

Managers' Perception of Internal Factors and their Effect on Corporate Entrepreneurship: The Case of Nigerian Manufacturing Industry

Emmanuel Tsado¹, Umar Gunu²

Abstract: This study was designed to investigate the specific internal factors that influence Corporate Entrepreneurship in Nigerian manufacturing industry. Previous studies have shown inconsistency findings regarding internal factors and Corporate Entrepreneurship. A survey research design was adopted. Simple random sampling technique was used to select 328 companies. Primary data were obtained using questionnaire. Data were analysed using hierarchical regression analysis. The result revealed that internal factors account for 33.9% variations in the Corporate Entrepreneurship in Nigerian manufacturing industry. All the five factors namely organizational boundary; management support; reward/re-enforcement; work discretion and time availability were found to have significant positive effect on Corporate Entrepreneurship at 5 % level of significance. The low value of R^2 recorded in the model was an indication that despite the usefulness of the instruments used in the study, there were other variables that also influence Corporate Entrepreneurship and needed to be included which still need to be investigated. Finding from this study has shown that manufacturing industry can serve as alternative means of economic growth for Nigeria.

Keywords: employees; environment; innovation; organization; reward

JEL Classification: M130; M190; O310; O140

1. Introduction

Interest in Corporate Entrepreneurship (CE) is on the increase by both the academics and business organizations all over the world. Business organizations' interest in CE arises as a result of the dynamic nature of the business environment couple with the effect of globalization. Notable among several factor responsible for dynamism of business environment include: change in the market, change in consumers' taste, competition and technological changes (Scheepers, 2007; Olughor, 2014).

¹ Doctoral Student, Department of Business Administration, University of Ilorin, Nigeria, Address: P.M.B 1515, Ilorin, Kwara State, Nigeria, Tel.: +234-807252190-1, Fax: 072-521901, Nigeria, Corresponding author: nueltsado@yahoo.com.

² Associate Professor, Ph. D, Department of Business Administration, University of Ilorin, Nigeria, Address: P.M.B 1515, Ilorin, Kwara State, Nigeria, Tel.: + 234-805591261-7, Fax: 055-912617, Nigeria, E-mail: umargunu@gmail.com.

For example, economic recession such as the one witnessed in 2008 – 2009 creates market disturbances for business organizations. In such periods, organizations usually suffer huge losses as a result of decline in demand for their products. However, as the economy begins to progress or revive, the surviving organizations have to renew and revitalize their products. They have to struggle to regain their market position.

Similarly, change in consumer taste and fashion also affect the survival of business organizations as it can easily renders the products or services of an organization obsolete or outdated. Consumers would always want products or services that are safe, fast and convenience, thus creating room for specifications. While these factors joined together with other factors such as continuous technological changes and globalization have increased competition among business organizations, particularly manufacturing organizations.

The only way to cope with these challenges of environmental uncertainties according to existing literatures (Kuratko, 2009; Kuratko, Hornsby & Covin, 2014) is for the organizations to keep on improving on their products or services and introducing new ones i.e constant innovations which can be achieved through Corporate Entrepreneurship. CE is recognized to have much importance which is not limited to business organizations only. It also has the potentials to contribute greatly to the overall economy of a nation by making different varieties of goods and services available for both domestic consumption and export purpose and creating job opportunities (Sathe, 2003).

However, for CE to flourish in any organization, there must be a favourable internal environment. In this situation, the upper management must be willing to support the employees and encourage them to come up with new ideas. In addition, this requires giving the employees adequate time in order to come up with new ideas and employees must be given enough freedom to take decisions with respect to their work. Furthermore, there must be a good reward system that will motivate the employees to have interest in CE, and management should be willing to remove all the bureaucratic processes in the organization (Kuratko, Montagno, & Hornsby, 1990; Hornsby, Kuratko & Montagno, 1999; Hornsby, Kuratko & Zahra, 2002; Kuratko et al., 2014).

Considering Nigerian internal business environment, most business organizations operate a management style which most employees perceived indifferently (Olughor, 2014). Most employers do not regard labour laws and ethics, thus giving room for unfair practices by the employers (Ugwudioha, 2004). Oke and Dawson (2008) describe Nigerian work environment as impersonal and task oriented, which uses close supervision and operates within a strict disciplinary code; thus, there is no or little autonomy among the employees. This management system represents Nigerian post colonial heritage, in which there is no room for employees' initiative.

Oke and Dawson (2008, p. 9) further describe such system as risk averse, centralised, hierarchical, non consultative and authoritarian.

While, in terms of rewarding employees, the reward system in most private organizations in Nigeria is not encouraging, because till today, some employers pay their employees as low as \$75 a month or even less than that in some cases. Most employers hide under the depressed economic condition of the country and claim they are not breaking even, thereby giving just little amount to their employees as salary. What added to this problem is that either there is no law regulating private sector wage in Nigeria, or the law is not functioning. Another problem regarding reward system in Nigeria is the issue of wage disparity between a foreign expatriate and Nigerian staff. Ugwudioha (2004) claims that foreign expatriate with the same qualification with Nigerian staff receives 12 times more in most cases than Nigerian expatriate. Thus, the following questions are raised:

- i. What is the effect of organizational boundary on CE?
- ii. What influence does time availability have on CE?
- iii. What is the nature of CE dependence on the support of the management?
- iv. What is the effect of reward/re-enforcement on CE?
- v. What influence does work discretion have on CE?

2. Literature Review, Theoretical Framework and Empirical Review

2.1. Internal Factors

Over the last three decades (see Kuratko, Hornsby & Bishop, 2005, p. 280), research has tried to develop our knowledge on the factors in the internal environment that can drive managers and employees to participate in entrepreneurial activities within an existing enterprise. Internal factors or organizational context or internal climate has been described as a set of social and administrative procedures that motivate or shape the behaviour of employees toward taking part in entrepreneurial activities (Birkinshaw apud Sebora & Theerapatvong, 2009).

A review of literature indicates that five factors are considered to be critical drivers of managers and employees entrepreneurial behaviour and these include support by the top management, the structure of the organization, the reward system of the organization, availability of time and resources and work freedom (Kuratko et al., 1990; Hornsby et al., 1999; Kuratko et al., 2005; Honsby et al., 2002; Hornsby, Holt & Kuratko, 2008).

Research has built a consensus around these five factors as antecedent to or motivating factors for managers and individual entrepreneurial behaviour within an

existing organization (Rutherford & Holt, 2004). Thus, a team of researchers in 2002 (Hornsby et. al., 2002) developed a psychometric instrument known as Corporate Entrepreneurship Assessment Instrument (CEAI) on these five factors which can be used to assess organizational readiness in terms of internal environment to adopt CE.

However, as good as this psychometric instrument, CEAI is, there is yet problem of inconsistency findings in most CE literatures and empirical studies (see for example the validity assessment of CEAI in Kuratko et al., 2014, p. 42). This problem of inconsistency findings is as a result of differences in environment in terms of social and cultural factors. As argued by Hisrich, Peters and Schepherd (2009), a corporate interest in entrepreneurship varies with social, cultural and business level. Similarly, Wyk and Adonisi (2011) argue that ‘the portability of psychometric instruments developed in one culture and applied in another culture is often questioned’. Wyk and Adonisi (2011) further observe that most of the psychometric instruments (CEAI for example) were developed in USA, which their applications in South African culture has showed lack of content validity. This observation was supported by Chaka (2006) who also argue that culture is an important determinant factor for individual willingness to accept entrepreneurial change.

In addition to the arguments and observations of Hisrich et al., (2009), Wyk and Adonisi, (2011) and Chaka (2006), it is important to note that differences in factors such as economic, educational and technological developments would limit generalization and application of most of the earlier empirical findings on factors in the internal environment and CE to a particular environment. For example, many Countries in Africa are still developing, underdeveloped or undeveloped compared to USA, Canada and other developed countries where most of the studies on internal factors and CE were done. Illiteracy level is still very high in most African countries, and this can affect the quality of employees who are expected to play a major role in CE process.

2.2. Theoretical Framework

There is no specific theory on Corporate Entrepreneurship. However, many theories are found useful from its mother field, ‘entrepreneurship’ in explaining the rationale behind CE. In addition, a number of theories from the field of organizational behaviour especially as it relate to employees’ motivation and involvement in organizational decision making processes can also be use to better explain CE (Robbins, Judge & Vohra, 2013). Therefore in this study, we considered Technology-Organization-Environment Framework (TOE) and Job Characteristics Model as theoretical foundations.

TOE: The frame work was based on three components: the external environment, the technology and the organization. However, present study is mainly concerned with the organizational component. The organizational context explains the nature of an organization such as the size of the firm, the extent of centralization,

formalization, the complexity of its managerial structure, and the amount of free resources (time) available within the firm (Arpaci, Yardinci, Ozkan & Turetken, 2012). It is assumed that the extent to which employees will participate in CE activities will largely depend upon the degree of centralization and amount of free time they have in their respective organizations.

Job Characteristics Theory: The theory is based on five job dimensions. These include skill variety, task identity, task significance, autonomy and feedback. These job dimensions are assumed to trigger three different psychological states which in turn will lead to different outcomes (Hackman & Oldham, 1976). However, in this study, we are only concerned with only one dimension of the model, and that is autonomy. Autonomy refers to the extent to which a job allows the employee independency, discretion or freedom in terms of schedule of work or determination of procedures in execution of the work (Robbins et al., 2013, p. 254). It is assumed in present study that if employees are given substantial autonomy on their work, it will lead them to take entrepreneurial risks on behalf of their organization.

2.3. Empirical Review on Factors in the Internal Environment and CE

Since the development of CEAI, many scholars have empirically applied it in different environment and have come up with different findings¹. Few among many other scholars that examined factors in the internal environment and CE using CEAI include: La Nafie, Nimran, Al Musadieq and Suyadi (2014); Olughor (2014); Chen and Cangahuala (2010); Hornsby, Kuratko, Shepherd and Bott (2009) and Hornsby et al. (2008).

La Nafie et al. (2014) in their study reported that management support; reward system and work discretion each has positive significant effect on CE, while organizational structure and resource availability each does not have significant effect on CE. However, La Nafie et al. (2014) focused on selected Banks in Indonesia which are service providing organizations. CE may be more important in any organization that requires use of technical skills such as production, designing etc.

Olughor (2014) carried out a study on corporate entrepreneurship and employee retention strategies in Nigerian telecommunication industry used multiple regression analysis for the data analysis. His result shows a low value of $R^2 = 29.3\%$. The author reported that except time availability, other factors in the internal environment: management support, work discretion, reward/re-enforcement and organizational boundary each had a significant effect on CE with t values = -4.044, -3.141, 2.511 and 8.074 and sig values = .000, .002, .012 and .000 respectively. Just like La Nafie et al. (2014), Olughor (2014) focussed on telecommunication companies which are also service providing organizations.

¹ See (Kuratko et al., 2014, p. 42).

Chen and Cangahuala (2010) in their study focusing on manufacturing sector in Taiwan reported that management support, work discretion and reward each has significant relationship with each of the three dimensions of CE (innovativeness, proactiveness and risk-taking), while organizational boundary has significant relationship with innovativeness and proactiveness, time availability on the other hand has significant relationship only with risk-taking. Similarly, Hornsby et al. (2009) found a low significant relationship between new idea implemented and top management support ($r = 0.19$), work discretion ($r = 0.11$) and reward/reinforcement ($r = 0.15$), only time availability has negative relationship with new ideas implemented and is not significant ($r = -.02$).

Furthermore, Scheepers (2007) reported that only internal factors (management support ($r = 0.43$), autonomy ($r = 0.31$) and reward ($r = 0.31$)) each has significant relationship with corporate entrepreneurial intensity among e-business firms in South Africa. In Hornsby et al. (2008) it was reported that support by the management has the strongest relationship with entrepreneurial orientation ($r = .45$). However, entrepreneurial orientation has moderate positive significant relationship with work discretion ($r = .17$), time availability ($r = .13$) and rewards/reinforcement ($r = .15$). Hornsby et al. (2008) failed to include organizational boundary in their study.

3. Methodology

We adopted a survey research design for this study; therefore we made use of primary data. The population of this study is 1,826 manufacturing companies registered with Manufacturers Association Nigeria (MAN) as at August, 2014.

The sample size was determined by Guilford and Flruchter (1973) formula for estimating sample size, and was calculated to be 328 companies. We selected companies across the various sectors using random sampling techniques. The names of the companies were written each on a paper, wrapped and picked at random.

Questionnaire was used as instrument of data collection. Questionnaires were administered directly to the companies by the researcher based on the sample size. However, we issued two questionnaires to each company which were filled by functional managers such as branch's customer care manger, head of productions/operations, marketing manager, store manager, accounts and finance manager. Therefore, a total of 628 questionnaires were distributed.

We considered those employees lower level (those at the branch level). We excluded the top management staff i.e the Directors and the Chief Executive Officers (CEOs). Furthermore, this study did not cover unskilled employees such as cleaners, security guards, drivers etc.

Dependent Variable

Corporate Entrepreneurship was used as dependent variable. This was measured proxy by risk-taking propensity of manufacturing companies in Nigeria. Most previous studies have used other dimensions as a proxy for CE. For example, Antoncic and Hisrich (2001) in their study used the following four dimensions: innovativeness, self-renewal, pro-activeness and new business venturing to measure CE. Also, Kuratko et al. (2005) used a dimension which can also be referred to as innovativeness (number of new ideas suggested, the number of new ideas implemented, and the number of improvements implemented without official organizational approval) to measure entrepreneurial actions of the managers. Since previous studies mostly used other dimensions, present research used risk-taking dimension as a proxy to CE. Thus we adapted some questions from the work of many scholars including Scheepers (2007) to measure risk-taking propensity of manufacturing companies in Nigeria.

Independent Variables

Factors in the internal environment as identified in the literature: management support for entrepreneurship, work discretion, time availability, organizational boundaries and reward/re-enforcement were used as independent variables. In order to ensure validity of the instruments, Corporate Entrepreneurship Assessment Instrument (CEAI) originally developed by Hornsby et al. (2002) was used to measure internal organizational factors that either promote or impede CE. The CEAI is a 5 point likert scale measuring instrument with 48 items on internal environmental factors that can promote CE in an organization. The CEAI was used by many authors including (Kuratko et al, 2005; Chaka, 2006; Davis, 2006; Wyk & Adonisi, 2011). However, a 7 point likert's scale was used in present research.

We used hierarchical regression analysis to analyse the data. The regression model below was used for the objectives and hypotheses of the study:

$$\text{CORPENT} = \alpha + \beta_1\text{MtS} + \beta_2\text{OgB} + \beta_3\text{RwS} + \beta_4\text{FrT} + \beta_5\text{WdS} + \varepsilon$$

Where:

CORPENT = Corporate Entrepreneurship

MtS = Management Support

OgB = Organizational Boundary

RwS = Reward Structure

FrT = Free Time

WdS = Work Discretion

α = The intercept (constant term)

$\beta_1, \beta_2, \beta_3, \beta_4,$ and β_5 = Slope parameter

ε = Error term

4. Results and Analysis

Table 1. Results of Model Summary on Internal Factors and CE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1 a	.432	.187	.186	.90249043	.187	128.092	1	557	.000	
2 b	.454	.206	.203	.89285125	.019	13.092	1	556	.000	
3 c	.512	.262	.258	.86120610	.057	42.611	1	555	.000	
4 d	.565	.319	.314	.82821814	.057	46.092	1	554	.000	
5 e	.583	.339	.334	.81638637	.021	17.174	1	553	.000	1.765

a. Predictors: (Constant), Organizational Boundary

b. Predictors: (Constant), Organizational Boundary, Management Support

c. Predictors: (Constant), Organizational Boundary, Management Support, Reward/Reinforcement

d. Predictors: (Constant), Organizational Boundary, Management Support, Reward/Reinforcement, Job Discretion

e. Predictors: (Constant), Organizational Boundary, Management Support, Reward/Reinforcement, Job Discretion, Time Availability

f. Dependent Variable: Corporate Entrepreneurship

Source: Author's Computation, 2015

Table 1 provides the results of model summary on the factors in the internal environment that influence CE. From the above table, the result of Durbin-Watson statistic tests for the presence of autocorrelation among the residuals shows that $d = 1.765$. As a general rule of thumb, the residuals are not correlated if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50¹. Since d

¹ See (Abdulkadir, 2012).

> 1.50, this result satisfies the assumption of independence of errors. This means that there was no autocorrelation problems in the data used for independent variables.

Furthermore, the result (Table 1) shows the contribution of each factor to the value of R^2 . It can be observed that all the factors each: organizational boundary, management support, reward/re-enforcement, job discretion and time availability has significant contributions to the value of R^2 , as indicated by R^2 Change (187,.019,.057,.057 and 021 respectively). This indicates the proportion of dependent variable that can be explained by each independent variable. It shows that organizational boundary explained the highest variation 18.7% of the proportion of dependent variable. The result reveals that overall, these factors in the internal environment account for 33.9% variations in the Corporate Entrepreneurship in Nigerian manufacturing industry. The result reveals that organizational boundary explains more variation in CE than every other factors; it has R^2 of 18%.

The result as further indicated by the change statistics shows that for organizational boundary, the value of F – change = 128.092 being significant with *p value* of $0.00 < 0.05$, while for management support, F-change = 13.092 which is significant with *p value* = $0.00 < 0.05$, for reward/re-enforcement, the value of F-change = 42.611 also being significant, *p value* = $0.00 < 0.05$, the result shows that for job discretion, the value of F – change = 46.092 which is significant, *p value* = $0.000 < 0.05$.and for time availability, the value of F-change = 17.174 also being significant with *p value* = $0.00 < 0.05$. This means that all the factors in the internal environment have significant contribution to the overall relationship with the dependent variable (CE).

Table 2. Results of Coefficients on Internal Factors and CE

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1.221E-16	.038		.000	1.000		
Organizational Boundary	.432	.038	.432	11.318	.000	1.000	1.000
2 (Constant)	1.316E-16	.038		.000	1.000		
Organizational Boundary	.432	.038	.432	11.440	.000	1.000	1.000
Management Support	.137	.038	.137	3.618	.000	1.000	1.000
3 (Constant)	1.439E-16	.036		.000	1.000		
Organizational Boundary	.432	.036	.432	11.860	.000	1.000	1.000
Management Support	.137	.036	.137	3.751	.000	1.000	1.000
Reward/Re-enforcement	.238	.036	.238	6.528	.000	1.000	1.000
4 (Constant)	1.914E-16	.035		.000	1.000		
Organizational Boundary	.432	.035	.432	12.333	.000	1.000	1.000
Management Support	.137	.035	.137	3.901	.000	1.000	1.000
Reward/Re-enforcement	.238	.035	.238	6.788	.000	1.000	1.000
Job Discretion	.238	.035	.238	6.789	.000	1.000	1.000
5 (Constant)	1.393E-16	.035		.000	1.000		
Organizational Boundary	.432	.035	.432	12.511	.000	1.000	1.000
Management Support	.137	.035	.137	3.957	.000	1.000	1.000
Reward/Re-enforcement	.238	.035	.238	6.886	.000	1.000	1.000
Job Discretion	.238	.035	.238	6.887	.000	1.000	1.000
Time Availability	.143	.035	.143	4.144	.000	1.000	1.000

a. Dependent Variable: Corporate Entrepreneurship

Source. Author's Computation, 2015

From the results in Table 2 presented above, the test for multicollinearity indicates that a low level of multicollinearity was present, because tolerance levels = 1.0 and Variance Inflation Factor (VIF) = 1.0 for all the five factors in the internal environment. Thus, the variables selected for assessing independent variables (factors in the internal environment) in this research do not reach the level that will indicate multicollinearity.

Organizational boundary was the first variable entered, followed by management support, reward/re-enforcement, job discretion and time availability. The results show that for the first predictor, beta coefficient is substantial, positive and significant; $\beta = 0.432$, $t = 11.318$ and $p \text{ value} = 0.000 < 0.05$. This means that organizational boundary has significant effect on CE. Beta coefficient for the second predictor, management support is also moderately substantial, positive and significant; $\beta = 0.137$, $t = 3.618$, and $p \text{ value} = 0.000 < 0.05$. In essence, management support has significant effect on CE. Similarly, beta value for the third predictor, reward/re-enforcement is substantial, positive and significant; $\beta = 0.238$, $t = 6.528$, and $p \text{ value} = 0.000$ which is less than 0.05. This implies that reward/re-enforcement has significant effect on CE. Furthermore, beta coefficient for the fourth predictor is substantial, positive and significant; it has standardized coefficient value of 0.238, $t \text{ value}$ of 6.789 and $p \text{ value}$ of 0.00 which is less than 0.05. This also means that job discretion has significant effect on CE. The fifth predictor equally has a substantial and positive beta value; $\beta = 0.143$, $t = 4.144$ and $p \text{ value}$ of $0.000 < 0.05$. This equally implies that job discretion has positive effect on CE. On the strength of relationship, organizational boundary showed the strongest statistical relationship with CE. This was followed by reward- re enforcement and job discretion.

The prediction equation for model can be written as:

$$\text{CORPENT} = 0.0000393 + 0.432\text{OgB} + 0.137\text{MtS} + 0.238\text{RwD} + 0.238\text{TrT} + 0.143\text{WdS} + 0.035\epsilon$$

5. Discussion of Findings

Based on theory, factors in the internal environment, namely organizational boundary, management support, reward/re-enforcement, work discretion and time availability influence CE activities in a business organization. It was reported in this research that all these five factors showed significant effect on CE. Interestingly, these findings support existing theory and literatures on CE, especially on the application of CEAI. Particularly, these findings are in line with the recent findings of Olughor (2014). The interesting thing about present research and that of Olughor, (2014) is that both are carried out in Nigeria, but each focused on different industry which gave opportunity for comparison. However, in his submission, Olughor,

(2014) reported that time availability have no significant effect on CE. The reason may be that Olughor's study focused on telecommunication industry which is a service providing industry while, present study focused on manufacturing industry. Workers in the service providing industry may be less busy compared to those in the manufacturing industry.

Findings from this study are supported by Job characteristics theory as discussed in the literature section, and are also in consistence with findings of most previous studies from other countries¹ but, with slight differences in some. For example in the work of La Nafie et al. (2014), management support; reward system and work discretion each has positive significant effect on CE, but organizational resources and organizational structure has no significant relationship with CE. In Scheepers (2007), it was reported that only management support, autonomy and reward were found to have significant effect on CE intensity.

However the differences that were observed between present research and La Nafie et al. (2014) and Scheepers (2007) can be attributed to differences in the business environment. This result implies that business organizations in Nigeria have a better internal environment that fosters CE than those in South Africa, Taiwan² and Indonesia³.

6. Conclusion and Recommendations

The low value of R² recorded in the model was an indication that despite the usefulness of the instruments used in the study, there were other variables that also influence CE and needed to be included which still need to be researched. Therefore, suffice to say that these psychometric instruments (CEAI for example) cannot be adopted as universally accepted instrument for measuring factors in the internal environment that determine CE. For example, there are some variables that may be peculiar to African business environment such as leadership style of the management, communication system in the organization and issues relating to staff training and development etc which were not captured in CEAI. These variables may also explain a share of CE activities in African business environment.

Since factors in the internal environment are in direct control of business organizations, respective management of every business organizations should develop a means of improving upon these factors especially the organizational boundary, reward system and time availability. They should try as much as possible to remove all the bureaucratic procedures that can hinder employees from participating in CE activities. They should also keep on reviewing their reward

¹ See (La Nafie et al., 2014; Hornsby et al., 2008; Scheepers, 2007).

² See (Chen & Cangahuala, 2010).

³ See also (La Nafie, 2014).

system if they really want to sustain CE strategy; because the economic situation in Nigeria keeps on fluctuating every day. A reward that is considered substantial today may not be seen as appropriate in near future by the employees as a results of bad economic condition. Also, time is very necessary when it comes to creative thinking, thus manufacturing companies should consider giving their employees adequate time.

6.1. Contributions to Knowledge and Suggestions for Future Research

The study made significant contributions to knowledge as it found one factor in the internal environment to be significant predictor of CE in addition to the remaining four factors found by the previous study. Despite this significant contribution, there are some areas that still need be investigated. We therefore suggest that similar study should be replicated in other sectors of Nigerian economy and other African countries in order to ensure generalization of its findings.

7. References

- Abdulkadir, D.S. (2012). *Effects of strategic human resource management practices on corporate performance in the Nigerian banking and insurance industry*. Unpublished PhD Thesis, Department of Business Administration, University of Ilorin.
- Antoncic, B. & Hisrich, R.D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16, pp. 495–527.
- Arpaci, I.; Yardimci, C.Y.; Ozkan, S. & Turetken, O. (2012). Organizational adoption of information technologies: A literature review. *International Journal of E-business and E-government Studies*. 4(2), pp. 37-50.
- Chaka, C.T. (2006). *Factors that promote corporate entrepreneurship within the first rand bank*. Unpublished MBA, Research Report, Gordon Institute of Business Science, University of Pretoria.
- Chen, M. & Cangahuala, G. (2010). Corporate entrepreneurship environment and organizational performance in technology manufacturing sector. *PICMET Proceedings*, Phuket, Thailand, pp. 1747-1755.
- Davis, T.M. (2006). *Corporate entrepreneurship assessment instrument (CEAI): Systematic validation of a measure*. Unpublished Master's Thesis, Department of Systems and Engineering Management, Graduate School of Engineering and Management, Air Force Institute of Technology, Air University, Ohio. USA.
- Guilford, J.P. & Fruchter, B. (1973). *Fundamental statistics in psychology and education*. 5th Ed. New York: McGraw Hill.
- Hackman, R.J. & Oldham, G.R. (1976). Motivation through the design of work. Test of a theory. *Organizational Behaviour and Human Performance*, 16, pp. 250-279.
- Hisrich, R.D.; Peters, M.P. & Shepherd, D.A. (2009). *Entrepreneurship*. USA: McGraw-Hill Companies.
- Hornsby, J.S.; Holt, D.T. & Kuratko, D.F. (2008). *The dynamic nature of corporate entrepreneurship: Assessing the CEAI*. Academy of Management, Annual Meeting Proceedings.

- Hornsby, J.S.; Kuratko, D.F.; Shepherd, D.A. & Bott, J.P. (2009). Managers' corporate entrepreneurial actions: Examining perception and position. *Journal of Business Venturing*, 24, pp. 236 – 247.
- Hornsby, J.S.; Kuratko, D.F. & Zahra, S.A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale. *Journal of Business Venturing*. 17(3), pp. 253-273.
- Kuratko, D.F. (2009). *Introduction to entrepreneurship* (8th Ed.). USA: South – Western: Cengage Learning.
- Kuratko, D.F.; Hornsby, J.S. & Bishop, J.W. (2005). Managers' corporate entrepreneurial actions and job satisfaction. *International Entrepreneurship and Management Journal*, 1, pp. 275–291.
- Kuratko, D.F.; Hornsby, J.S. & Covin, J.G. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, 57, pp. 37 – 47.
- Kuratko, D.F.; Montagno, R.V. & Hornsby, J.S. (1990). Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment. *Strategic Management Journal*, 11, pp. 49-58.
- La Nafie, N.; Nimran, U.; Al Musadieq, M. & Suyadi, I. (2014). Organizational internal factors, corporate entrepreneurship and organizational performance. *European Journal of Business and Management*, 6(36).
- Manufactures Association Nigeria (2014). *Nigeria industrial directory: A comprehensive guide to manufacturing companies in Nigeria*. Lagos: MAN.
- Oke, A. & Dawson, P. (2008). *Contextualising workplace stress: the experience of bank employees in Nigeria*. Faculty of Commerce - Papers (Archive). University of Wollongong, Research Online.
- Olughor, R.J. (2014). Corporate entrepreneurship and employee retention strategies in Nigerian telecommunication industry. *European Journal of Business and Social Sciences*, 3(2), pp. 09 – 23.
- Robbins, S.P.; Judge, T.A. & Vohra, N. (2013). *Organizational behavior*. 15th ed. India: Dorling Kindersley Pvt. Ltd.
- Rutherford, M.W. & Holt, D.T. (2004). Corporate entrepreneurship: An empirical look at the innovativeness dimension and its antecedents. *Journal of Organizational Change Management*, 20(3), pp. 429-446.
- Sathe, V. (2003). *Corporate entrepreneurship: Top managers and new business creation*. UK: Cambridge University Press.
- Scheepers, M.J. (2007). *Entrepreneurial intensity: The influence of antecedents to corporate entrepreneurship in firms operating in South Africa*. Unpublished Ph. D Thesis, Department of Business Management, University of Stellenbosch.
- Sebora, T.C. & Theerapatvong, T. (2009). Corporate entrepreneurship: A test of external and internal influences on managers' idea generation, risk taking, and pro-activeness. *International Entrepreneurship Management Journal*.
- Ugwudioha, M.O. (2004). Compensation system in Nigerian construction firm "piccolo-brunelli engineering ltd". *An Unpublished Ph. D Dissertation* of St. Clements University.
- Wyk, R.V. & Adonisi, M. (2011). An eight-factor solution for the corporate entrepreneurship assessment instrument. *African Journal of Business Management*, 5(8), pp. 3047-3055.