Organizational Learning and Performance of Selected Paint Manufacturing Firms in Lagos State, Nigeria

Ewans Chukwuma¹,*, Olai Godwin²,*, Offor Patience Ndidi³,*

¹Business Administration, Faculty of Management Sciences, Nnandi Azikiwe University, Awka, Nigeria
²Business Administration, Faculty of Management Sciences, Ignatius Ajuru University of Education, Port-Harcourt, Nigeria
³Business Management, Faculty of Management Sciences, Ebonyi State University, Abakaliki, Nigeria

Email address
cuks4real2cu@yahoo.com (E. Chukwuma), olaibas@yahoo.com (O. Godwin),
godsgiftoffor@gmail.com (O. P. Ndidi)

*Corresponding author

Citation

Abstract
The emerging trend in business environment occasioned by the interplay of various elements of the environment calls for effective implementation of organizational learning practices for the acquisition of relevant knowledge and skills to engender operational excellence. The specific objectives among others include: to ascertain the extent to which knowledge utilization relates to product diversification of the selected paints manufacturing firms in the Lagos State, Nigeria and to determine the extent to which knowledge sharing relates to product quality improvement of the selected paint manufacturing firms in Lagos State, Nigeria. The study employed correlational design in an attempt to determine the degree of relationship between studied variables. Structured questionnaire were administered to the sample of two hundred and seventy three (273), out of which, two hundred and sixty five (265) copies of the questionnaire were returned and subsequently used for the analysis. The data collected were analyzed with Product Moment Correlation Coefficient Via SPSS version 20.0. The study found a significant relationship between knowledge utilization and product diversification ($r = 0.76$) and significant relationship between knowledge sharing and product quality improvement ($r=0.64$) of the selected paint manufacturing firms in the Lagos State, Nigeria. From the findings therefore, the study concluded that organizations could sustain superior performance, if organization learning is implemented effectively. The study recommended that the management of these firms should provide a sustainable framework that will allow for organizational learning among organizational workers for cross-fertilization of innovative ideas, thus assemblage of these ideas would enable organization to come up with new product ideas or improved on already existing line of business.

1. Introduction
The emerging trend in business environment heretofore exerts considerable influence on organizations regarding its efforts in institutionalizing strategies for survival giving
the dynamism of the environment in achieving superior performance through sustainable framework of organizational learning and practices [1]. The demand for superior performance therefore reinforced the organizational predisposed desire to engender organizational learning practices in an attempt to achieve and sustain greater operational effectiveness and efficiency that will afford them greater leverage for optimal performance in their operations [2]. Organizational Learning emphasizes the need for organizations to exert conscious effort in making pertinent decisions to change their actions in the light of the changing business environment [3]. The imperativeness of the foregoing is that organizations share cognate experiences, draw inferences, and encode inferences in repositories of organizational knowledge, such as formal rules and informal practices.

Organizations are consistently shaped in the light of changing environment by complex learning processes which relatively constitute the combination of individuals with cognoscenti experience on operation management to aid their operations [4]. Notions about organizational knowledge, learning processes, and outcomes of learning vary a great deal in the organizational learning practices. This, however, could be attributed primarily to the presuppositions of learning organizational theory that conscientiously predict individual work-related-attitudes in typical organization [5]. This introduces some conceptual imprecision, tension, and even contradictions into the field, but also enriches it, and makes it applicable to a wide range of phenomena. Current approaches to organizational learning practices emphasize routines as repositories of knowledge and they conceptualize learning as making and updating of routines in response to experiences. Routines are regarded as recurrent sequences of actions, which span multiple organizational actors and assets [6]. For instance, organizational routines include organizational rules, roles, conventions, strategies, structures, technologies, organizational learning practices and capabilities.

From the aforementioned, organizational routines function as the primary form of organizational knowledge, learned from divergent trainings, workshops and symposia designed to enhance employee’s operations in the organization. The focus on routines in organizational learning establishes superior working capabilities that drive high performing organizations toward the realization of the predetermined goal [7]. Organizational learning is about firm’s training, increasing skills, work experience, and formal education. Learning organization create sustainable framework that allow their employees’ to learn through experimentation, dialogue and learning from each other [8]. Therefore, organizational learning is essentially central in driving high performing organizations through knowledge management consisting of knowledge utilization and sharing [9].

Most paint manufacturing firms have been responding to the changing business environment by making decisions in the light of the changes emanating from the environment [10]. These decisions are rooted within the whims and caprices of operational confinement of sustaining their customer relationship management [11]. Precious Paints Nigeria Limited is one of the fast growing companies in the paint manufacturing industry in Nigeria and was duly registered under the manufacturing association of Nigeria known as MAN. The company was incorporated on the 5th May, 2000. The company’s operations site is located at 6/8, Alhaji R. O. Sadiq close, off OnilewuraLiasu Road, Ikotun Edge, OshodiIsolo, Lagos. The company’s products are Precious paints and Next-coat paint which are in Emulsion, Gloss, Satin, Texture [12]. In addition, Portland Paints Nigeria was incorporated in April, 2001. The firm’s operations site is situated at 15, Aromire Avenue, Adeniyi Jones, Ikeja, Lagos State. The firm produces variety of paints. Their products come in Emulsion, Texture, Gloss, and Satin [13]. In the same vein, Dulux Paints Nigeria was incorporated on the 3rd day of February, 1999. The company’s office is situated at 2, Adeniyi Jones, Adeniyi Avenue, Ikeja, Lagos. Their products over the years have gained customer loyalty from various parts of this country. The company produces categories of paints, which come in the form Emulsion, Gloss, Satin and Texture etc. and Berger Paints Nigeria, Public Limited Company (PLC), was incorporated on the 22nd day of September, 1998. The company’s operation site is situated at Plot 142, Oba Akran, Ikaja Industrial Estate, Ikeja, Lagos [14].

Organizational Learning is a product of inquiry which involves the interaction of cognoscente’s individuals with cognate experience on operation management aimed at directing work-related-attitudes towards achieving the goal of the organization. Therefore, for organizational learning to yield the desired result, organizations must provide structural framework that allow for constant learning among the workers. From observation, it appears that these firms seldom conduct seminars, workshops and symposia for the acquisition of the desired skills necessary for knowledge utilization and sharing among their workers. However, knowledge acquired, shared and utilized enable organizations to be innovative and possibly help them improve their product quality and diversify their line of products in meeting the demands of the environment. Thus, lack of innovativeness in businesses brings about re-cycling, rigidity, retardation, and boredom which are occasioned due to dearth of organizational learning.

Knowledge utilization and sharing as component factor of organizational learning should not be relegated by any purpose driven organizations considering its pertinent role in providing the needed skills for operational excellence. Organizational learning drives when the management entrenches structural framework of learning principles that cut-across every segments of the organization. The relevance of the aforementioned underpinned the imperativeness of conducting workshops, and seminars for cross fertilization of ideas from knowledgeable individuals with cognate experience. It appears that these firms have neither
in institutionalized organizational learning practices nor engender knowledge management strategies that could allow for the desired skills, dexterity, and abilities needed to generate superior performance. Consequently, no significant improvements of these firms have been recorded in terms of product diversification and quality improvement as quintessential for improved performance. Therefore, failure to entrench organizational learning practices has been known to have negative effect on organizational performance. It is against this backdrop that this study is designed to ascertain the effects of organizational learning and performance in the paint manufacturing industry, Lagos State, Nigeria.

2. Objectives of the Study

The general objective of the study is to determine the nature of relationship between organizational learning and performance of the selected paint manufacturing firms in Lagos State, Nigeria. Specifically, the objectives are:

i. To ascertain the extent to which knowledge utilization relates to product diversification of the selected paint manufacturing firms in Lagos State, Nigeria.

ii. To determine the extent to which knowledge sharing relates to product quality improvement of the selected paint manufacturing firms in Lagos State, Nigeria.

3. Concept of Organizational Learning

Organizational learning is a process by which organizational members acquire skills and co-opt knowledge necessary for the development of capabilities, resources and abilities for superior performance [15]. The definition suggests that organizational learning is driven on knowledge management practices shared by members of the organizations. The knowledge acquired especially during seminars or symposia is not resourceful until utilized [16]. In the same vein, Mylse [17] sees organizational learning as a continuous process through which organization responds to its environment by utilizing various skills, knowledge and capacities aimed at achieving competitive advantage. On the other hand, Argyris and Schon averted that organizational learning is the product of organizational inquiry. As a process of organizational inquiry, workers will interact with cognoscente’s individuals with cognate experience on the operation management through which they acquire knowledge [18]. Gilley, and Maybunich [19] agreed with the presupposition of Argyrs and Schon as they contend that organizational learning is a direct product of interaction with individuals who have acquired operational skills in the organization. Organization Learning is defined as organization where people continually develop their capacity to achieve results they desire, whereby new patterns of thinking are nurtured, collective aspirations are freed and people learn to learn together [20]. Organizational learning emphasizes on the capacity of organization to acquire, access, utilize, and share tacit information that would enable them achieve ascendancy in market place [21]. From the avalanche of definitions, the study sees organizational learning as a well-designed process that allow for continuous improvement on working capabilities and dexterity as cross-fertilization of ideas and knowledge are shared amongst workers in organization.

4. Organizational Performance

Organizational performance is measured in terms of return on investment, sales revenue, products diversification, quality improvements, profits, market share etc., depends on the nature of the business. The objective of any manufacturing firms is not only to gain competitive advantage but to improve on it operations toward the attainment of organizational goal. Performance could be sustained through effective thru-put system to improve their output. Veer [22] argues that most organizations strive to strengthen their supply-chain channels to improve on their sales, thereby enhancing their performance. Improved sales through supply-chain interconnectivity are one of the construct measurements of performance which must be entrenched for effective flow of products from the manufacturer down to the ultimate consumers. In addition, Jerill [23] sees organizational performance as the nexus between effective cost and realized output and also relationship between output and results achieved over a period of time. More so, enterprise performance explains how organization successfully appropriates their resources in meeting the demands of the changing environment. Thus, efficiency in resource allocation, utilization and mobilization that result to improved performance is referred to as organizational performance. For organization to achieve enhanced performance, every segment of the organization must work in synergy that has collective effect on the output, rather than individual output [24].

5. Knowledge Utilization

The term knowledge utilization covers individual and group knowledge, learning from experience or innovative solutions [25]. It is that knowledge acquired to design new products or improved on already existing product line. This kind of knowledge is learned to improve on capacity utilization of individuals’ potentials for superior performance [26]. Knowledge utilization enables organization to match employees’ capabilities with job requirements to engender innovativeness and creativity in operations management. Fryor [27] averted that knowledge utilized bring about innovations, and product quality improvements necessary in meeting the challenges of the environment.

6. Knowledge Sharing

Knowledge sharing according to Mark [28] is the dissemination of tacit information within the organizational
members. Access to relevant information is a key that drives performance in organization. The nature of business environment demands that organizations should source and share relevant information for decision making. Though, knowledge learnt and shared enables organization to see beyond its immediate environment regarding its capabilities, resource control and allocation in producing products that stand the test of time [29]. Therefore, by knowledge sharing and alignment of individual’s objectives to the overall goal of the organization is a central engine that produces a formidable ascendancy in the market place.

7. Empirical Reviews

Buwea [30] carried out a study on the impact of organizational learning on performance of manufacturing firms in Kenya. The study was aimed at determining the effects of organizational learning on performance of the selected manufacturing firms in Kenya. Survey research design was employed such that structured questionnaire was administered on the sample of three hundred and fifty four (354) drawn from the population of the study. Data collected from the respondents were analyzed with Chi-square ($X^2$) and simple percentage. The study revealed that organizational learning is quintessential in the generation of capabilities and resources needed for improved performance and concluded that organizations can achieve and sustain competitive advantage if organizational learning practices are entrenched. From the findings, the study recommended that organizational learning practices should be enhanced in order to create room for innovations and creativity in their operations.

Tomislav, Miha and Vlado [31], studied the relationship between organizational learning and organizational performance. The objective of the study was to examine the extent of relationship between organizational learning and organizational performance with special interest on Croatia. Descriptive research design was used and structured questionnaire designed in 5-likert point scale were administered to three thousand and seven hundred (3700) companies in Croatia. The data collected were analyzed with Pearson correlation coefficient ($r$) via SPSS and the reliability was also conducted using Cronbach’s alpha. The rest-retest results yield Cronbach’s alpha value of 0.927, suggesting that the instruments were reliable. The study found that organizational learning has positive relationship with organizational performance and concluded that organizations gain more insights on the interplay of environmental elements which influences their performance.

Rajnish, Kritic, Nipur, Ridhima and Ritika [32] carried out a study on Impact of Learning Organization on Organizational Performance in Consulting Industry. The study was designed to explore the effect of learning organization and organizational performance in consulting industry. Learning organizations create a dynamic culture in every organization that teaches organizations to adapt to changes as quickly as their environment changes. The research design is descriptive in nature. A convenient sampling has been used to collect the data. The participants in the survey are 50 employees of leading consulting firms working on different positions of management cadre. The tool used for learning organization is a “designed questionnaire for data collection”. After the analysis, it was observed that there is a positive correlation between learning organization and organizational performance with respect to their parameters and concluded that organizational performance is affected by organizational learning.

8. Theoretical Framework

The underpinning theory of this study is cognitive theory of learning propounded by Collins, Brown and Newman [33]. Cognitive theory of learning came to limelight following the need for workers in organization to acquire operational skills to improve their work-related-attitudes in organization. This theory assumes that individual workers who may have acquired operational skills have that tendency of exploring greater heights in their operations. The theory believes that workers in organization learn when people with cognate experience interact with them especially when there is discrepancy between expected outcome and actual outcome. According to the theory, three other ways in which workers learn are through experience, verbal persuasion, and physiological state. They contend that learning through the process of inquiry into the prevailing circumstance would not only expose the individual workers to acquire the knowledge but make them proactive in responding to the changing environment rather than being reactive.

The relevance of this theory on the present study is that it laid emphasis on the imperative nature of high performing organization that is knowledge driven occasioned by organizational learning. Individual workers learn especially when people with cognate experience on operation management interact with them on the prevailing situation.

9. Methodology

The study employed a correlational research design in an attempt to identify the degree of relationship between variables under study. Structured questionnaire drawn on 5 point scale rating was administered to a sample of two hundred and seventy three (273) respondents drawn from the population of eight hundred and sixty four (864). 273 copies of questionnaire were administered, out of which, 265 copies were returned, and subsequently used for the analysis. The study employed component factor analysis using varimax rotation to ensure the usability and suitability of the research instrument. Also, for sampling adequacy Bartlett Test of Sphericity and Kaiser-Meyer-Olkin were employed. Test re-test approach was employed such that cronbach alpha coefficient was used to determine the reliability of the research instrument. The reliability results were 0.76 and 0.78 for knowledge utilization on product diversification and knowledge sharing on product quality improvement of the selected paints manufacturing firms in Lagos State, Nigeria.
The data collected were analyzed with Pearson Correlation Coefficient Via SPSS version 20.0.

Table 1. Component Factor Analysis.

<table>
<thead>
<tr>
<th>Component extractions and items</th>
<th>Factor Loadings</th>
<th>Mean Scores</th>
<th>Cronbach’s α if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor One: Knowledge utilization and product diversification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge acquired is a valuable asset</td>
<td>0.895</td>
<td>4.2100</td>
<td>.898</td>
</tr>
<tr>
<td>Capacity utilization is entrenched via knowledge acquired in organization</td>
<td>0.816</td>
<td>3.3556</td>
<td>.889</td>
</tr>
<tr>
<td>New ideas for new products line could be sustain through knowledge imbibed.</td>
<td>0.687</td>
<td>4.9263</td>
<td>.765</td>
</tr>
<tr>
<td>Products diversification leads to new idea</td>
<td>0.676</td>
<td>3.2110</td>
<td>.709</td>
</tr>
<tr>
<td>Reliability result = 0.76, eigenvalue =78.659, % variance =27.801 and Mean score =3.6091</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor Two: Knowledge Sharing and product quality improvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing of tacit information enhances decision making.</td>
<td>0.744</td>
<td>3.290</td>
<td>.878</td>
</tr>
<tr>
<td>Knowledge shared among workers engenders proficiency in operations management.</td>
<td>0.761</td>
<td>3.987</td>
<td>.761</td>
</tr>
<tr>
<td>Quality specification could be improved via knowledge shared</td>
<td>0.802</td>
<td>4.981</td>
<td>.813</td>
</tr>
<tr>
<td>Quality improvement is enhanced via knowledge shared</td>
<td>0.810</td>
<td>4.091</td>
<td>.981</td>
</tr>
<tr>
<td>Reliability result = 0.78, eigenvalue =71.659, % variance =17.801 and Mean score =4.7256.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 above shows the component factor analysis of the instrument involving the use of varimax rotation for the study. A test re-test method on a pilot study was employed in an attempt to ascertain the internal reliability of the instrument. The employment of component factor analysis was appropriate in exploring sampling adequacy, which was shown by the Bartlett Test of Sphericity ($X^2 = 562.632$, $p<0.000$) and the Kaiser-Meyer-Olkin measure of sampling adequacy was greater than 0.5 (KMO = 0.751), which show that use of factor analysis was appropriate. Further inspection of the correlation matrix for the factorability of R indicated that many coefficients were above 0.30, another strong evidence for the suitability of factor analysis. The resultant factor structure explained 17.801 per cent of the variance with eigenvalues greater than 0.5. More so, there was considerably evidence of high communalities subsisting across each scale components. In addition, the Cronbach’s alpha ($\alpha$) for each instrument was respectively calculated to establish the constructs of the component extractions.

Factor 2 above shows 17.801 percent variation in the four items loaded for knowledge utilization and product diversification of the selected paint manufacturing firms in Lagos State, Nigeria. The overall mean score of the four items is 4.7256 and the mean scores of all the constructs were above .30. This means that the four measuring instruments were respectively significant in measuring knowledge sharing on quality product improvement. The result of the Cronbach’s alpha ($\alpha$) values of the four instruments ranged from .823 to .776, respectively. Therefore, $\alpha$ coefficient of the total was 0.78, which is absolutely considered good indicators of reliability of the instrument.

10. Results

Table 2. Correlation Analysis of knowledge utilization on product diversification of the selected paints manufacturing firms in Lagos State, Nigeria.

<table>
<thead>
<tr>
<th>knowledge utilization</th>
<th>Product diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.764*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>265</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.764*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>265</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3. Correlation Analysis of knowledge sharing on product quality improvement of the selected paints manufacturing firms in Lagos State, Nigeria.

<table>
<thead>
<tr>
<th>knowledge sharing</th>
<th>Product quality improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.640*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>265</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.640*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>265</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

11. Discussion of Findings

The correlation result in Table 2 shows that there is a significant relationship ($p=0.000$) between knowledge utilization and product diversification of the selected paints manufacturing firms in Lagos State, Nigeria. This was shown
by a strong correlation coefficient (r) of (0.76). This implies that knowledge sharing will engender innovativeness in operations that will result to product diversification giving the dynamism of business environment of the selected paints manufacturing firms in Lagos State, Nigeria. Therefore, since the P-value is less than 0.01, the study reject the null hypothesis and conclude that there is a significant positive relationship between knowledge sharing and product diversification of the selected paints manufacturing firms in Lagos State, Nigeria. This implies that any increase on the level of knowledge utilized will lead to generation of innovative ideas for product diversification.

More so, the correlation result in Table 3 also shows that there is a significant relationship (p=0.000) knowledge sharing and product quality improvement of the selected paints manufacturing firms in Lagos State, Nigeria. This was shown by a strong correlation (above average) coefficient (r) of (0.64). The implication of the coefficient of determination (r) is that the level of knowledge shared among organizational workers would engender some level of quality specifications on their operations. Therefore, since the P-value is less than 0.01, the study reject the null hypothesis and conclude that there is a significant positive relationship between knowledge sharing and product quality improvement of the selected paints manufacturing firms in Lagos State, Nigeria.

12. Conclusion

In the light of the aforementioned, the study concludes that organizational learning positively relates to performance of paints manufacturing firms in Lagos State, Nigeria. This implies that organizational learning predispose individual workers to acquire basic knowledge that will enable them to forage strategies for business performance which is sacrosanct given the dynamism of business environment. The resulting flux in changing business environment necessitated the imperativeness of co-opting organizational learning practices to modulate the growing incidence of business failure resulting from dearth of operational dexterity in the work place.

Recommendations

The management of these firms should employ the services of personnel with cognate experience on operations management such that individual workers will learn from them through inquiry.

References


