

IMPACT OF STRUCTURE ON ORGANISATIONAL PERFORMANCE OF SELECETED TECHNICAL AND SERVICE FIRMS IN NIGERIA

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Abstract

The study aimed at establishing the impact of structure on organizational performance. Organizations today are becoming more automated and complex, hence, the need to maintain and improve performance by structuring and restructuring based on changing strategy. The study was conducted using the survey approach. The geographical scope of study was Innoson Nigeria Ltd, and Etisalat, Enugu Regional Office. Two sources of data were utilised in the study: they included primary and secondary sources. The primary source was the administration of copies of designed questionnaire to a total of eighty (80) respondents that made up the sample for the study. Out of the eighty (80) copies administered, seventy eight (78) were completed and returned. Simple percentage (%), chi-square (*a) and correlation were used in analysis of the data and in testing the three hypotheses. Findings revealed that decentralization enhanced better and more informed decision making in technical and service firms in Nigeria; that task routine affected staff productivity both positively and negatively; and that a significant positive relationship existed between narrow span of control and efficiency in organizations. The study concluded and recommended among others that managers of organizations should adopt more decentralized forms of structures as means of improving the decision making process; that managers should combine both task routine and variety in organizing employees for carrying out task in order to reap the advantages of both systems of task assignment; and that employees should be empowered to be more innovative in carrying out tasks, whether routine or not.

Keywords: Structure, Restructuring, Strategy, Automated, Organisational Performance, Decentralization, Task Routine

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1 Introduction

The business environment today is so dynamic that the decision to structure and re-structure has become paramount. Stephen and Timothy (2012) posit that structural decisions like the reconfiguration of any organization are arguably the most fundamental ones a leader has to make. This according to them is because organizational structure defines how job tasks are formally divided, grouped, and coordinated.

Similarly, Nelson and Quick (2011) posit that the organization's structure gives it the form to fulfill its functions in the environment. Acknowledging the views of these authors on the indispensability of structural decisions and the ongoing debate on the interrelationships between strategy, structure and performance, one would want to agree with Joris, Brand, Marco and Zoetermeer (2002) that the outcome of the organizational design process is unmistakably an important determinant of the performance of firms.

Historically, organizational structure developed from the ancient times of hunters to industrial

structures and today's post-industrial structures as pointed out by Lawrence (1982). Away from history to today's world of business, one reoccurring and widely asked question is; how does the structure of an organization affect its performance? The difficulty in answering this question hinges on the fact that the relationship between organizational structure and performance has received little attention over the past few years, especially in regards to firms with less than 100 employees. McShane and Glinow (2005) however, answer this question partly by positing that structure includes two fundamental elements: the division of labor into distinct tasks and its coordination so that employees are able to accomplish common goals.

Child (2005) posits that the purpose of structure is to contribute to the successful implementation of objectives by allocating people and resources to necessary tasks and design responsibility and authority for their control and coordination. The foregoing assertion underscores the position that the structure of an organization affects not only productivity and economic efficiency but also the morale and job

satisfaction of the work force (Ezigbo, 2011). Additionally, Wolf (2002) believes that structure does not only shape the competence of the organization, but also the processes that shape performance. Clemmer (2003) also concludes that the performance of an organization is influenced by the structure adopted by that organization.

This paper therefore will re-open the discussion on the relationship between structure and performance while placing particular emphasis on decentralization, task routine and span of control as they influence effective decision making, staff productivity and organizational efficiency respectively.

1.1 Statement of the problem

In recent times, business organizations in an attempt to adopt the best type of structure with the aim of attaining maximum performance have faced a lot of problems. Also many organizational flaws can be related to an inappropriate structure chosen in order to reach a desired goal. An appropriate structure is contingent upon both the type of work to be performed as well as the environment in which the organization conducts business (Bolman and Deal, 1997). Different structures provide different strengths and weaknesses to the work to be performed and it is therefore important to find a structure suitable for the desired outcome on stability and predictability (Mintzberg, 1983).

These problems encountered by business organizations in choosing suitable forms of structure are complexities associated with the recent shift from authoritarian to decentralized structures stressing employee empowerment, inability of managers to identify the best form of structure that should follow strategies adopted by their individual organizations, inability of employees to adapt to existing and changing structures, and the difficulty in maintaining a stable structure as a result of the ever changing business environment.

1.2 Objectives of the study

The broad objective of this study is to examine the impact of structure on organizational performance. The key specific objectives include:

- 1) To establish whether decentralization improves effective decision making.
- 2) To determine the extent to which task routine affects staff productivity.
- 3) To ascertain the relationship between narrow span of control and organizational efficiency.

1.3 Research questions

To effectively achieve the above objectives, the following questions were asked:

- 1) Does decentralization improve effective decision making?

2) To what extent does task routine affect staff productivity?

3) Does any significant relationship exist between narrow span of control and organizational efficiency?

1.4 Research hypotheses

The followings hypotheses guided the study:

H1: Decentralization does improve effective decision making.

H2: Task routine does affect staff productivity.

H3: There exists a significant relationship between narrow span of control and organizational efficiency.

2 Literature review and conceptual framework of the study

2.1 The concept of organizational structure

The structure of an organization can be defined simply as the total of the ways in which its labor is divided into distinct tasks and then its coordination and integration is achieved among those tasks (Bernd Venohr 2007). It is the map of relationships that lets the firm orchestrate specialized experts (Thompson, 1967), and provides the basic foundation within which an organization functions (Mohammed and Saleh, 2013).

Organizational structure institutionalizes how people interact with each other, how communication flows, and how power relationships are defined (Hall, 1987). It reflects the value-based choices made by the company (Quinn, 1988); it refers to how job tasks are formally divided, grouped, and coordinated and can provide the link between social and psychological sub-systems (Rezayian, 2007).

March and Simon (1958) expressed a more behavioural view by defining organizational structure as the „pattern of relationship and behaviours that change slowly and thus provide clarity and stability. Similarly, Ranson (1980) posits that structure is a complex medium of control, the framework of rules, roles, and authority relations that seeks to facilitate prescribed purposes by differentially enabling certain kinds of conduct, conferring support for forms of commitment and obligating those who reject the claims entailed by the framework. It is the formal system of task and reporting relationships that controls, coordinates, and motivates employees so that they cooperate to achieve on organization's goals (Underdown, 2003).

Weber (1947) theorized that managers designed a structure to control the firm's activities by specifying the vertical hierarchy, formal procedures and division of labour. More precisely, structure delineates the verticality of the chain of command, breath of communication, extent of dyadic relationships and

relative prominence of functional, product and/or market responsibility (Rosalie, 1999).

For the purpose of this paper, a working definition of structure is given as simply the way in which functions or tasks are grouped and assigned, and the manners in which relationships are coordinated between superiors and subordinates within any organization.

2.2 Dimensions of organizational structure

As a result of the position of Burns and Stalker (1961) who introduced a popular method of examining the potential dimensions of organizational structure: “mechanistic and organic” systems of organization, a large number of researchers have explored and produced different lists on the dimensions of structure. Notable among them are Pugh, Hickson, Hinings, and Turner (1968) who defined five dimensions of organizational structure: specialization, standardization, formalization, centralization, and configuration. Jackson and Morgan (1982) added a sixth dimension, traditionalism. Duncan (1971) proposed five primary features of organic structure: participation in work decisions, formalization, hierarchy of authority, impersonality, and division of labor.

More recently, Daft (2003) provided a list that includes formalization, specialization, standardization, hierarchy of authority, complexity, centralization, professionalism, and personnel ratios. Additionally, the structural dimension is a tool for coordination and integration (Bernd, 2007), and managers need to

address six key elements when they design their organization's structure: work specialization, departmentalization, chain of command, span of control, centralization and decentralization, and formalization (Daft, 2010).

For the sake of this paper, most of the dimensions mentioned will be discussed but emphasis will be placed on only the ones relating to the objectives of the study.

2.3 The concept of organizational performance

In broad terms, a firm's performance is determined by the success of selling products and services in the market, and, by the effectiveness of organizing and transforming inputs (such as labour and capital) into sellable products and services (Nickell, Nicolitsas, and Dryden 1997). In more specific terms, organizational performance is the ability of an organization to utilize its resources efficiently and to generate outputs that are consistent with its goals and objectives and relevant for its clients and stakeholders (Ezigbo, 2011).

2.4 Measures of organizational performance

Performance measures are also referred to as dimensions of performance. Several financial and non-financial performance indicators have being presented. In the table below, a summary of the most popular ones are presented.

Table 1. Performance dimensions and indicators selected

<i>Profitability</i>	<i>Employee satisfaction</i>	<i>Productivity</i>	<i>Efficiency</i>	<i>Effective decision making</i>
Net income, Return on investment, Return on equity	Turnover rate, retirement plan, employee training and development	Output level, Product development, Output per labour hour	Input-output ratio, Resource utilization, Waste minimization, Cost minimization	Policy implementation, Effective leadership

Source: Researchers

2.5 Decentralization and effective decision making

Decentralization refers to the degree to which decision making is allowed for lower-level managers. In a decentralized organization, decision making is pushed down to the managers closest to the action. It is the term for pushing decision authority downward to lower level employees (Sablinskis, 2003) and is based on the principle of subsidiarity (Holtmann 2000). A decentralized organization can act more quickly to solve problems, more people provide input into decisions, and employees are less likely to feel alienated from those who make decisions that affect their work lives (Stephen and Timothy, 2012).

Similar to the views of Stephen and Timothy, research investigating a large number of Finnish organizations demonstrates that companies with decentralized research and development offices in multiple locations were better at producing innovation than companies that centralized all research and development in a single office (Leiponen and Helfat, 2001).

This is due to the fact that employees in all organizations want to work in an environment of trust and respect where they feel they are making a real contribution to organizational goals and objectives (Anderson and Pulich, 2000).

2.6 Task routine and staff productivity

Sustaining operational productivity in the completion of repetitive tasks is key to many organizations' success (Bradley and Francesca, 2011). Managers have to identify the best way to assign task over a long period of time. Task routine has both positive and negative impacts on staff productivity. For example, in recently reviewing the impact of specialization and variety on productivity, Bradley and colleague (2011) writes that when a worker completes many tasks during a day, specialization helps the worker quickly complete the focal task (Newell and Rosenbloom, 1981; Argote, 1999) and limits costly changeovers (Cellier and Eyrolle, 1992; Schultz, McClain and Thomas, 2003). They went further and pointed out that; although limiting variety during a day may lead to improved performance the opposite may be true over many days.

In this paper, we emphasize the need for managers to combine elements of task routine and variety in task assignment. This way, the benefits of both are obtained.

2.7 Narrow span of control and organizational efficiency

An organization characterized by narrow span of control has its managers at each level controlling few subordinates. Gittel (2001) posits that by keeping the span of control to five or six employees, a manager can maintain close control of employees. Also Hendericks (2001) commenting on the impact of narrowing span of control, writes that a reduction of span of control from 1:18 to 1:6 was found to increase productivity and profit in the company.

However, Robbins and Timothy (2012) believe that all things being equal, the wider or larger the span, the more efficient the organization. They went further by pointing out that narrow spans have three major drawbacks. First, they are expensive because they add levels of management. Second, they make vertical communication in the organization more complex. The added levels of hierarchy slow down decision making and tend to isolate upper management. Third, narrow spans encourage overly tight supervision and discourage employee autonomy.

2.8 Theoretical framework

In this section, it is intended to outline a few influential theories related to the subject matter and thus provide a background for a better understanding of the mechanism through which structure affects performance in technical and service firms.

2.8.1 Meier and Bohte's model of span of control

Meier and Bohte (2000) offer the general theory on the functional form of relationship between the span

of control and the performance of organizations. They propose a multi-dimensional model in which initial increases in span of control produce increases in organizational performance, though at a decreasing rate of return. Increasing spans of control, according to Meier and Bohte, allow for greater specialization, enhancing efficiency and performance. To them, a higher manager/employee ratio reduces the manager's ability to control, communicate and coordinate leading to a decrease in performance at an increasing rate. They also propose that different spans of control can exist within one organization depending on the goal being pursued in each department of the organization.

2.8.2 Hatch's Model of decentralization

Prior to Hatch's model of decentralization, Andrew, Christia, Marc, and Ross (2003) proposed that the theory underlying the decentralization decision is very simple. Value is increased by minimizing the total of knowledge transfer costs. Minimizing this total cost requires allocating some decision rights from the CEO's office to lower level managers of the firm.

Hatch (2006) proposes that the decentralized structure allows for innovation and is thus more suitable and beneficial when used in a changing environment with high requirement on adapting to the environment. He points out that the decentralized structure is characterized by interactions that allow for redefinition of tasks and work methods. A decentralized structure uses formalization to a smaller extent than a mechanic structure, and uses horizontal communication and consulting between departments rather than vertical instructions. In such structure Hatch explains that employees rather seek advice from each other than give instructions.

2.8.3 Hierarchy-community phenotype model of organizational structure

This model was developed by Lim, Griffiths, and Sambrook (2010). They proposed that organizational structure development is very much dependent on the expression of the strategies and behavior of the management and the workers as constrained by the power distribution between them, and influenced by their environment and the outcome. This goes to show that the extent of decentralization, task routine and specialization, and the size of span of control in an organization is dependent on the organizational strategy and behaviours of managers and subordinate within that organization. In more specific terms, the structure of an organization is dependent on and reflective of its most dominant internal and external characteristics.

2.8.4 Chester Barnard's model on structure

Chester Barnard was a practitioner who had read Weber's papers and was influenced by his writings.

But unlike Weber, who had a mechanistic and impersonal view of structure, Barnard saw organizations as social systems that requires human cooperation. For him, organizations should be structured in such a way that people will be allowed to be closer and freely communicating, and the organizations should be more flexible in adjusting to environmental changes to maintain a state of equilibrium (Mohammed, 2009). This model stresses decentralization, narrow span of control, and employee empowerment.

3 Methodology

The study was conducted using the survey approach. Two sources of data were utilized in the study: they

included primary and secondary sources. The primary source was the administration of copies of designed questionnaire to a total of eighty (80) staff that made up the sample for the study. Out of the eighty (80) copies administered, seventy eight (78) were completed and returned. Simple percentage (%), chi-square (χ^2) and correlation were used in analysis of the data and in testing the three hypothesis.

4 Presentation of data

Table 2. Responses on whether decentralization improves effective decision making

	<i>Frequency</i>	<i>Percent (%)</i>
Strongly agree	51	65.38
Agree	15	19.23
Strongly disagree	1	1.28
Disagree	6	7.69
Undecided	5	6.41
Total	78	100.0

Source: Survey Data, 2015

The table above shows that 65.38% of the respondents strongly agreed that decentralization improves effective decision making while only 1.28% of the respondents maintained otherwise.

Table 3. Responses on whether task routine affects staff productivity

	<i>Frequency</i>	<i>Percent (%)</i>
Strongly agree	24	30.77
Agree	30	38.46
Strongly disagree	2	2.56
Disagree	8	10.26
Undecided	14	17.95
Total	78	100.0

Source: Survey Data, 2015

The table above shows that 30.77% and 38.46% of the respondents strongly agreed and agreed respectively that task routine affects staff productivity while only 2.56% strongly disagreed that task routine affects staff productivity.

Table 4. Responses on whether a relationship exists between narrow span of control and efficiency

	<i>Frequency</i>	<i>Percent (%)</i>
Strongly agree	23	29.49
Agree	31	39.74
Strongly disagree	10	12.82
Disagree	4	5.13
Undecided	10	12.82
Total	78	100.0

The table above shows that 29.49% and 39.74% strongly agreed and agreed respectively that there is a relationship between narrow span of control and efficiency while only 12.82 maintained otherwise.

4.1 Test of hypothesis

4.1.1 Hypothesis 1

Table 5. Test statistics (hypothesis 1)

Chi-Square	161.227 ^a
Df	4
Asymp. Sig.	.000

Note: a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 46.6.

The hypothesis that decentralization improves effective decision making was tested using the chi-square (χ^2) test statistic. At 5 percent level of significance, the null hypothesis was rejected, and it was therefore concluded that decentralization improves effective decision making. The conclusion is based on the fact that the critical chi-square value of 9.49 was lower than the calculated chi-square value of 161.227 at alpha level of 5 percent and at 4 degrees of freedom.

4.1.2 Hypothesis 2

Table 6. Test statistics (hypothesis 2)

Chi-Square	33.026 ^b
Df	4
Asymp. Sig.	.000

Note: b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 15.6.

The hypothesis that task routine affects staff productivity was also tested using the chi-square (χ^2) test statistic. At 5 percent level of significance, the null hypothesis was rejected, and it was therefore concluded that task routine affects staff productivity. The conclusion is based on the fact that the critical chi-square value of 9.49 was lower than the calculated chi-square value of 33.026 at alpha level of 5 percent and at 4 degrees of freedom.

4.1.3 Hypothesis 3

Table 7. Correlations

		<i>Narrow span of control</i>	<i>Efficiency</i>
Narrow span of control	Pearson Correlation	1	.973**
	Sig. (2-tailed)		.000
	N	156	156
Efficiency	Pearson Correlation	.973**	1
	Sig. (2-tailed)	.000	
	N	156	156

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

The hypothesis that there is a significant relationship between narrow span of control and efficiency was tested using correlation (r). The tested hypothesis gives us a very strong positive correlation coefficient of 0.973. The Sig. (2-tailed) gives a "P" value of 0.000. Since $P < 0.05$, we reject the null hypothesis and accept alternate the hypothesis which states that there is a significant relationship between narrow span of control and efficiency.

5 Discussion of findings

It was found that decentralization enhanced and still enhances better and more informed decision making in technical and service firms in Nigeria. This agrees with Hatch's model as presented in the previous section of this study that decentralization allows for innovation. This is also in line with the assertion by Stephen and Timothy (2012) that a decentralized organization can act more quickly to solve problems, more people provide input into decisions, and employees are less likely to feel alienated from those who make decisions that affect their work lives.

It was found that 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. This is in line with the studies of Bradley (2011), McClain and Thomas (2003), Tucker, Nembhard and Edmondson (2007) and many others who pointed out the two-sided effects of task routine on employee productivity.

The third finding is that a significant positive relationship existed and still exists between narrow span of control and efficiency. This finding however, only partly agrees with Meier and Bohte's model of span of control which emphasized wide spans at the initial stage of production. It is also in disagreement with Robbins and Timothy (2012) who assert that narrow spans encourage overly tight supervision and discourage employee autonomy.

6 Conclusions and recommendations

The results and findings suggests the conclusions 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. Based on the above conclusions, it was recommended as follows:

1. Managers of technical and service firms

should adopt more decentralized forms of structures as means of improving the decision making process.

2. 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.

3. 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.

4. Employees should be empowered to be more innovative in carrying out tasks, whether routine or not.

5. 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.

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