The Effect of Human Resources Development on the Innovation Capability of SMEs

Joseph Oluremi Olubitan¹, Daniel Olaitan Alabi², Abiola Idowu³

¹²Dominion University, Ibadan, ³lautech, Ogbomoso, Oyo State
Corresponding Author: olujozem@hotmail.com
alabiolaitand@yahoo.com, aidowu22@lautech.edu.ng

Abstract

This study researched the effect of Human Resources Development as a means of improving the innovative capability of SMEs. SMEs were observed to be more innovative in their startup stage than in the developing stage (3-6 years old); hence most merged or are completely bought over by matured SMEs. Startups invest in HRD before their launch and thus bring about innovative product(s). The 21st-century business firms thrive and survive on innovation. The survival of any firm in today’s “pro-aggressive” business environment depends on how seriously it adopts an innovative culture as well as on the capability of its employees to innovate. This necessitates understanding the effect that HRD can have on the capability of SMEs to create innovative products. The research was carried out using a questionnaire survey of 50 SMEs. The population is in the Garments, Information Technology, Hospitality, Wood & Leatherworks, and other services sectors in Ibadan, Oyo State, Nigeria. While HRD variables were training, training outcomes, and training targets, the innovation capability was measured by innovation potential, innovation cycle, and new product cycle. Findings revealed that HRD plays an essential role in the innovation capability of SMEs. It was also observed that previous education, on-the-job certification, and the innovation cycle significantly affect New Product Development by SMEs. The result implies that HRD components play a pivotal role in innovative product developments by organisations and serve as an impetus to innovative capability for SMEs.

Keywords: Innovation, SMEs, Training, Human Resources Development, Effect, OrganisationalCapability

1. Introduction

The success rate of startups differs for all businesses from one society to another and from one industry to another. Taking a perfunctory look at new businesses commonly called startup companies, it will be observed that new businesses generally are business ventures that either modify existing product(s) and service(s) or create a new product(s) and service(s) entirely during their launch as a business enterprise. Their establishment is hinged on bringing something new into the market for the customers, and the acceptability also depends on how unique and useful these products and services are.

Managers and organisations have to contend with challenges upsetting their very existence between the 1980s and 1990s. Products with high-quality, value-added imports were challenging...
the traditional dominance of Western industries in areas such as engineering and technology. At the outset they were cautious to be on familiar terms with and act in response to the considerable changes stirring the “marketplaces, these organizations eventually responded spending much of the 1990s rationalising core businesses, delayering, outsourcing, and reengineering for productivity. During this period, competitive advantage rested variously on mainstream variables like efficiency, quality, customer responsiveness, and speed. In the new millennium, control over the above variables represents the minimum threshold to “play the game”. Each factor remains important but is unlikely in itself or as part of a group to provide a sustainable competitive advantage. Today’s organisations face an additional challenge — the requirement to innovate, not just occasionally but often, quickly, and with a solid success rate. The sphere of organisational and managerial attention has expanded to incorporate both mainstream variables and an innovation capability” (B. Lawson and D. Samson, 2001).

1.1. Statement of the Problem

Extant literatures has only addressed the relationships between organizational practices and innovation, but did not compare the levels of those factors in different organizations and thus left a gap in the understanding of the differences in organisational innovation capability, and personal context that may lead to creativity and innovations as relates to new products development. Understanding these differences as seen through the human resources development perspective may provide an explanation of why startup companies are more innovative than mature companies. Innovation is important for organizations’ survival, achieving competitive advantage and superior financial performance, as an appropriate response to environmental and technological changes, and in some cases as a source of quality of life improvement to society as a whole (Yoram, 2010). A 2008 Boston Consulting Group survey showed that the majority of executives considered innovation to be one of the top three strategic priorities for their companies (Andrew et al, 2008). Innovation is the life-blood of 21st century business organisation (Mohd, 2005). Thus for business organisation to maintain a competitive advantage, there is need to innovate. Halim et al, (2014) posited that the growth of SMEs is hinged on how it can leverage on innovative human resources.

1.2. Research Questions

1. How does Human Resources Development affect the innovation capability of SMEs in Nigeria?
2. What is the degree of importance HRD is given to startups and matured SMEs in Nigeria?
3. Does HRD necessarily bring about New Product Development by SMEs in Nigeria?

2. Literature Review

According to Yoram Solomon (2010), “innovation, and particularly radical innovation has the power to change industries and the competitive positioning of companies within those industries”. With this assertion, it appears innovativeness is what distinguishes businesses from one another. What then is innovation?

“Innovation can then be defined as the outcome of a set of activities that use knowledge to create new value for those benefiting from its use” (de Sousa, 2006). “Organizations need to generate knowledge, facilitate the sharing of knowledge, and apply the knowledge so that the organization can generate innovation. Innovative organizations use knowledge creatively” (SatuParjanen, 2012).
Innovation is the backbone of “today’s competitive advantage, supported by strong mainstream capabilities in quality, efficiency, speed, and flexibility. Innovation can help firms play a dominant role in shaping the future of their industries. High-performing innovators can maintain a giant juggling act of capabilities and consistently bring new high-quality products to the market faster, more frequently, and at a lower cost than competitors. Moreover, these firms use process and systems innovation as a way of further improving their products and adding value to customers. This combination creates a dynamic and sustainable strategic position making the organisation a constantly moving target to competitors” (Lawson and Samson, 2001).

Ingrid Kihlander, (2011) also pointed out that “for product-developing companies, their capability of being innovative is a matter of great importance and survival”. “Making concept decisions, in the sense of selecting the right ideas and solutions for further development, is a critical and difficult activity in product development and innovation” (Martinsuo and Poskela, 2011).

From the above discussion, innovation is not restricted to technology. It spreads across all the sectors possible. In the words of Peter Drucker (1985: 31)“innovation does not have to be technical, does not indeed have to be a "thing" altogether. Few technical innovations can compete in terms of impact with such social innovations as the newspaper or insurance. Instalment buying transforms economies. Wherever innovation is introduced, it enhances the economy from supply-driven to demand-driven, regardless almost of the productive level of the economy.”

The development of human resources of an organisation is succinct for such organisation to shape attitude, influence, develop skills and behaviour of individual employees to be effective and thus achieve its organisational goals. Thus, any firm interested in innovating must invest in human resources development (Beugelsdijk, 2008 and Chen & Huang, 2009). Jiang, Wang & Zhao (2012) and Jennie Karlsson (2013) in their research point out that human resources development through employee training has a positive relationship with technological innovations in China.

Chen et al (2009) reiterate the benefits of Human Resources Development (HRD) and it was corroborated by Beugelsdijk (2008) that human resources development assists employees to develop their innovation capability through new insights and skills incrementally. Baldwin and Johnson (1995) posited that human capital development is complementary to innovation and technological change.

Human resource development is one of the most important organisational practices that serve as a source to consider for organizational innovation, as any organisation enriched with motivated, innovative, and committed employees can achieve any competitive goals and challenges (Waheed, Miao, Waheed, Ahmad, and Majeed, 2019). “The human resource development goal is to efficiently improve the capacity of an organization through learning and development. Therefore, it is not out of context to assert that the innovation capability of any organization largely depends on HRD programmes and practices, since it has been argued that individuals are the main source of any idea” (Mulero, and Emeka, 2018).

Innovation “is directly proportional to the attitude of those who manage the human capital of an organization, their ability to adopt best practices that will encourage and support innovation as well as create an environment where creativity and innovation are allowed to flourish is ever-important” (Mulero and Emeka, 2018).

However, there is also a general agreement amidst extant literature and previous research works that startup companies are more innovative than mature, established ones (Leifer, McDermott,
O’Connor, Peters, Rice and Veryzer, 2000). Yoram (2010) argued that “entrepreneurial startup companies consistently disrupted markets and caused mature companies to fail”. Also, Amabile (1998) opined that “in large organizations ‘creativity gets killed much more often than it gets supported’”, while Christensen (1997) “claimed that management was doing its job while, in the process, missed market disruption events and drove their companies to obsolescence through lack of disruptive innovation.”

3. Research Method

The purpose of this research was to appraise comparatively, the effect human resources development has in enhancing innovation by startup and matured SMEs in Nigeria.

The study population was Ibadan metropolis as it is counted among the top 5 cities where SMEs operate and accounts for more than 5% of the total SME population in Nigeria. Based on the 2017 NBS MSMEs survey released in the 3rd quarter of 2019, there were 73,081 SMEs in Nigeria. The research randomly picked 50 SMEs in the Ibadan metropolis cutting across garment, wood and leather, information technology (IT) and other informal sectors of the economy. A survey research design will be used. Primary data was collected and used for the study.

The primary data was sourced using questionnaires. The questions were designed from an extract of the Nigeria Innovation Survey conducted by the IMF Enterprise Survey of 2014. The questionnaire had two sections. Section A captured industry-related information such as Size, Sector, Educational background of the managers, training, frequency of training, etc. Section B captured the innovation culture of the industry such as budgetary provision for innovative related ideas and how innovation arises in the organisation.

The research analysis was both descriptive and inferential statistics, such as frequency, percentage, and means which will mainly be to achieve descriptive objectives. Inferential statistics was adopted to test the level of significance.

4. Results And Discussion

The results and interpretation of the data analysis are herein presented. The research population was on the innovation managers or the likely persons that handle such duties in a situation where the office does not exist. The total sample consisted of 50% small enterprises and 50% medium-scale enterprises. The research did not consider gender demography, though it can serve as a research focus for further and future research.
From Figure 1 above it was revealed that at P>0.01 training has a significant effect on the innovation capability of firms with a 0.000 value. Findings based on the result obtained indicate that $R^2 = 0.8057$, which implies that approximately the variation in the dependent variable (Innovation Capability) is caused by the explanatory variables included in the model and remained robust at 0.7837 after adjusting for the degree of freedom. Moreover, the explanatory variables are jointly significant at 1% level as captured by F-statics (36.5) with a corresponding P-value of 0.0000. The result implies that Human Resources Development (which is represented by Training) is significant in explaining the innovation capability of SMEs. Also, training targets (which represents Training targeted specifically towards innovative performance) were significant at 5% with a P-value of 0.05.

<table>
<thead>
<tr>
<th>BUDGET</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>14</td>
<td>28.00</td>
<td>28</td>
</tr>
<tr>
<td>N1 – N10,000</td>
<td>10</td>
<td>20.00</td>
<td>48</td>
</tr>
<tr>
<td>N10,000 – N100,000</td>
<td>12</td>
<td>24.00</td>
<td>72</td>
</tr>
<tr>
<td>N100,000 – N500,000</td>
<td>10</td>
<td>20.00</td>
<td>92</td>
</tr>
<tr>
<td>N500,000 – N1,000,000</td>
<td>4</td>
<td>8.00</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 1**: Regression result of Effect of HRD on Innovation

**Figure 2**: Importance of HRD in Budgetary Provision per annum.
Table 1: Sessions of Training per annum

<table>
<thead>
<tr>
<th>TRAINING SESSIONS</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>14</td>
<td>28.00</td>
<td>28</td>
</tr>
<tr>
<td>Yearly</td>
<td>2</td>
<td>4.00</td>
<td>32</td>
</tr>
<tr>
<td>Half Yearly</td>
<td>14</td>
<td>28.00</td>
<td>60</td>
</tr>
<tr>
<td>Quarterly</td>
<td>10</td>
<td>20.00</td>
<td>80</td>
</tr>
<tr>
<td>Monthly</td>
<td>10</td>
<td>20.00</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

While 72% have budgetary provisions for human resources development, only 28% do not make provisions available for training. And as could be observed in Figure 3, companies that didn’t make budgetary provisions available also didn’t give room for training. It was also observed that only 8% make budgetary provisions of between N500,000 - N1,000,000 annually while 24% and 20% allocated between N10,000 - N100,000 and N100,000 – N500,000 respectively. 28% register for training twice a year while 20% do training monthly. The result also revealed that though only 28% have a budgetary allocation of more than N10,000, a majority (68%) do training more than once annually with a combined 40% organizing training either quarterly or monthly.

![Figure 3: Tabulation of Budgetary Provision against Training](image)

This underscores the fact that high priority is been placed on Human Resources Development geared toward innovation capability by SMEs. The budgetary allocation also signifies that a high level of premium is placed on human resources development focusing on innovation capability.
Table 2: Effect of HRD on New Products Development

| New Product Cycle   | Coef.     | Std. Err. | t     | P>|t| | [95% Conf.Interval] |
|---------------------|-----------|-----------|-------|--------|---------------------|
| Certification       | 0.1269266 | 0.0736911 | 1.72  | 0.092* | -0.02149490.2753481 |
| Education           | 0.2859496 | 0.0886132 | 3.23  | 0.002**| 0.10747390.4644253  |
| Innovation Cycle    | 0.2030909 | 0.0578854 | 3.51  | 0.001**| 0.08650370.3196782  |
| Innovation          | -0.2268931| 0.1354758 | -1.67 | 0.101  | -0.49975530.0459691 |
| _cons               | 0.9144117 | 0.335972  | 2.72  | 0.009  | 0.23772951.591094   |

Table 2 shows the components of HRD and Innovation Capability that have effects on the ability of SMEs to develop new products/services. On-Job certification, educational background (prior education), and innovation cycle were observed to have a significant effect on the development of new products/services. The robustness of 0.3139 and $R^2 = 0.3754$ with a $P$-value of 0.0002 indicates a strong relationship of the variables against how often a new product is developed by SMEs. This implies that how often new products are developed by SMEs is a function of how often innovative ideas are allowed and coupled with prior education and the various certification levels attained while on the job.

5. Conclusion

This research analysed the findings from 50 sample Small and Medium Scale Enterprises in Ibadan. The questionnaire used comprised 25 questions with 15 captured variables from which the research questions were evaluated. The results of the data analysis revealed the relationship between human resources development variables and innovation capability variables. From the result, it was concluded that there is a positive effect of HRD on innovation capability. Further, training and training targets have shown a significant strong positive relationship and impact on the innovation capability with 0.000 and 0.05 respectively. Also, certification, education, and innovation cycle have a strong positive relationship with new product development. Ultimately, this research proved that human resources development strongly affects the innovation capability of SMEs.

This research was found to have three managerial implications for an organization. Firstly, organisations that want to retain their competitive edge must give attention to the human resources development of their employee. Employees are the drivers of organizational objectives. Any organization that wants an efficient workforce that will be able to compete innovatively with others must invest in human resources development.

Secondly, to develop innovative products, the innovation capability of employees must be developed. Employees must be conscious of the need to reel out innovative products. Their capability must be intentionally developed towards innovative ideas.
Finally, training, soft skills certifications, further education, and innovation cycle are important factors that must be taken into cognizance for an organisation to have a solid innovative workforce. This must also be targeted to be able to compare the actual with the proposed outcome. This paper was based on SMEs within the Ibadan metropolis, other SMEs outside the city of Ibadan and major business cities in Nigeria were not considered in the research and these variables may have the ability to change the outcome of the research. Future research could consider more cities to increase the sample size and to have more robust and extensive research.

Secondly, the variables were limited to training, certification, education and, innovation cycle. Other factors and variables of human resources development like motivation, remuneration, promotion etc. were excluded. Future research could focus on a wider array of human resources variables.

References


Hanifi, S. (2016). Effect of Leadership Style on Organizational Innovation with Mediating Knowledge Management, Khatam University, School of Accounting and Management. https://osf.io › preprints › socarxiv › download


**Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/)

Published by: