Organic Structure and Performance of Nigerian Manufacturing Firms

Aga, Celestina C.

Department of Management Faculty of Business Administration University of Nigeria, Enugu Campus

* Ezenwakwelu, Charity A.

Department of Management
Faculty of Business Administration
University of Nigeria, Enugu Campus
Corresponding Author: Ezenwakwelu, Charity A

Abstract

This study conducted an investigation on organic structure and performance of Nigerian Manufacturing Firms. The paper sought to ascertain the extent to which decentralization affects creativity and assess the effect of open communication on productivity of Nigerian manufacturing firms.

The study adopted the survey research design. Primary data were obtained by administering of a structured questionnaire which was designed on five point likert scale format. The target population consists of senior and junior staff category of the ten selected manufacturing firms in South East, Nigeria The manufacturing firms were selected purposefully. The study population was 6454 employees.

The results revealed that decentralization positively and significantly affected creativity; open communication positively affected productivity. The study concluded that organic structure exerts huge influence and has substantive role in realization of organizational performance. The study proposed that management of business firms should decentralize authority when it is necessary so as to adapt to frequent changes in the environment. Open communication should be the focal point of any contemporary organization because it is necessary and facilitates increase in productivity.

Key Words: Organic structure, Decentralization, Open communication, Creativity and Productivity

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I. INTRODUCTION

Organic structure refers to an organization that is flexible and is able to adapt to changes from the environment. Organic structured organizations are characterized by decentralization, flexible, broadly defined jobs, interdependence among employees and units, multi-directional communication, employee initiative, relatively few and broadly defined rules, regulations, procedures, and processes, employee participation in problem solving and decision making. Organic structure holds emphasis on effectiveness, problem solving, responsiveness, flexibility, adaptability, creativity, and innovation. Such organizations quickly respond to environmental change because the employees are empowered to be creative. (Berry, 2004).

Durward (2010) posits that organic structures are appropriate in unstable, turbulent, unpredictable environments and for non-routine tasks and technologies. For organizations coping with uncertainty, finding appropriate, effective, and timely responses to environmental challenges, organic structure is relevant.

Environment is characterized as dynamic, uncertain, unpredicted and turbulent that affects organizational activities. Business organization is an integral part of its environment and they are mutually interdependent and exclusive where the environment plays the role of providing the resources and opportunities to organization for its existence, the business organization in turn, offers its goods and services to the people living in the environment for survival and enlightenment (Babalola and Adesanya, 2013).

As an organization grows in size, its hierarchy of authority normally lengthens, thereby, makes the organisation's structure less flexible and slows manager's response to changes in the organizational environment. An organic organization stresses teamwork, open communication and decentralized decision making and is well suited for changing or turbulent environment. A changing environment is unpredictable due to frequent shifts in technology, products, markets, competitors and political forces. In turbulent environments, managers seek to satisfy customers' needs and preferences which are constantly changing (Hellriegel et al,

This paper seeks to ascertain the extent to which decentralization affects creativity and assess the effect of open communication on productivity of Nigerian manufacturing firms.

II. CONCEPTUAL REVIEW

2.1.1 Organic Structure

Organic structure is characterized by flat reporting structure within an organization. Thus, the span of control encompasses a large number of employees. Interactions among employees across the organization are horizontal rather than vertically between layers of managers. Because interactions are mostly amongst employees within a flat reporting structure, decisions are usually made by consensus among groups of employees, rather than by individual managers in organic structure. Rather than concentration of information at the upper levels of an organization which is more commonly seen in traditional top-down reporting organizations; there tends to be a larger amount of information sharing among employees. There may be a large amount of cooperation between departments, rather than what is seen in more hierarchically-organized businesses. Organic organization structure tends to function effectively with employees with diverse set of skills and ability to make decisions on multiple issues. This type of employees would not require senior management directives. Since procedures change as the business routinely adapts to variations in the business environment, there is less need for a broad array of formal procedures in an organic organizational structure. *In* the organic organizational structure there is widespread availability of information which results in better decisions that react well to current market conditions; which is useful in an unstable market environment where change occurs regularly, and especially where there is a high level of competition (www.accountingtools.com).

Ezigbo (2011) posits that organic structure is well suited to a changing environment. In organic structure, tasks tend to be inter-dependent, tasks are continually adjusted and redefined through interaction, structure of control, authority and communication is a network, communication is both vertical and horizontal depending on where needed information resides, and communication primarily takes the form of information and advice among all levels.

2.1.2 Decentralization and Creativity

Decentralization is the process of dispersing decision making governance closer to the people or citizens. It includes the dispersal of administration or governance in sectors or areas like engineering, management science, political science, political economy, sociology, and economics (Ezigbo, 2011). Decision-making is spread among more managers. Functional managers in marketing, human resource and finance may be sent to run regional departments. The reason for this type of strategy is that consumers' needs and tastes vary by region. Raw materials may also be more plentiful and cheaper in certain regions. Decentralized manufacturing usually increases motivation and creativity, (Rick, 2018). Decentralization refers to passing authority down to the individuals in the organization. Researchers state that decentralization would result in higher productivity, efficient use of resources, increased job skills, employee moral and job satisfaction (Brennen, 2002),

Decentralization refers to the degree to which decision making is allowed for lower-level managers. Decision making authority is given to managers closest to the task performance in a decentralized organization (Sablynskis, 2003).

Top executives pass down their decision-making authority to lower levels of the organizational structure in a decentralized organization. Thus, the organization operates on wider spans of control and less rigid policies among each staff of the organization. As the span of control widens, it reduces the number of levels within the organization, giving its structure a flat appearance. Thus managers are interested in creating self-managed work-teams, and developing cross-functional teams (Ezigbo, 2012).

In decentralized organisations, decision-making is quicker and better because decisions do not have to be referred up through the hierarchy. Opportunity to learn by doing is provided by decentralization. Also, positive climate where there is freedom to make decisions, use judgement and freedom to act is released by decentralisation. It gives practical training to middle level managers and facilitates management development at the enterprise level (Ezigbo, 2012).

Therefore, decentralisation focuses attention on the growing emphasis on participation and empowerment. A decentralized organizational system relies more on lateral relationships than on command or force. Implementing decentralisation appears to be easy with private sector organizations than the public sector organizations where there is need for accountability of actions, follow regular procedures and adopt uniformity of treatment. Thus, the government get involved in privatisation and deregulation of some public organisations which however, shifts responsibility for functions from public to the private sector. When departments, functional units, or teams are allowed to have much decision-making authority, they may begin to pursue their own goals at the detriment of the organisation. If managers are operating in a stable environment, where they use well understood technology then there could be no reason to decentralize authority (Jones, George and Hill,

2003). The advisability of decentralization must be considered in terms of the nature of the product or service provided, policy making, the day-to-day management of the organization, and the need for standardization of procedures, or conditions or terms of employment of staff (Mullins, 2010).

Creativity is the act of turning new and imaginative ideas into reality. Creativity is the process of bringing something new into existence. Creativity requires passion and commitment. It brings to existence what was previously hidden (Rollo, 1994).

Creative individuals do not think the way other people think. They are not doing what others are doing. Rather, they tend to go off in their own way, seeking to propose ideas that are both new and useful. The major obstacle to creativity is not exactly restrictions from other people but rather the limitations one places on one's own thinking and ability. (Sternberg and Lubart, 1995).

2.1.3 Open Communication and Productivity

Effective communication is necessary to increase productivity because it directly influences employee behavior. Effective communication which includes clear instructions, fast message delivery, and proper explanation, is vital to solid relationship between managers and employees. Poor communication can affect work production if the employee does not receive adequate information or understand what to do to complete a task assigned to him (Pawel, 2017).

Effective communication enhances the morale of employees and productivity. When employees receive regular feedback on their performance, and are informed on what is going on in the company and what role they play in the overall success of the organization; they will show appreciation by working harder and more efficiently. Employees tend to take ownership of their work when they are allowed to participate in the decision concerning their work process (Pawel, 2017).

Communication is the key to reach all levels of engagement. A culture of open communication where employees are encouraged to share their positive and negative ideas, gives them the sense that they are valued. When communication is open, employees feel empowered and see management as transparent and trustworthy. Employees who are more informed are likely to go about their duties with confidence and direction. When the workplace is open and transparent, and communication runs smoothly within the organization, there will be less friction and misunderstanding amongst members of the workforce. (Vdovin, 2017).

Communication is a process of exchanging the views, ideas, opinions and suggestion between one or more person in the same organization. Communication is a very essential element of a successful business. Communication is the process whereby people within an organization give and receive messages (Dwyer 2005). Communication can occur through informal channels such as grapevines or formal channels such as procedures and official meetings. Previous studies assert that communication in an organization has significant effect on employee's job satisfaction (Odden and Sias, 1997).

2.2 Theoretical Review Open-system Theory

Open systems theory was propounded by Ludwig Von Bertalanffy (1956). The theory stresses that organizations are strongly influenced by their environment. The environment consists of internal and external factors that exert various forces of an economic, political, or social nature. The environment also provides key resources that sustain the organization and lead to change and survival (Michael, 2004). An open system is a system which does interact with its environment, on which it rely for obtaining essential inputs and for the discharge of their outputs. An open system is contrasted with an isolated (closed) system, which for all practical purpose is completely self – supporting and thus does not interact with its environment (Ezigbo, 2011).

2.3 Previous works

Ezigbo, (2012) conducted a study on achieve organisational effectiveness by decentralization in public organisations in Nigeria. The study sought to determine the extent of the relationship between decentralization and organizational effectiveness; identify the types of decentralization applicable in public sector organisations; determine the extent of the relationship between empowerment and job satisfaction and assess the extent of decentralization in public sector organizations. The study adopted the survey research design. A sample size of 286 was obtained from the population of 1000. Findings revealed that there was a significant positive relationship between decentralization and organisational performance; Political, administrative, applicable fiscal, and economic decentralization are public sector organisations; there was significant positive relationship between a and of decentralization empowerment job satisfaction; extent in public sector the organizations was high. The study concluded that decentralization has certain disadvantages: if departments, functional units, or teams are allowed to have much decision-making authority, they may begin to pursue their own goals at the detriment of the organisation. The study recommended that decentralization should be considered in terms of the nature of the product or service provided, policy making, the day-to-day management of the organization, and the need for standardization of procedures, or conditions or terms of employment of staff.

of the organization, and the need for standardization of procedures, or conditions or terms of employment of staff.

Ogbo, Nwankwere, Orga and Igwe (2012) conducted a study on the impact of structure on organisational performance of selected technical and service firms in Nigeria. The specific objectives were to establish whether decentralization improve effective decision making; determine the extent to which task routine affects staff productivity; ascertain the relationship between narrow span of control and organizational efficiency. The study adopted the survey design. Findings revealed that decentralization enhanced and still enhances better and more informed decision making in technical and service firms; task routine affects staff productivity both positively and negatively depending on the time frame and the individual worker's preference for either task routine or variety; that a significant positive relationship existed and still exists between narrow span of control and efficiency. The study concluded that decentralization improves effective decision making, task routine has both positive and negative effects on productivity, and narrow span of control has a positive relationship with efficiency. The study therefore recommended that managers of technical and service firms should adopt more decentralized forms of structures as means of improving the decision making process; lower level managers should be allowed to participate in the decision making process in order to foster goal congruence and avoid sub optimization in organizations; managers should combine elements of both task routine and variety in organizing employees for carrying out task in order to reap the advantages of both systems of task assignment; employees should be empowered to be more innovative in carrying out tasks, whether routine or not and managers and business owners should ensure that span of control is kept at a level that can be effectively handled by the individual manager. That is, the ability of the manager should be properly considered.

III. METHODOLOGY

The study adopted the survey research design. Primary data were obtained by administering of a structured questionnaire which was designed on five point likert scale format. The target population consists of senior and junior staff category of the ten selected manufacturing firms in South East, Nigeria The firms were selected purposefully. The study population was 6,454 employees of the ten selected manufacturing firms. The sample of 549 was obtained from Cochran (1963) Statistical formula. The Bowley's (1997) proportional allocation formula was used to allocate the sample to the designated firms regarding their populations. Content validity was measured by experts from the academia. The reliability test that was conducted after test re - test using Cronbach Alpha indicates 0.93 implying high degree of items consistency. Thus, on the 549 copies of the questionnaire distributed, 508 (91%) were returned while 41 (9%) were not returned. Ordinal logistic regression was used to test the two hypotheses.

Table 1: The Extent to which Decentralization affects Creativity of Manufacturing Firms.

S/N	Options	5	4	3	2	1	
	•	SA	A	N	D	SD	Total
1.	Organisations enjoy certain inherent advantages as they decentralize in turbulent environment	191	173	48	62	34	508
2.	Decentralization is the process of redistributing or dispersing functions, powers, people or things away from a central location or authority.	170	135	87	42	74	508
3.	Motivation and creativity increase with decentralisation.	227	155	58	51	17	508
4.	Decentralization is spurred to achieve organizational goals during turbulent environment.	132	258	59	27	32	508
5.	The transfer of decision making power and assignment of accountability and responsibility for results is decentralization	229	176	44	34	25	508
	Grand Total/Percentage	1,846	(72.7%)	296(11.6%)	398	(15.7%)	2,540

Source: Field Survey, 2021

Table (1) on the first item shows that 364 (71.7%) of the respondents agree that organisation enjoys certain inherent advantages as they decentralize in turbulent environment; 48 (9.4%) are neutral while 96 (18.9%) disagree. Second item shows that 305 (60%) of the respondents agree that decentralization is the process of redistributing or dispersing functions, powers, people or things away from a central location or authority; 87 (17%) are neutral while 116 (23%) disagree. Third item shows that 382 (75.2%) of the respondents agree that motivation and creativity increases with decentralisation, 58 (11.4%) are neutral

while 68 (13.4%) disagree. Fourth item shows that 390 (76.8%) of the respondents agree that decentralization is spurred to achieve organizational goals during turbulent environment, 59 (11.6%) are neutral while 59 (11.6%) disagree. Fifth item shows that 405 (79. 7%) of the respondents agree that the transfer of decision making power and assignment of accountability and responsibility for results is decentralization, 44 (8.7%) are neutral while 59 (11.6%) disagree. Generally, 1, 846 (73%) of the respondents agree. Thus, 296 (12%) are undecided, while 398 (15%) disagree. This implies that decentralization affects creativity of manufacturing firms. H_1 . Decentralization positively and significantly affects creativity of manufacturing firms.

Table 2a. Pseudo R-Square

Cox and Snell	.736
Nagelkerke	.801
McFadden	.958

Link function: Logit.

R-square statistics are large (See Cox and Snell) in table 4.13a which is 73.6%. This indicates that decentralisation explains a large proportion of the variation in creativity.

Table 2b. Parameter Estimates

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[FIRMCREAT= 314]	2.963	2.006	0.894	1	.013	2.963	3.269
Location	[Decentralisation = 206]	7.652	0.728	3.721	1	.002	7.652	8.323

Link function: Logit.

FIRMCREAT = Firm creativity

Interpretation of Result: The result in table 2b reveals that decentralisation positively and significantly affects creativity of manufacturing firms. With an increase in the probability of increased creativity at the odds ratio of 7.652 (95% CI, 7.652 to 8.323), Wald χ^2 (1) = 3.721, p = 0.002 < 0.05. Thus, the alternate hypothesis which states that decentralization positively and significantly affects creativity of manufacturing firms is hereby accepted and the null hypothesis is rejected.

Table 3. The Effect of Open Communication on Productivity of Manufacturing Firms.

S/N	Options	5	4	3	2	1	
		SA	A	N	D	SD	Total
1.	Free flow of communication enhances organizational output.	281	158	23	33	13	508
2.	Creating an atmosphere of open communication contributes to a more vibrant, creative workforce that allows employees to be more engaged.	180	180	52	66	30	508
3.	Free flow of communication encourages coaching and thereby increases productivity	142	235	35	55	41	1 508
4.	Open communication strengthens an organization both internally and externally in turbulent period.	40	306	45	71	46	508
5.	The level of communication that employees receives from the management increases their job satisfaction	202	139	61	35	71	508
	Grand Total/Percentage	1,863	(73.3%)	216(8.5%)	461	(18.2%)	2,540

Source: Field Survey, 2021

Table (3) on the first item shows that 439 (86.4%) of the respondents agree that free flow of communication enhances organizational output, 23 (4.5%) are neutral while 46 (9.1%) disagree. Second item shows that 360 (70.9%) of the respondents agree that creating an atmosphere of open communication contributes to a more vibrant and creative workforce that allows employees to be more engaged; 52 (10.2%) are neutral and 96 (18.9%) disagree. Third item shows that 377 (74.2%) of the respondents agree that free flow of communication encourages coaching thereby increases productivity, 35 (6.9%) are neutral while 96 (18.9%) disagree. Fourth item shows that 346 (68.1%) agree that open communication strengthens an

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organization both internally and externally in turbulent period; 45 (8.9%) are neutral while 117 (23%) disagree. Fifth item shows that 341 (67.1%) of the respondents agree that the level of communication that employees receives from the management increases their job satisfaction; 61 (12%) are neutral while 106 (20.9%) disagree. Generally, 1, 863 (73.3%) of the respondents agree. Thus, 216 (8.5%) are undecided, while 461 (18.2%) disagree. This implies that open communication affects productivity.

H_{1:} Open communication positively affects productivity of manufacturing firms.

Table 4a Pseudo R-Square

14010 14 150440 11 54441							
Cox and Snell	.77.3						
Nagelkerke	.890						
McFadden	.902						

Link function: Logit.

R-square statistics are large (See Cox and Snell) in table 4.14a which is 77.3%. This indicates that open communication explains a large proportion of the variation in productivity of firms.

Table 4b Parameter Estimates

	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Threshold [PRODFIRM = 562]	3.367	10.157	4.661	1	.000	3.367	4.957
Location [Opencomm = 209]	9.017	7.992	6.020	1	.000	9.017	11.119

Link function: Logit.

PRODFIRM = Productivity of firms, Opencomm = Open communication

Interpretation of Result: The result in table 4b reveals that open communication positively affects productivity of manufacturing firms. With an increase in the probability of increased productivity at the odds ratio of 9.017 (95% CI, 9.017 to 11.119), Wald χ^2 (1) = 6.020, p = 0.000 < 0.05. Thus, the alternate hypothesis which states that open communication positively affects productivity is hereby accepted and the null hypothesis rejected.

IV. DISCUSSION OF RESULTS

Hypothesis one was tested with ordinal logistic regression to ascertain the extent to which decentralization affects creativity of manufacturing firms. The result revealed that decentralisation positively and significantly affected creativity ($\beta=7.652$, p=0.002<0.05). This implies that decentralized organizations encourage staff autonomy which enhances creative thinking and improved performance. Thus, the alternate hypothesis which states that decentralization positively and significantly affects creativity of manufacturing firms is hereby accepted and the null hypothesis is rejected. Bashir (2015) asserts that decentralized firms are more likely to innovate, introduce new products to the market and export their products.

Hypothesis two was tested with ordinal logistic regression to assess the effect of open communication on productivity of manufacturing firms. The result revealed that open communication positively affected productivity of manufacturing firms ($\beta = 9.017$, p = 0.000 < 0.05). This implies that open communication spurs productivity. Thus, the alternate hypothesis which states that open communication positively affects productivity is hereby accepted and the null hypothesis rejected. However, effective organizational communication plays an important role because communication has crucial impacts among work groups; organizational communication is a channel to flow information resource, and even policies (Shonubi and Akintaro, 2016).

V. CONCLUSION

The study concludes that organic structure exerts huge influence and has substantive role in realization of organizational performance. This is because an organic structure has the potential to develop teamwork, engage open communication and adopt decentralized decision making which helps the organization to adapt to changes in the environment.

VI. RECOMMENDATIONS

- i. Management of business firms should decentralize authority when it is necessary so as to adapt to frequent changes in the environment.
- ii. Open communication should be the focal point of any contemporary organization because it is necessary and ensures increase in productivity.

iii. The need to build a consensus can slow decision making. Thus, the top-down hierarchical approach may work better in very stable environments that change little over the long term, and so require less companywide consensus building.

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