ABSTRACT
The paper explored the effect of entrepreneurial innovation on firm resilience in selected Nigerian hospitality firms using a cross-sectional survey. Twenty hotels that are registered with the Enugu State Ministry of Culture and
Tourism were surveyed with a simple random sampling technique. The demographic profiles were analyzed using frequency distribution and linear regression was employed to analyze the formulated hypotheses. The study found that entrepreneurial innovation dimensions have a positive significant effect on situation awareness and adaptability. It was concluded that entrepreneurial innovation measured in terms of service innovation and marketing innovation enhances the resilience capacity of hospitality firms through situation awareness and adaptability. The implication of this study is that entrepreneurs in both hospitality and service-oriented sectors should embrace innovation in service delivery to their esteemed customers to enhance their resilience capacity.

**Keywords:**

*Entrepreneurial innovation, resilience, service innovation, marketing innovation, adaptability, situation awareness.*

1. **Introduction**

Entrepreneurial innovation is a major issue that is attracting the attention of researchers and business practitioners across the globe due to its significance on economic advancement. Entrepreneurial innovation is the lubricant that pilots the wheels of every country’s economy through the discovery of new products and services quite apart from inventions. Thus the quest for new opportunities has prompted both new and existing firms to configure and re-configure its structures so as to survive in the competitive business environment. It is based on this premise that entrepreneurs employ innovation that gives them an edge over their rivals in the same or different industry. Innovation is the key to the economic development of any country or firm (Hisrich,
Tourism were surveyed with a simple random sampling technique. The demographic profiles were analyzed using frequency distribution and linear regression was employed to analyze the formulated hypotheses. The study found that entrepreneurial innovation dimensions have a positive significant effect on situation awareness and adaptability. It was concluded that entrepreneurial innovation measured in terms of service innovation and marketing innovation enhances the resilience capacity of hospitality firms through situation awareness and adaptability. The implication of this study is that entrepreneurs in both hospitality and service-oriented sectors should embrace innovation in service delivery to their esteemed customers to enhance their resilience capacity.

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1. Introduction

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From the foregoing, the resilience of firms is built upon a strong entrepreneurial innovation (Backman, Johan & Özge, 2017, p.1598). In order to overcome the environmental crisis and natural disaster, entrepreneurs tend to develop strong capabilities and competencies that will enhance their resilience especially in terms of uncertainties. How then does been resilient capacity help entrepreneurs? Edeh, Chukwu and Osueke (2019, p.278) in their argument contended that organisational resilience improves their strengths to attract more opportunities in the external environment. In addition, Gunasekaran, Rai and Griffin (2011, p.5491) added that in the midst of uncertainties, entrepreneurs may not have what it takes to avert the danger facing them but their immunity of resilient can resurrect in tacking such negative effects. In this research, the point of focus is geared towards investigating entrepreneurial innovation as a predictor of firm resilience in selected Nigerian hospitality firms with a specific interest in hotels operating in Enugu State as geographical scope. The reason for chosen hospitality firms is because it contributes sixty percent of Nigeria’s economic development. Hotel which is the sub-sector of the hospitality industry also provides fifty percent of job employment to the Nigerian economy as well as the development of rural communities where the hospitality firms are located. On the other hand, Nigerian entrepreneurs in the hotel business are innovative and risk-takers thereby engendering the establishing new hotels across the country.

Nevertheless, trends of studies have shown that entrepreneurial innovation is the predictability of other organisational weaknesses
(Falahat, Tehseen & Horne, 2018, p.3; Xuhua, Spio-Kwofie, Udimal & Addai, 2018, p.9; Ojo, Petrescu, Petrescu & Bilcan, 2017, p.264). These trends of studies failed to investigate the predictability of entrepreneurial innovation on firm resilience in Nigeria hospitality industry. Thus, in order to fill these research gaps, this study investigates the relationship between entrepreneurial innovation and firm resilience in Nigeria hospitality industry. This research is expected to contribute to entrepreneurship literature and provide additional evidence on how entrepreneurial innovation influences the resilience of hospitality firms in Nigeria. This will assist policymakers and industry practitioners in reaching policy decisions with regards to entrepreneurial innovation and firm resilience.

2. Literature review

2.1. Entrepreneurial Innovation

Innovation has become a family name in entrepreneurship discipline. This is because many firms all over the world are innovative by coming up with new ideas and modifying the existing ones according to customer’s expectations (Ojo, Petrescu, Petrescu & Bilcan., 2017, p.264). The emphasis on innovation was promoted by Schumpeter who strongly held that innovation is a radical and disruptive action from the existing practice or cultures (Schumpeter, 1934). He identified five typologies of innovation to include; new product introduction; new market creation; acquisition of new source for supply of raw materials and or finished products; creation of new industrial organization; and introduction of a new product with significant improvement (Schumpeter, 1942, p.7; Apostolos, Soldatou & Anna-
Ipapanti, 2019, p.38). Elaborating further, Manimala (1992, p.49) classify innovation to include marketing innovation, operations innovation, boundary management innovation and organizational innovation. Other scholars have typologies innovation to include service innovation, sustainability innovation, process innovation, marketing innovation, technological innovation, management innovation and business model innovation (Martin-Rios, 2020; Varis & Littunen, 2010, p.133).

In this research, entrepreneurial innovation is concerned with new approaches that entrepreneurs employ to identify new opportunities, improve on existing product or services and reconfigure organisational modes of operation to achieve organisational goals. On another hand, Manimala (1992, p.50) perceived entrepreneurial innovation as anything undertaken by an entrepreneur that gives him/her a competitive advantage over his/her competitors. It has been shown and validated that entrepreneurial innovation has four dimensions; boundary management innovation, operations innovation, organizational innovation and market-related innovation (Manimala, 1992, p.47). Entrepreneurs from an existing firm are the agents of creative destruction due to their quest for discovering new ways through which they can take advantage of market space. In doing this, most entrepreneurs prefer to acquire a certain amount of knowledge at their workplace which will give them all the skills they will require to come up with their business definition to establish their own enterprise. This is the reason why some products today have different names but similar attributes (Ribau, Moreira & Raposo 2017, p.925; Hristov & Reynolds, 2015, p.137). Thus, creative destructive
becomes real when the customer compares two products only to discover they are almost the same but have different brand names. Therefore, entrepreneurial innovation gives entrepreneurs an opportunity to become their own bosses thereby providing jobs for people that are willing and ready to work. In the establishment of the new business venture through innovation, entrepreneurs have assisted the government to reduce the unemployment rate in the society (Tajuddin, Iberahim & Ismail, 2015, p.91; Prajogo, 2016, p.245). Some examples of entrepreneurial innovation results include a personal computer, biotechnology, and Internet search engines (González-Cruz & Devece, 2018, p.246; Autioa, Kenney, Mustar, Siegel & Wright, 2014, p.1101).

Drawing from the above, hospitality entrepreneurs’ tactics to foster new ideas is dependent on their capability to be innovative in terms of service innovation, technological innovations, marketing innovation and process innovation (Martin-Rios, 2020; Xuhua, Spio-Kwofie, Udimal & Addai, 2018, p.11). Innovations usually manifest itself as changes in firm capabilities that present opportunity at the end, together with service and product development (Gustafsson, Kristensson & Witell, 2012, p.320). Service innovations in the hotel sector are concerned with service rendered to customers’ or guests which includes room services, 24hrs front desk constant communications with guests, daily replacement of guest amenities, beddings, breakfast, fast WIFI connections in all the rooms (Xuhua, Spio-Kwofie, Udimal & Addai, 2018, p.15). Service innovation is a new customer interaction that enhances the fast delivery of services to the customer in their respective geographical locations (Kylliäinen, 2019). Other
technological enhanced service innovation includes facial recognition, voice-controlled rooms, robots, RFID wristbands, chatbots, mobile room keys, virtual reality, and augmented reality (Morgan, 2020). Albeit, apart from the enormous benefits of service innovations to service delivery, it also comes with several challenges ranging from lack of operational capabilities, inadequate capital to implement, lack of employee motivation, leadership failure, and excessive bureaucratic processes (Randhawa, Kim & Cichy, 2017, p.187). On another hand, Victorino, Verma, Plaschka & Dev, 2005, p.558 accentuated that service innovation can be successfully implemented if change agents lead by example, provision of adequate resources, provision of incentives to employees and orientation of customers. From the foregoing, the first hypothesis is hereby formulated.

**HA1: Service innovation has a significant effect on adaptability**

In line with the above, the second entrepreneurial innovation that hotel entrepreneurs employed to improve their resilience capacity is marketing innovation (Apostolos, Soldatou & Anna-Ipapanti, 2019, p.40). Marketing innovation refers to as innovative processes and activities that entrepreneurs employ to advertise their new products and services to a group of customers (Farooq, 2019). Marketing innovation helps entrepreneurs in hotel firms to improve customer satisfaction by using online brand communities and social media platforms to attract, retain and maintain a constant relationship with their customers (Martin-Rios, 2020). Innovation in this context does not work in isolation as it has direct significant economic implications for hotels. Marketing innovation comprises of an active company
website, social media presence, and unique dresses for all employees, serene conference rooms, and good customer relationship management techniques (Xuhua, Spio-Kwofie, Udimal & Addai, 2018, p.12).

However, some of the challenges of marketing innovation are risk aversion, unskilled manpower that would drive the new innovation, workers resistance to change and customers’ inability to respond quickly to new products (D’Este, Iammarino, Savonac & Tunzelmann, 2011, p.485; Kamalian, Rashki & Arbabi, 2011, p.81). Hipp & Grupp (2005, p.520) argued that barriers to marketing innovation can be resolved if managers and business owners train and retrain their workforce on the benefits as well as how the innovations can be applied to improve the performance of the organisation. Based on the above argument, the second hypothesis is formulated.

HA2: Marketing innovation has a significant effect on situation awareness

Nevertheless, finding from previous empirical studies on entrepreneurial innovation are shown here. Falahat, Tehseen and Horne (2018, p.6) investigated “the impact of entrepreneurial innovativeness on SMEs’ performances in Malaysia”. Finding from this study indicates that entrepreneurial innovativeness has a significant impact on perceived performance associated with competitors, non-financial and business growth. Xuhua, Spio-Kwofie, Udimal & Addai (2018, p.14) explored the “influence of entrepreneurial innovation strategies on hotel growth in Ghana”. The finding of their study showed that management innovations, service innovation, marketing innovation and process innovation have a significant
relationship with hotel growth. Ojo, Petrescu, Petrescu and Bilcan (2017, p.263) examined “the impact of innovation on the entrepreneurial success in Nigeria”. Their finding revealed that innovation has a significant relationship with the financial performance of the organisation.

2.2. **Firm Resilience**

In this study, firm resilience is concerned with the organisational capacity to anticipate external shocks by reconfiguring all its structures to accommodate the new order. Some of these external shocks include COVID-19 pandemic outbreak, economic recession, and destruction of ordered goods that usually happened as a result of the bad road network as well as in the sea. On the other hand, scholars have defined firm resilience as an organisational capability to bounce back from disaster, challenges, uncertainties and continuous learning (Kim, 2020, p.17; Ledesma, 2014, p.6; Folke, Carpenter, Walker, Scheffer, Chapin & Rockström, 2010, p.4; Luthans, 2002, p.23). On another hand, Denver (2017, p.12) argued that firm resilience refers to its ability to prepare for, anticipate, respond and adapt to sudden disruptions in order to thrive and prosper in the business environment. What this implies is that firms that are ready for unforeseen circumstances are resilient (Herbane, 2018, p.11). Other researchers perceived firm resilience as the firm capacity to perceive, avoid, absorb, adapt and recover from unexpected disruptions (Linnenluecke, 2017, p.15; Lengnick-Hall, Beck & Lengnick-Hall, 2011, p.248; Morrison & Frances, 2000). Firms that employee resilience in their strategic intent will always overcome any threats that may arise from the external business thereby taking good advantage
opportunities that will emerge after the crises (Duchek, Raetze & Scheuch, 2019, p.10; Al-Ayed, 2019, p.182; Ingram & Bratnicka-MyÅliwiec, 2019, p.189). Thus, entrepreneurial innovation is a strategy for strengthening the resilience of hospitality firms through service innovation, technological innovation and marketing innovation strategies. However, many scholars have validated firm resilience dimensions to include redundancy, resourcefulness, rapidity, robustness, agility, and integrity (Kantur and Say, 2015, p.464; Bruneau, Chang, Eguchi, Lee, O’Rourke, Reinhorn, Shinozuka, Tierney, Wallace & Von Winterfeld, 2003, p.744); awareness of the situation, management of vulnerabilities and adaptability (McManus, Seville, Vargo & Brunsdon 2008, p.84); adaptive capacity, resilience ethos, situation awareness, and management of keystone vulnerabilities (Lee, Vargo & Seville, 2013, p.33). The study as adopted from extant literature makes use of situation awareness and adaptability as validated firm resilience dimensions. Adaptability is the ability of an organisation to adapt to change that is triggered by government policies, change in global politics, and technological changes (Annarelli, Battistella & Nonino, 2020, p.7). Situation awareness refers to a firm’s capacity to be fully aware of what is happening within its internal and external environment (Endsley, Bolte & Jones, 2003, p.48). This can be achieved through strategic planning using SWOT analysis to identify the strength, weakness, threats and opportunity surrounding the organization.

3. Methodology
The study adopts a cross-sectional research survey to elicit information from participants.
Cross-sectional research survey is a type of study in which the researcher collects data with copies of the questionnaire at least once over a specified period in order to answer stated research questions (Sekaran & Bougie, 2016, p.104). Twenty (20) hotels that are registered with Enugu State Ministry of Culture & Tourism were selected from forty hotels (sample frame) with a simple random sampling technique. Simple random sampling is concerned with when selections are drawn from a specified and defined population (frame is known) where every unit in the population has an equal chance of been selected (Adams, Khan, Raeside & White, 2007). Ten (10) participants were sampled from each of the twenty (20) hotels making it two hundred (200) participants. For equal representation, Krejcie & Morgan (1970, p.2) sample size determination table was used to determine the sample size of one hundred and thirty-two (132) participants. Thus, 132 questionnaires were administered to the participants but only one hundred and fifteen (115) of the questionnaire was filled correctly and used for analysis. Entrepreneurial innovation dimensions and Firm resilience dimensions were scaled with 16-items on a five-point Likert scale. Participants’ demographic was analysed using frequency distribution and the linear regression was used to analyse the formulated hypotheses.
4. Data Analysis and Results

Table 1 Demographic characteristic of participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>92</td>
<td>80.0</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Age Bracket</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46-50 years</td>
<td>33</td>
<td>28.7</td>
</tr>
<tr>
<td>36-45 years</td>
<td>24</td>
<td>20.9</td>
</tr>
<tr>
<td>26-35 years</td>
<td>41</td>
<td>35.7</td>
</tr>
<tr>
<td>18-25 years</td>
<td>17</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master degree</td>
<td>16</td>
<td>13.9</td>
</tr>
<tr>
<td>Diploma</td>
<td>31</td>
<td>27.0</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>68</td>
<td>59.1</td>
</tr>
</tbody>
</table>

Source: Field Survey (2020).

Table 1 above shows the analysis of demographic profiles. The results revealed that 92 participants representing 80.0% are males while 23 participants representing 20% are females. Age bracket result showed that 33 respondents representing 28.7% are between 46-50 years; 24 participants representing 20.9% fall within 36-45 years; 41 participants representing 35.7% are between 26-35 years; 17 respondents representing 14.8% fall within 18-25 years.

Table 2 Linear regression - Entrepreneurial innovation and firm resilience

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable Firm resilience dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Innovation Dimensions</td>
<td>Situation Awareness</td>
</tr>
<tr>
<td>Service Innovation</td>
<td>-</td>
</tr>
</tbody>
</table>
The above table showed that service innovation has a significant effect on adaptability. The result also revealed that marketing innovation has a significant effect on situation awareness. The model's correlation revealed that 75% and 76% is quite reasonable. On the other hand, the difference between R² and adjusted R² are less than 5%, which means that there is no sampling error (George & Mallery, 2016, p.215). The goodness of fit of the model is further verified as significant because of F-statistics (1461.127**; 111.089**) are greater than 3.93 degrees of freedom (1,113). Thus, all the alternative hypotheses are accepted and null hypotheses rejected. This is endorsed by the significant value of p<0.05, indicating that the overall regression model is significant at 5% level of significance (George & Mallery, 2016, p.216).

5. Findings and Discussion
The result indicates that entrepreneurial innovation dimensions have a positive significant effect on situation awareness and adaptability. The finding of this study is quite different from other entrepreneurial innovation empirical studies. This is as a result of the criterion variable which
firms resilience that is predicted. Meanwhile, other related empirical study findings indicated that entrepreneurial innovativeness has a significant impact on perceived performance associated with competitors, business growth and non-financial (Falahat, Tehseen & Horne, 2018, p.7). Another study on entrepreneurial innovation strategies showed that management innovation, service, marketing and process innovations have a significant relationship with hotel growth. Lastly, Ojo, Petrescu, Petrescu & Bîlcan (2017, p.264) finding showed that innovation correlates significantly with the financial performance of the organisation.

6. Conclusion and Implication

The paper concluded entrepreneurial innovation measured in terms of service innovation and marketing innovation enhances the resilience capacity of hospitality firms through situation awareness and adaptability. This implies that entrepreneurs deployment of service innovations in hospitality such as 24hrs front desk constant communications with customers, availability of fast Wi-Fi internet connectivity, card mobile guest keys, variety availability of guest delicacies, lodge and make use of extra facilities will enhance the resilient capability of selected hotels. On the other hand, entrepreneurs’ deployment of marketing innovation such as functional hotel website, strong social media presence, unique uniforms for all employees, functional fitted conference halls, as well as strong customer relationship management strategy will strengthen the resilient capacity of the organisation. The implication of this study is that entrepreneurs in both hospitality and service-oriented sectors should embrace innovation in service delivery to their esteemed
customers to enhance their resilience capacity.

References


