk accumulation, uncertainties and complexities in urban Ghana. *Jamba (Potchefstroom, South Africa)*, 11(1), 1–10. <https://doi.org/10.4102/JAMBA.V11I1.479>
- Pamić, R. K., & Belullo, A. (2018). Investments' background of entrepreneurial zones in Croatia. *Economic Research-Ekonomska Istraživanja*, 31(1), 1590–1606. <https://doi.org/10.1080/1331677X.2018.1506707>
- Prasetyani, D., Ashar, K., Susilo, S., & Multifiah, M. (2019). The meaning of business success: Moslem women entrepreneur in Surakarta. *International Journal of Trade and Global Markets*, 12(2), 168–186. <https://ideas.repec.org/a/ids/ijtrgm/v12y2019i2p168-186.html>
- Pula, L., & Elshani, A. (2018). Role of Public Expenditure in Economic Growth: Econometric Evidence from

- Kosovo 2002–2015. *Baltic Journal of Real Estate Economics and Construction Management*, 6(1), 74–87. <https://doi.org/10.2478/BJREECM-2018-0006>
- Sani, A., Liza, G. P., Zainudin, A., & Izah, M. T. (2015). *The effect of finance, infrastructure and training on the performance of small and medium scale enterprises (SMEs) in Nigeria*. <https://www.semanticscholar.org/paper/The-effect-of-finance%2C-infra-structure-and-training-Sani-Liza/4aff76a35403ccfd1b078d65d90d2ea8149be035>
- Saylor, J., Hertsenber, L., McQuillan, M., O'Connell, A., Shoe, K., & Calamaro, C. J. (2018). *Effects of a service learning experience on confidence and clinical skills in baccalaureate nursing students*. 43–48. <https://doi.org/10.1016/j.nedt.2017.11.009>
- Siddiquee, N. A., Xavier, J. A., & Mohamed, M. Z. (2017). What Works and Why? Lessons from Public Management Reform in Malaysia. *International Journal of Public Administration*, 42(1), 14–27. <https://doi.org/https://doi.org/10.1080/01900692.2017.1390762>
- Sigurðardóttir, I. (2018). Wellness and equestrian tourism – new kind of adventure? *Scandinavian Journal of Hospitality and Tourism*, 18(4), 377–392. <https://doi.org/https://doi.org/10.1080/15022250.2018.1522718>
- Simatupang, D. O. (2019). Farmers motivation in banking agriculture credit loans. *International Journal of Civil Engineering and Technology*, 10(2), 35–39. https://www.researchgate.net/publication/332251318_Farmers_motivation_in_banking_agriculture_credit_loans
- Skorobogatova, O., & Kuzmina-Merlino, I. (2017). Transport Infrastructure Development Performance. *Procedia Engineering*, 178, 319–329. <https://doi.org/https://doi.org/10.1016/j.proeng.2017.01.056>
- Spigel, B. (2017). The Relational Organization of Entrepreneurial Ecosystems. *Entrepreneurship Theory and Practice*. <https://doi.org/https://doi.org/10.1111/etap.12167>
- Stam, F. C., & Ven, A. van de. (2018). *Entrepreneurial Ecosystems: A Systems Perspective* (No. 18–06). <https://ideas.repec.org/p/use/tkiwps/1806.html>
- Tan, T. M., Tan, W. L., & John, E. Y. (1994). A Conceptualisation of the Entrepreneurial Infrastructure: The Case of Singapore. *5th ENDEC World Conference on Entrepreneurship 1994: The Pursuit of Opportunity, Singapore*, 76–84. https://ink.library.smu.edu.sg/soa_research/537/
- Tan, T. M., Tan, W. L., & Young, J. E. (2000). Entrepreneurial Infrastructure in Singapore: Developing a Model and Mapping Participation. *The Journal of Entrepreneurship*, 9(1). https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=2381&context=lkcsb_research
- Thanki, S. J., & Thakkar, J. (2018). Interdependence analysis of lean-green implementation challenges: a case of Indian SMEs. *Journal of Manufacturing Technology Management*, 29(2), 295–328.
- UKEssays. (2018). *The Economic Importance Of Hospitality Industry Tourism Essay*. <https://www.ukessays.com/essays/tourism/the-economic-importance-of-hospitality-industry-tourism-essay.php>
- Vecchio, P. Del, Minin, A. Di, Petruzzelli, A. M., Panniello, U., & Pirri, S. (2017). Big data for open innovation in SMEs and large corporations: Trends, opportunities, and challenges. *Creativity and Innovation Management*, 27(1), 6–22. <https://doi.org/https://doi.org/10.1111/caim.12224>
- Wong, M. C. S., Li, S. C. Y., & Ku, A. C. T. (2015). Impacts of Intellectual Capital on Profitability: An Analysis on Sector Variations in Hong Kong. *Journal of US-China Public Administration*, 12(8), 614–626. <https://doi.org/10.17265/1548-6591/2015.08.003>
- Woolley, R. (2017). *Understanding Inclusion Core Concepts, Policy and Practice* (1st ed.). Routledge. <https://www.routledge.com/Understanding-Inclusion-Core-Concepts-Policy-and-Practice/Woolley/p/book/9781138241688>
- Zia, S., Obaid, M. S., Ahmed, J., & Qazi, S. (2019). Key-feature Questions for Assessment of Clinical Reasoning: Reliable and Valid or Not? *Rawal Medical Journal*, 44(1), 189–191. https://www.researchgate.net/profile/Jamshed-Ahmed/publication/333175881_Key_feature_problems/links/5cdf08a592851c4eabaa3cfb/Key-feature-problems.pdf