

RE-ORDERING STRUCTURAL DIMENSIONS FOR NIGERIAN ORGANIZATIONS

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Abstract

The organization structure (OS) reflects the interface of the dimensions of the OS, the model in place and the mix of determinants of OS. This paper focuses on the organization structure (OS) to find out, not just the consistency of the structural properties with the OS but also the potentials of OS oriented towards the realization of organization goals. To achieve this end, an extensive review of relevant, extant literature follows. Findings reveal that available researches conducted in organizations, especially in western organizations, so far reflect structural properties of OS in place as well as a variety of determinants, which, in turn, reflects the model adopted. Besides, environmental and cultural factors are found to be major determinants of the choice of model of OS in Nigerian organizations. It is recommended, in the concluding remarks, that OSs should reflect variables, beyond environment, size, technology and simply growth; and that such reflected variables should be dictated by situations, circumstances and peculiarities that capture the achievement of organizations' goals in Nigeria

Keywords: Structure; dimensions, model, determinants

Introduction

Today's organizations are becoming dominant and successful only because of a well-defined and meticulously-articulated organization structure (Blake, Manton and Allen, 1988 and Jones, 1998). Organizations are known to exist to achieve defined goals. These defined goals remain the tools intended to coordinate actions targeted towards goals realization (Jones, 1998). When these goals are established, organization structure inevitably evolves. Organization structure constitutes the interface of authority responsibility, communication and coordination in order to achieve the objects, here, the goals for which the organization is established (Jones, 1998; McOliver and Nwagwu, 2000). Organization structure relates to how job tasks are formally allocated and coordinated; the established pattern of relationship between the component parts of an organization, with the details of

communication, control and authority patterns (Robbins, 1990)..

Expectedly, issues of interest are raised from the perceptions of organization structure. Robbins (1990) believes that these issues of interest constitute the fulcrum upon which organizations can achieve their goals. Stephen (1996) identifies these issues as the components of organization structure, listing them as: differentiation, mechanism of control and coordination, formalization and centralization. In Stephen's (1996) opinion, these components determine the type and degree of organization structure that should be in place. Robbins (1990) identifies complexity, formalization and centralization as the core components of organization structure. Complexity is the extent of flexibility or rigidity of the organization structure. It defines the extent of differentiation, including the degree of specialization or division of labour,

the number of levels in the organization's hierarchy as well as the extent to which the organization's units are dispersed geographically (Robbins, 1990; Stephen, 1996; Sycamniyas, 2008;). Formalization connotes rules and procedures intended to direct behavior (Sycamniyas, 2008); it is the degree to which instruction and procedures are written down (Pugh, 1973:44). According to Robbins (1990), centralization locates the focus of decision making authority in the organization. Other variants of components however exist.

Essentially, the organization structures are designed to achieve organization goals. These goals and the planned strategies for realizing them are anchored on the type of organization structure in place. This re-echoes the importance attached to organization structure, the strategic role of which, has been emphasized in literature (Mintzberg, 1972). It cannot be overemphasized that the 'character and content' of organization structure, the template for goals realization, is shaped by some variables, termed the determinants, the model and type of OS in place.

Given the inter-relationship of the dimensions (properties) or components of organization structure and the conceptual linkages between the model adopted and determinants, this paper focuses on the interface of the structural dimensions of OS and the choice of model most appropriate.

Literature Review

Dimensions of Organization Structure

According to Child (1973) and Robbins (1990), dimensions of OS constitute the components of OS; and these include: complexity, formalization and centralization. Meijaard, Brand and Mosselman (2002) identify four dimensions of OS to include work division and coordination mechanism, standardization and formalization. Generally, writers suggest that dimensions of OS are not

found in iron-cast compartments. For example, Pugh, Hickson, Hining and Turner (1968) identify seven dimensions and Child (1973) suggests ten dimensions. These OS variables (Meijaard, *et al.* 2002) put forward by Pugh, *et al.* (1968) include: specialization, standardization, formalization, centralization, configuration (width and height) and traditionalism. Child (1973) suggests, as additional dimensions, outside the dimensions put forward by Pugh, *et al.* (1968), the way organizational units are grouped, communication, integration, as well as the system of motivation of staff.

From the views of various writers, including Robbins (1990), Child (1973) and Pugh, *et al.* (1968), it is observed that organizations' goals are achieved if the conception of the OS is right from the beginning; and when the OS is flexible to be restructured to respond to the factors (both internal or external) in the environment (Pugh, *et al.* 1968; Child, 1973; Robbins, 1990). Against the backdrop that factors in the environment are always in the state of flux or fluidity and never constant, the 'character and content' of the organization structure can be shaped by the dimensions that remain critical to the success or achievement of organization goals. Pugh (1973) identifies some critical dimensions of interest to include (but not restricted to):

- **Specialization:** this is an OS variable (Meijaard, *et al.* 2002), and a subset of complexity (Jones, 1998). It deals with the issue of how organization's activities are shared out into specialized roles. Specialization could be functional or social specialization (Robbins, 1990). In functional specialization, tasks and functions are broken down into simple and routine or repetitive tasks. On the other hand, social specialization creates a class of professionals who are specialists and cannot be routinized.

- **Standardization:** Pugh, *et al.* (1968) describe this OS variable as the degree or extent to which an organization lays down standards, rules and norms. It has been argued in literature that standardized decision-making and coordination procedures make people's actions predictable in certain circumstances. However, there is the intervention of mutual adjustment, which is a compromise that allows for initiative rather than strict adherence to rules and standards
- **Centralization:** this focuses on the direction of decision-making authority in the organization. According to Pugh (1973) and Robbins (1990), it is the degree to which the authority to make certain decisions is located at the top of the organization's hierarchy. In some organizations, the decision-making authority is concentrated at the top, necessitating an upward flow of problems that are resolved at the top. In decentralization, decision-making authority is dispensed downwards in the hierarchy. Centralization and decentralization are however two extremes on a continuum. Organizations tend towards centralization or decentralization.
- **Formalization:** this relates to the extent to which rules and procedures are written down (Pugh, 1973); it is the degree to which jobs within the organization are standardized (Jones, 1998). It is expected that heavily formalized jobs leave little or no room for discretion over what, when and how they can be done.

It is however observed that where there are extensive formalized and standardized operations, there will be no room for mutual adjustments (Jones,

1998), mutual adjustment, being described by Mondy, Sharplin and Premeaux (1990), as the use of initiative and discretion. Where formalization is low, employee's behavior could be relatively non-programmed. Low formalization gives the employees a great deal of freedom to exercise discretion in their work place. The issue of whether formalization considers only the organization's written documents is critical; and it is recognized that formalization can be explicit and implicit, considering both written records and employees' perceptions (Robbins, 1990).

- **Complexity:** this is the extent to which an organization structure directs attention towards organization's goals. It deals with the degree of differentiation within the organization. Mondy, *et al.* (1990) recognize size as a determinant of complexity. A small-sized organization is expected to be less complex than a large-sized organization. Robbins (1990) identifies horizontal, vertical and spatial differentiation as elements of complexity, which in itself is a sub-set of organization structure. Horizontal differentiation considers the extent or degree of horizontal separation between units, sections or departments of the organization. Vertical differentiation looks at the depth of the organization's levels of authority in the hierarchy while spatial differentiation considers the degree to which organization's facilities, personnel, and even location, are geographically dispersed. In essence, spatial differentiation considers the issue of *number and distance* (Robbins, 1990).

- **Configuration:** this is a holistic term used to cover all other variables. It addresses the shape of the organization's role structure (McMillan, n.d.), addressing at whether the management chain of command is long or short, whether superiors have limited span of control or broad span of control (Pugh, 1973).

Structural properties and relationships of organizational structure dimensions

Robbins (1990; 2003) categorizes organization dimensions along the line of *complexity, formalization and centralization*; and indicates, through his study, the relationships among the three dimensions. The revelation of Meijaard, *et al.* (2002) reflects the similarity in impact of specialization and differentiation (both being sub-component parts of complexity) on organization structure. Pugh (1973) suggests specialization and formalization as additional dimensions of OS. In an earlier study, Pugh, *et al.* (1968) and Child (1972) revealed that specialization, standardization and formalization are inter-related. Centralization, complexity and formalization are found to be related in some form, on one hand, and without any relationship (or having some spurious relationship) on the other hand (Meijaard, *et al.* 1990). *Centralization has an inverse relationship with low complexity; and decentralization has associated relationship with high complexity (Hage and Aiken, 1969).* Logically, increase in centralization of work decisions would mean less complexity. By the same token of reasoning, decentralization of work decisions, it is expected, suggests high complexity. Grouping along the two dimensions of work division and coordination mechanisms suggested by Meijaard, *et al.* (2002), complexity and decentralization are about how specific tasks (activities and decision-making tasks are distributed in the organization).

On the relationship between centralization and formalization, Pugh, *et al.* (1968) reported that earlier works did not find any relationship. They however submitted that later works found negative relationship between centralization and formalization, just as more recent works on the centralization-formalization relationship are hazy and inconsistent. The analysis, hazy and inconsistent conclusions of the relationship indicate and present logical derivations and deductions of the centralization-formalization relationship. To this end, it is expected, *that high formalization could be found in both centralization and decentralization.* Robbins (1990) opines that where management centralizes the decision-making processes, and autocratic management style is assumed, such organization will be highly formalized.

In addition, an organization that is replete with unskilled labour, and whose labour force is predominantly untrained, will have an organization that is highly formalized. Expectedly, therefore, decision-making process will be concentrated at the centre to control behavior. This scenario satisfies the centralization-high formalization proposition. On the other hand. Hage and Aiken (n.d.) confirm the decentralization-low formalization proposition. According to them, professionally and technically skilled labour force does expect decentralization of decision that affects their work. This is coupled with the "low formalization of their technical work. This position would be contrasted with the high formalization of operative, personnel and strategic issues which are centralized where the labour force is unskilled and untrained.

Organization structure determinants

In contrast with the classical scholars, most theorists believe that there is no one best way to organize. According to Stephen (1996), there should be a fit between the organization structure and the requirements of the

environment, size, and technology. Burton and Obel (1998) recognize this fit and highlight the organization technology and capabilities as relevant factors that affect organization structure. Donaldson (1987) supports the good-fit-better-performance organization structure of Stephen (1996).

To this end some contingencies, known for their uncertainty and complexity, have been found to impact or affect the structure of the organization (Mondy, *et al.* 1990).

- **Environment:** this is a contingency and a source of uncertainty. Jones (1998) and Meijaard, *et al.* (2002) agree that the environment determines the appropriateness of organization structures. Lawrence and Lorsh (1967) mention other environmental aspects of hostility, equivocability and unpredictability as determinants of the character of organization structure. Child (1972); Miller and Friesen (1980) lend their voices and align with the proponents of the positive impact of environmental influences on the organization structure.

Stephen (1996) agrees that the influences of environmental impact on OS are not in doubt. According to him, organization structure should differentiate in a complex, highly-uncertain environment to domesticate and reduce the influence of a problem. He further contends that organizations in a stable environment are able to adapt better while organizations that have power over others are able to impose elements of structure on them. Burns and Stalker (1967) summarize and conclude their findings, using the mechanistic-organic structure typology. According to them, organizations should be mechanistic in a stable environment and organic when the environment is turbulent.

Mechanistic organization structures are characterized by high complexity, formalization and centralization (Robbins, 1990; Senior, 2002). These structures perform routine tasks, rely heavily on programmed behavior and slow in responding to the unfamiliar (Jones, 1998). On the other hand, organic structures are more flexible and adaptive with emphasis on lateral rather than vertical communication. They are characterized by low horizontal differentiation, collaboration, relaxed hierarchy and decentralized decision-making.

- **Size:** according to Robbins (1990), size is the total number of employees in the organization. Robbins (1990), summarizing some study on different measures of size and the most appropriate measure to capture the total number of people employed in an organization, finds out that the total number of employees appears to be highly related to other popular gauges of size. The inevitable conclusion linked size as a commonly-used, fairly-accurate measure across organizations.

Many studies have agreed that organizational size is one of the variables most closely related to organizational structure (Pugh and Hickson, 1976 and Meijaard, *et al.* 2002). It is proved that there is a positive correlation between size and complexity, formalization and decentralization (Geeraerts, 1984) but the correlation with centralization is not so clear (Miller, 1989). As organizations grow and expand, the structure is positively affected; For example the need for work division and coordination also increases (Blau and Schoenherr 1971; Child, 1972;

Robbins, 1990). Research has proved that as the size of the organization grows, the need for high formalization becomes compelling; and so is complexity.

- **Technology:** this is the combination of skills, knowledge, abilities, techniques, materials, machines, computer tools and other equipment used to convert inputs to outputs (Jones (1998). It has also been described in terms of information, techniques and processes in the transformation of inputs to outputs (Burton and Obel, 1998). Woodward (1965) and Robbins (1990) recognize three distinct forms of technology, which are relevant in the linkage between technology and organization structure. These are the unit production technology, mass production technology and process production technology. The unit production technology is the least complex and process production technology, the most complex. Perrow's (1970) technology-structure linkage was evaluated through the routine-non-routine typology, reporting that routine technology is positively related to low complexity and high formalization, while it is only positively related to centralization if formalization is low. Perrow (1970) finds that routine is followed by standardized coordination and control (centralization) while non-routine technology, which requires some flexibility, is linked with decentralization and low formalization.
- **Strategy:** this is the determination of the basic long-term goals and objectives of an organization and the adoption of courses of action and the allocation of resources necessary for

carrying out these goals (Robbins, 1990 and Jones, 1998). Strategy reflects two dimensions of views-the planning mode and evolutionary mode (Mintzberg, 1972). The planning mode describes strategy as a plan developed in advance to achieve set goals or objectives (Robbins 1990). The evolutionary mode reviews strategy not as a through-out plan but as evolving over time as a pattern in a stream of significant decisions. Chandler (1962) highlights the strategy-structure relationship. According to him, strategy precedes structure. Miles and Snow (1978) and Meijaard, *et al.*, (2002) developed the strategy-precedes-structure typology, cited in literature, by indicating a best fit between structure and strategy. To this end, the design of the organization structure is guided by an analysis of the contextual factors, the strategies of the organization, and personal preferences (www.express computer line. Com).

The current view on the strategy-structure relationship points to the inter-relatedness, but causality is hard to see; this, according to Miller and Friesen (1990), results from the organization's sluggish and inert reaction to environmental influence.

- **Ownership Objectives:** in literature, it is established that a relationship is found between organization structure and managerial variable, of entrepreneurship, leadership style and type of control (Miller and Friesen, 1980; Robbins, 1990; Geeraets, 1984; J; Meijaard, *et al.* 2002) Size-organization structure relationship, research indicates, has been affected by the type of management style in place.

Models of organizational structure

Models of organization structures evolve in response to some variables, among which is organizational change. Organizational change in itself is inevitable in an environment that is not static or an environment that is in a state of flux. To this end, a number of models of organization structure in place are not an exclusive preserve of any author/writer of organization theory.

Senior (2002) identifies models for Bureaucratic organization structure, Matrix organization structure, Networks organization structure, virtual organization structure, among others. Jones (1998), Robbins, (1990; 2003) and a host of other writers (Kast and Rosenwag, 1977, McOliver and Nwagwu, 2000) identify, in addition to the above models, Contingency theory model, Functional structure model and General system approach.

Jones (1998) and Robinson (1990) regard bureaucratic model as an organization structure model in which people can be held fully accountable for their action because they are required to act in accordance with specified and agreed-upon rules, standards and operating procedures. Senior (2002) and Mondy, *et al* (1990) describe bureaucratic structure as a prototype form of organization that is characterized by order, system, rationality informality and consistency. Jones (1998) however argues that such Bureaucratic model hinges on fundamental principles developed by Max Weber upon which the model could work. He goes ahead to list and describe the principle as:

Principle 1. This builds on the *Rational Legal Authority*: it holds the view that the power and authority of an individual is a function of the office he/she occupies in an organization.

Principle 2. This principle hinges on the use of technical competence in

determining who assumes organizational roles.

Principle 3. It is believed that specificity of role's task responsibility and decision making authority and their relationship with other roles in other organization should be the rule which could guarantee organization effectiveness and realization of organization goals.

Principle 4. This principle emphasizes insubordination of roles in lower office hierarchy to the control and supervision of a higher office.

Principle 5. Rules, standards, operating procedures and norms should be used to control behavior and the relationships between roles in an organization.

Principle 6. This principle harps on the formulation of administrative acts, decisions and rules and put in writing.

On the other hand Lawrence and Lorsch (1969) and McOliver and Nwagwu (2000) are of the view that organismic structure model assumes that an organization is made up of interdependent parts such that a change of one part has an impact on the others. It has however been noted that organismic/biological model does not equate an ideal organization structure neither does it have the needed capacity to change the shape of the organization.

Functional structure model argues that the justification of an organizational structure derives from the belief that functionalization makes single grouping into the same decision possible. The kernel of this model rests mainly on the assertion held generally that only functional grouping could bring about better

appreciation of the jobs of those in each functional limit (McOliver and Nwagwu, 2000). Jones (1998) opines that functional structure model is a design that groups people together on the basis of their common skills and expertise or because they use the same resources.

The natural conclusion of this grouping is increased effectiveness and faster achievement of organizational goals, providing customers with high quality products at reasonable prices (Child 1977; Duncan, 1979 Galbraith and Kazanjian 1986). According to Jones (1998), functional structure model begot (gave rise to) horizontal differentiation (one of the organizational structure models listed by Senior (2002).

Contingency theory structure model is designed for organizations designs and managerial systems which are carved out to deal with specific situations. The contingency theory model is of the view that an organization is made up of sub-systems whose interrelationships need to be studied as well as their (pattern of) relationships with the environment. Contingency theory model attempts a review of the multifaceted variables in an organization, the interdependency and relationships, in varying conditions and in specific circumstances (Kast and Rosemwig, 1977)

In matrix structure model people and resources are grouped in two ways simultaneously: by function and by product (Davis and Lawrence, 1977 and Galbraith, 1970). Matrix structure model is a response to a search for better and faster ways to develop products and to respond to customers' needs (Jones, 1998). Mondy, *et al* (1990) view matrix structure model as consisting of a permanent organization designed to achieve specific objectives through the use of specialists from different functional areas within the organization.

Matrix organization is a response to the need to be responsive to rapidly changing external environment. It is a structure design that assigns specialists from specific functional departments to work on one or more interdisciplinary team, led by project leaders (Robbins, 1990). Matrix organization model, despite the successful use in the banking industry, chemicals, computers, and electronics, has been criticized on grounds of the negative effect of dual authority (Cheng, 1983).

System approach model emphasizes criteria that increase the long-term survival of the organization. This long-term survivability includes the organization's ability to acquire resources, maintain itself internally as a social organization and interact successfully with its external environment. In system approach, end goals are not ignore but they are only one element in a more complex set of criteria (Robbins, 1990)

Network organization model relates to an evolving organization that allows management great flexibility in responding to new technology, low cost foreign competition. According to Robbins (1990) and Senior (2002), Network organization model relies on other organizations to perform the functions of manufacturing, distribution and marketing or other crucial business functions on contract basis (Miles and Snow, 1986). In this model, functional units are virtually not performing their traditional core functions seen in the traditional structures. In this model, most of the functions are contracted out. This gives a lot of flexibility to management and allows the organization to concentrate on what it knows best. This enables them to earn a competitive return with little staff strength. Network structure model however has been criticized on grounds that coordination is hard and difficult; and that management in Network structure model lacks the close control of manufacturing

operations that exist in more traditional organizations.

The virtual organization structure model is noted for its boundarylessness, and is characterized by being temporary, having strategic alliances and joint ventures; elimination of chain of command, replacement of departments with empowered and cross functional team, having flat hierarchy, incorporation of customers and suppliers in decision making, globalization and telecommuting.

Organization structure in Nigeria

It is undisputable that most of the researches on the OS influences conducted reflected the western world like the U.S., U.K. (Blunt, 1983). However, a few examples of research available replicated the OS determinants in the western world in Nigeria and Kenya (Leonald, 1977). It has been argued, though, that such western experiences are alien to Africa because of differences in environment, culture and even technology. Be that as it may, western experiences tend to influence Nigeria in situations and circumstances that are similar; such experiences remain a store house for data which is readily available in Nigeria. Beside, there is higher probability of success in replicating western experiences in Nigeria and by extension, Africa.

Blunt (1983) lists some major influences on OS as technology, organizational size, external environment, growth and culture. But Blunt(1983), using the influence of technology in a Nigerian oil refinery, concludes that each technology seemed to be suited to a particular type of OS. Other variables as external environment and culture, under certain circumstances, supercede a variable, like size.

Findings and concluding remarks

It is clear that the choice of organization structure and models are not to be seen in

strait-jacket compartments. While organizations expectedly have a more formalized and complex structures, with centralized or decentralized decision making authority, the relationship among these components vis-a-vis achieving organization's goal, is a function of a number of factors or determinants. Such, as was observed, vary from organizations to organizations. What is stressed in the discourse so far is that the model and type of OS adapted or adopted in Nigeria is a reflection of a number of factors and organizational variables, including but not restricted to the environment and culture. The choice of model of OS by Nigerian organizations could be dictated by management style, objects of the organization and other factors as determinants of OS. Future research is however suggested for determinants beyond size, strategy, environment, technology, and owner's entrepreneurship, that can shape the 'character and content' of Nigerian organizations. All these pending issues would constitute the subject of future research.

The present study, descriptive as it were, has attempted a search towards a better understanding of organization structure, and Nigerian organization structure. It is hoped that adequate attention be paid to the environment and culture. Beside, organization should synchronize those attributes that define the work environment and develop a network of complex interrelation both internally and externally.

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