
HUMAN RESOURCES DEVELOPMENT AND INNOVATION CAPABILITY OF SMALL AND MEDIUM SCALE ENTERPRISES IN IBADAN METROPOLIS

OLUBITAN, Joseph Oluremi

Department of Management Sciences
Dominion University, Ibadan, Nigeria
j.olubitan@dominionuniversity.edu.ng

ALABI, Daniel Olaitan

Department of Management Sciences
Dominion University, Ibadan, Nigeria
alabiolaitand@yahoo.com

IDOWU, Abiola

Department of Management & Accounting,
LAUTECH, Ogbomoso, Oyo State
aidowu22@lautech.edu.ng

ABSTRACT

This study assessed the effect of human resources development on innovative capability of SMEs. The study adopted a survey research design. Training was used as a proxy for human resources development. The study population comprised SMEs in Ibadan metropolis. The study randomly picked 50 SMEs cutting across garment, wood and leather, information technology (IT) and other informal sectors of the economy to serve as test units. Structured questionnaire was used to collect primary data; while data analysis was done using frequencies and measures of central tendencies at the the descriptive level of analyses; while regression analysis was used to test the the effect of human resources development on innovation capability of SMEs. The Statistical Analysis Package Version 11 (STATA/SE 11.2) was used for the analyses. The study found that human resource development in terms of training, training targets and training budgets have strong positive and statistically significant effect on innovation capability of SMEs. Hence, the study concluded that human resource development informs innovation capability of SMEs. The implication of the finding of the study is that SMEs that want to again and sustain competitive edge that comes through innovation capability must give attention to developing the competencies of their employees through training and other human resources development programmes.

Keywords: Human resources development, innovation capability, new product development, training

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 products or create entirely new products to launch a business enterprise. Their establishment is hinged on bringing something new to the market to satisfy an identified need. The acceptability of such new products however, depends uniqueness and usefulness.

Managers of organisations have always contended with challenges that upset new business start-up. Products with high quality and value-added imports challenge 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 considerable changes stirring the “marketplaces.” These organizations eventually responded by 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 these mainstream variables represents minimum threshold to “play the game.” Each factor remains important but is unlikely in itself or as part of a group, to provide sustainable competitive advantage. Today’s organisations face additional challenge - the requirement to innovate, not just occasionally but continuously, and swiftly. The sphere of organisational and managerial attention has expanded to incorporate both mainstream variables and innovation capability” (Lawson & Samson, 2001).

Extant literature addresses the relationships between organizational practices and innovation, but did not compare 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 it relates to innovation. Understanding these differences as seen through the human resources development perspective may explain 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 majority of executives consider innovation a strategic priority for their companies (Andrew et al., 2008). Innovation is the life-blood of 21st century businesses (Mohd, 2005). Thus for a firm to maintain a competitive advantage, it must innovate. Halim et al. (2014) posits that the growth of SMEs is hinged on how they can leverage innovative human resources.

In this study, we examine how human resources development (proxied by training) relates to innovation capability of SMEs in Nigeria. To provide direction to the study, we hypothesizes that:

Ho₁: Human resource development (training, training targets and training budget) do not have significant effect on innovation capability of SMEs in Nigeria

LITERATURE REVIEW

Human Resource Development

Human resources development (HRD) helps organisation to shape attitude and develop employees’ skills and behaviours for more effective job performance. Firms with vested interest in innovation must invest in HRD (Chen & Huang, 2009; Beugelsdijk, 2008). Karlsson (2013) and Jiang et al. (2012) point out that HRD through employee training positively relates to technological innovation in China; while Chen et al. (2009) and Beugelsdijk (2008) reiterate that HRD assist employees to develop innovation capability through new insights and skills. Baldwin and Johnson (1995) posits that HRD is complementary to innovation and technological change.

HRD is an important organisational practices that give fillip to innovation. Firms with motivated, innovative, and committed employees can achieve any competitive goals and challenges (Waheed et al., 2019). The goal of HRD is to improve the capacity of an organization through learning and development. Therefore, it is not out of context to assert that innovation capability of organizations depends on HRD programmes and practices, since it has been argued that individuals are the main sources of ideas that create profitable new products that change societies (Mulero & Emeka, 2018).

Mulero and Emeka (2018) states that innovation is directly proportional to attitude of those who manage the human capital of an organization, their ability to adopt best practices that encourage and support innovation as well as create an environment where creativity and innovation are allowed to flourish. However, there is a general agreement in extant literature that startup companies are more innovative than established ones (Leifer et al., 2000).

Yoram (2010) argue that “entrepreneurial startups consistently disrupt markets and cause mature companies to falter. Also, Amabile (1998) opined that “in large organizations, creativity gets killed more often than it gets supported” while Christensen (1997) aver that management may be doing their job while, in the process, miss market disrupting events and drive their companies to obsolescence through lack of disruptive innovation.

Innovation Capability

Innovation, and particularly radical innovation has the power to change industries and competitive positioning of companies (Yoram, 2010). It thus appears innovativeness is what distinguishes businesses from one another. What then is innovation? Innovation is the outcome of a set of activities that use knowledge to create new value for those benefiting from its use” (de Sousa, 2006). To promote innovation, firms must generate knowledge, facilitate the sharing of the new knowledge, and apply new knowledge in their operations. Innovative organizations use knowledge creatively (SatuParjanen, 2012).

Innovation is the backbone of competitive advantage, supported by strong mainstream capabilities in quality, efficiency, speed, and flexibility. Innovation provide firms with domineering roles in shaping the future of industries. High-performing innovators maintain a giant juggling act of capabilities and consistently bring new high-quality products to market faster, more frequently, and at a lower cost than competitors. Moreover, these firms use process and systems innovation as a way to further improve their products and add value to customers. This combination creates a dynamic and sustainable strategic position, making the organisation a constantly moving target to competitors” (Lawson & Samson, 2001).

Ingrid (2011) pointed out that the survival of manufacturing firms depends on their capability to innovate. Making concept decisions, in the sense of selecting the right ideas and solutions for further development, is a critical and difficult activity in innovation (Martinsuo & Poskela, 2011). This suggests that innovation is not restricted to technology. It spreads across all sectors possible. In the words of Drucker (1985), 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.

METHODOLOGY

The purpose of this research was to appraise comparatively, the effect human resources development has on innovation in startup and matured SMEs in Nigeria. The study adopted a survey research design. The population of the study comprised SMEs in Ibadan metropolis. Ibadan is counted among the top 5 cities in Nigeria where SMEs operate and accounts for more than 5% of 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 Ibadan metropolis cutting across garment, wood and leather, information technology (IT) and other informal sectors of the economy.

Primary data used for the study was collected using structured questionnaire. The questionnaire was designed from an extract of the Nigeria Innovation Survey conducted by IMF Enterprise Survey of 2014. The questionnaire had two sections. Section A captured industry-related information such as Size, Sector, Education background of the managers, training, and frequency of training, etc. Section B captured innovation culture of SMEs such as budgetary provision for innovation-related ideas and how innovation arises in the firm. Data analysis was done using descriptive and inferential statistics. Frequencies, measures of central tendencies were used for the descriptive analyses; while regression analysis was used to test the level of significance of HRD on innovation capability of SMEs. The Statistical Analysis Package Version 11 (STATA/SE 11.2) was used for the analyses.

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.

Table 1: Regression result of effect of HRD on innovation capability

Innovation	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]
Training	2.022977	.3410386	5.93	0.000***	1.335659 2.710295
Training Outcomes	0.0391117	.0597982	0.65	0.516	-0.0814036 0.159627
Training Targets	-0.3075499	.1527364	-2.01	0.050**	-0.6153699 0.00027
Innovation Cycle	0.0681131	.0407058	1.67	0.101	-0.013924 0.1501502
New Product Cycle	-0.0855136	.0908944	-0.94	0.352	-0.2686992 0.0976719
_cons	-1.901216	.4432889	-4.29	0.000	-2.794606 -1.007826

Number of obs	50
F(5, 44)	36.5
Prob > F	0.0000
R-squared	0.8057
Adj R-squared	0.7837
Root MSE	0.39241

*** means significant at 1%, ** means significant at 5%

Source: STATA output of data analyses (2022)

From Table 1 above, it was revealed that at $P > 0.01$ HRD (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 HRD (training) is significant in explaining 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 2: Importance of HRD in Budgetary Provision per annum

BUDGET	Freq.	Percent	Cum.
Nil	14	28.00	28
N1 – N10,000	10	20.00	48
N10,000 – N100,000	12	24.00	72
N100,000 – N500,000	10	20.00	92
N500,000 – N1,000,000	4	8.00	100
Total	50	100.00	

Source: STATA output of data analyses (2022)

Table 3: Sessions of Training per annum

TRAINING SESSIONS	Freq.	Per cent	Cum.
Nil	14	28.00	28
Yearly	2	4.00	32
Half Yearly	14	28.00	60
Quarterly	10	20.00	80
Monthly	10	20.00	100
Total	50	100.00	

Source: STATA output of data analyses (2022)

While 72% have budgetary provisions for human resources development, only 28% do not make provisions available for training. And as could be observed in Table 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.

Table 4: Tabulation of Budgetary Provision against Training

BUDGET	NO OF TRAINING						Percent
	Nil	Yearly	Half Yearly	Quarterly	Monthly	Total	
Nil	14	0	0	0	0	14	28.00
N1 - N10,000	0	2	0	4	4	10	20.00
N10,000 - N100,000	0	0	8	2	2	12	24.00
N100,000 - N500,000	0	0	4	4	2	10	20.00
N500,000 - N1,000,000	0	0	2	0	2	4	8.00
Total	14	2	14	10	10	50	100.00
Percent	28.00	4.00	28.00	20.00	20.00	100.00	

Source: STATA output of data analyses (2022)

The results in Table 4 underscores the fact that high priority is been placed on HRD (through training) 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 5: Effect of HRD on New Products Development

Number of obs	50
F(4, 45)	6.76
Prob> F	0.0002
R-squared	0.3754
Adj R-squared	0.3199
Root MSE	0.58098

New Product Cycle	Coef.	Std. Err.	t	P>t	[95% Conf.Interval]
Certification	0.1269266	.0736911	1.72	0.092*	-0.02149490.2753481
Education	0.2859496	.088613	3.23	0.002**	0.10747390.4644253
Innovation Cycle	0.2030909	.0578854	3.51	0.001**	0.08650370.3196782
Innovation	-0.2268931	.1354758	-1.67	0.101	-0.49975530.0459691
_cons	0.9144117	.335972	2.72	0.009	0.23772951.591094

Source: STATA output of data analyses (2022)

Table 5 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.

CONCLUSION

This study analysed data collected from 50 sample SMEs in Ibadan. The questionnaire used to collect the data comprised 25 questions, with 15 capturing variables from which the research questions were evaluated. The results of data analyses revealed the relationship between human resources development and innovation capability. From the result, it was concluded that there is a positive effect of HRD on innovation capability of SMEs. Further, training and training targets show strong positive relationship and impact on 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 has shown that human resources development strongly affects innovation capability of SMEs.

MANAGERIAL IMPLICATION

This research has three managerial implications. Firstly, organisations that want to retain their competitive edge must give attention to the development of their employee through training and other HRD programmes. 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 target based to be able to compare the actual with the proposed outcome.

LIMITATIONS AND DIRECTION FOR FURTHER STUDIES

This study was based on SMEs within Ibadan metropolis, SMEs outside the city of Ibadan and major business cities in Nigeria were not considered in the research and these factors 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

- Adelekan S. A. (2016). The impact of organizational culture on innovation capability of SMEs: Case study of SMEs in Alimosho and Ojo Local Government Area of Lagos State, Nigeria. *International Journal of Economics, Commerce, and Management* 4(9), 158-167.
- Amabile T. M., & Pratt M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157-183.
- Amabile, T. M. (2012). Componential theory of creativity. *Harvard Business School Working Paper*, No. 12-096.
- Amabile, T. (1998). How to kill creativity. *Harvard Business Review*, 76, 76–87.
- Andersson, F. (2003). The dynamics of requirements and product concept management. *Unpublished Thesis*. Chalmers University, Gothenburg.

- Andrew, J. P., Haanaes, K., Michael, D. C., Sirkin, H. L., & Taylor, A. (2008). *Innovation 2008: Is the tide turning? A BCG senior management survey*. The Boston Consulting Group Inc.
- Baldwin, J. R., & Johnson, J. (1995). Human capital development and innovation: The case of training in small and medium sized-firms. *Statistics Canada*, 74.
- Becker, K. L., & Matthews, J. H. (2008). Linking human resource management and innovation: Formulating the research agenda. Paper presented at the 22nd ANZAM Conference 2008. 2–5 December, Auckland, New Zealand.
- Benn L., & Danny S. (2001). Developing innovation capability in organisations: A dynamic capabilities approach. *International Journal of Innovation Management*, 5(3), 377-400.
- Beugelsdijk, S. (2008). Strategic human resource practices and product innovation. *Organization Studies*, 29, 821-847.
- Birkinshaw, J., Hamel, G., & Mol, M. J. (2008). Management innovation. *Academy of Management Review*, 33(4), 825-845.
- Chen, C.-J., & Huang, J.-W. (2009). Strategic human resource practices and innovation performance – The mediating role of knowledge management capacity. *Journal of Business Research*, 62, 104-114.
- de Sousa, M. (2006). The sustainable innovation engine. *VINE: The Journal of Information and Knowledge Management Systems*, 36(4), 398-405.
- Halim H. A., Ahmad N. H., Ramayah, T., & Hanifah H. (2014). The growth of innovative performance among SMEs: Leveraging on organisational culture and innovative human capital. *Journal of Small Business and Entrepreneurship Development*, 2(1), 107-125.
- Ingrid K. (2011). Managing concept decision making in product development practice. *Unpublished Thesis*. Royal Institute of Technology
- Karlson, J. (2013). The role of HRM in innovation processes: Nurturing or constraining creativity. *Unpublished Thesis*. University of Gothenburg.
- Jiang, J., Wang, S., & Zhao, S. (2012). Does HRM facilitate employee creativity and organizational innovation? A study of Chinese firms. *The International Journal of Human Resource Management*, 23(9), 4025-4047.
- Martinsuo, M., & Poskela, J. (2011). Use of evaluation criteria and innovation performance in the front end of innovation. *Journal of Product Innovation Management*. Retrieved from <https://www.doi.org/10.1111/j.1540-5885.2011.00844.x>
- Mohd K. H. (2005). Relationship Between human resource practices and innovation activity In Malaysian SMEs. *Journal Management & Business*, 3(6).
- Mulero, A. W., & Emeka, O. E. (2018). Developing organizational innovation capabilities through human resources management practices: Evidence from Nigeria's brewery industry. *International Journal of Advanced Academic Research, Social & Management Sciences*, 4(4), 357-375.
- Nigeria Bureau of Statistics (2017). *Report on national survey of micro small & medium enterprises (MSMEs)*. Retrieved from [https://nigerianstat.gov.ng/elibrary/queries\[search\]](https://nigerianstat.gov.ng/elibrary/queries[search])
- Olubitan, J. (2017). The Effect of business climate on operations of small and medium scale enterprises in Nigeria. *Binus Business Review*, 8(3), 207-214. doi:10.21512/bbr.v8i3.3715
- Storey, J., Ulrich, D., & Wright, P. M. (2019). *Strategic human resource management: A research overview*. State of the Art in Business Research. London: Routledge.
- Sung, S. Y., & Choi, J. N. (2013). Do organizations spend wisely on employees? Effects of training and development investment on learning and innovation in organizations. *Journal of Organizational Behaviour*, 35, 393-412.
- Waheed, A., Miao, X., Waheed, S., Ahmad, N., & Majeed, A. (2019). How new HRM practices, organizational innovation, and innovative climate affect the innovation performance in the IT industry: A moderated-mediation analysis. *Sustainability*, 11, 621. Retrieved from <https://www.doi.org/10.3390/Su11030621>
- Yoram, S. (2010). From startup to maturity: A case study of employee creativity antecedents in high tech companies. *Unpublished Dissertation*. School of Business & Technology, Capella University.