JOB DESIGN AND SERVICE DELIVERY IN NIGERIA MANUFACTURING FIRMS

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Abstract
This study examined the relationship between job design and service delivery in manufacturing Firms in Rivers State of Nigeria. A total of 550 respondents from 22 registered manufacturing firms in Rivers State of Nigeria formed the population of the study and a sample size of 232 was arrived at using the Taro Yameni formula. The data was generated through administered and retrieved structured questionnaire. Three null hypotheses were tested by employing the Spearman's rank order correlation coefficient in SPSS version 21; andthe study utilized both descriptive and inferential statistical methods in its analysis. The major findings of the study revealed that there is a significant relationship between job design and service delivery. Specifically, the findings indicate that job design, through its dimensions of job rotation, job enrichment and job enlargement; significantly impact on the service delivery of Nigeria manufacturing firms. In concluding, it is noted that that Job rotation, enrichment and enlargement in Nigeria manufacturing firms significantly and positively contributes to the effective and efficient service delivery. Therefore, we recommend that in job design - job rotation, enrichment, enlargement, etc; consideration should be given to concepts such as flexibility, autonomy and communication adequacy which promote some levels of freedom and interaction so as to encourage creativity, innovativeness and improve interpersonal relationswith a view of facilitating customer satisfaction through effective and efficient service delivery.

Keywords: Job Design, Service Delivery, Manufacturing, Organization

Introduction

In this era of high technology and competitiveness, many manufacturing organisations seem to have consistently suffered various degrees of ineffectiveness following the perceived inabilities of the management of such enterprises to use appropriate job design approach to enhance service delivery of their organization, especially in less developing countries like Nigeria. The focus of this study on manufacturing, job design and service delivery is born out of the fact of their importance and contributions to developed and developing nations socio-economic development.

Onuoha (2014) identified the agricultural and manufacturing sectors as bedrock to the economic and technological development of any nation. This is in line with Sola, Obamuyi, Adekunjo and Ogunleye (2013) observation that industrialization stems from manufacturing and through industrialization, jobs are created, living standards are raised and incomes are enhanced. The significance and contribution of the manufacturing sector thus places an onus on manufacturing organizations with regards to their service

delivery. Galbraith (2002) in examining organizational outcomes such as adaptability and dynamic competitiveness with regards to service delivery and product distinctiveness; observed that the internal workings and design of jobs within the organization play a critical role in enhancing workers performance and in achieving cohesiveness. The author argued that without the structural platforms provided by the network and systematic design of jobs within organizations, there is a tendency for disharmony, conflict and a weak adherence to organizational values and goal. It is obvious that the apportioning, structuring, utilization and dispensation of roles through job design can be considered a priority as regards the effective actualization of customer service delivery.

Similarly, Clement (2012) opines that customers form service expectations from past experiences, word of mouth and advertisement. In general, customers compare perceived service with expected service in which if the former falls short of the latter the customers are disappointed. From the viewpoint of business administration, service quality is an achievement in customer service and reflects at each service encounter. In addition to producing quality products, manufacturing firms must be able to provide necessary facilities such as transportation, customer care line, prompt delivery of products and services, etc. Service delivery is about making sure that end users or customers derive optimal satisfaction from purchasing and consuming the product.

Extant literatures(Kuye and Sulaimon, 2011; Noah, 2009; Jain and Arggawarl, 2008) emphasize that the internal structuring and design of organizations most often with reference to work structures and job designs as being integral to manifestations of service delivery in organisation. This view is given credence by the findings of Morgeson and Champion (2003), that organizations which recognize and tap into the effective job designs are often better placed in the actualization of customer service delivery. Most of these studies tend to have assessed the relative association between job design and service deliveryand opined that there exist congruence in findings which support significant relationship between job design and service delivery of manufacturing organisation.

However, most of these studies have rather focused on the association between these variables (*job design and service delivery*) within the context of developed economies and their market systems. The preceding view highlights the knowledge gap made evident by the paucity of foreign studies which have empirically examined the relative effect of job design and service delivery of organisation within their geographical confines. This study therefore, will address the exiting gap in knowledge between the studies of developed countries and that of developing countries such as Nigeria.

OPERATIONAL FRAME WORK OF JOB DESIGN AND SERVICE DELIVERY

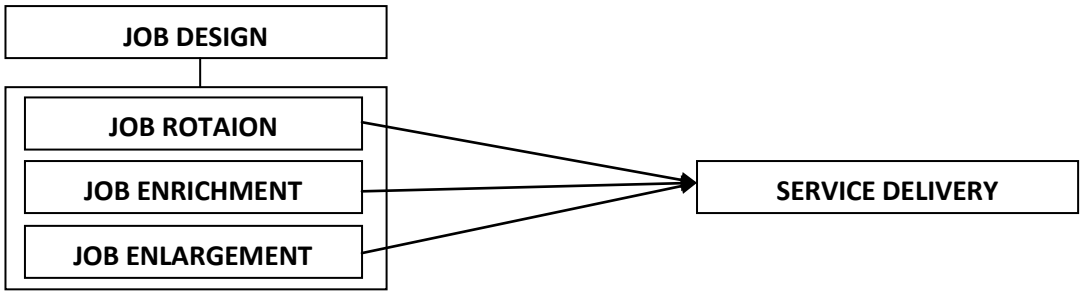


Figure 1

Source: Researcher Desk (2017)

The above operational framework in figure 1, shows **job design** as the predictor variable in this study. It is operationalized herein using three main dimensions namely - job rotation, job enrichment and job enlargement. These three dimensions are examined relative to the structuring and design of

jobs within the organization and thus serve as a reflection of job design which is the predictor variable. Each component (job rotation, job enrichment and job enlargement) presents varying explanations and descriptions of job designs within the organization, yet all three shares a core and single point of reference – job design.

Similarly, **Service delivery** which is the criterion variable in the study is considered as the outcome or effect of the antecedent in this study.This measure is presented as expressions of an outcome with regards to the organizations'ability to effectively meet the expectations of its customers.
This study is set out to:

i. Investigate the relationship between job rotation and service delivery.
ii. Examine the relationship between job enrichment and service delivery.
iii. Determine the relationship between job enlargement and service delivery.

While the hypotheses for the study stated in the null form are:

HO_1: There is no significant relationship between job rotation and service delivery
HO_2: There is no significant relationship between job enrichment and timely service delivery
HO_3:There is no significant relationship between job enlargement and service delivery.

Review of Related Literature

Concept of Job Design

In most organizations, job design and redesigning is considered a much easier and convenient strategy to identify, implement and follow-up since it concentrates and is more concerned with specific roles and task arrangements within the organization without any substantial impact on the jobs or roles of other professional groups within the organization. Hellgren and Sverke (2001) describe Job design as the specification of the role, content, techniques and the structure of relationship associated with the job as a means to achieving role specificity, clarity of work division, identification of contributions and overall organizational wellbeing, thus facilitating organizational efficiency and effectiveness. Job design is most often utilized as a tool in achieving employee development and knowledge enhancement and also serves as a means through which employees can be motivated and allowed participation in decision making events. Rohmert and Raab (1995) observed that several factors affect the design of jobs within organizations; these according to them include (i) the skill of the worker, (ii) the work environment (iii) the technology being utilized in the organization, and (iv) the size of the organization. These factors are either impaired or enhance the structuring of tasks or the design of jobs within the organization. Rohmert and Raab (1995) also note that they determine outcomes of job design with respect to stress, job ambiguity, burnout and the level of satisfaction with the job.

Similarly, Dessler (2005) identified aspects and features of job design such as *job enlargement*: which is concerned with the expansion of tasks or roles to be handled by individuals or teams – a good example can be likened to the additional role of the receptionist in an organization who could also double as the secretary to the manager; *job rotation*: which is concerned with varying of employee roles and jobs at intervals to allow for job variety, development and exposure – it entails the shift between roles or functions such as a teller officer switching to the desk of customer complaints officer on a different day; *job enrichment*: which is concerned with the vertical addition to content of roles and expectations so as to allow for stimulation and psychological growth – such as the driver who at the same time is the mechanic to the car he drives.

Various studies proffer various methods and techniques through which workers can be duly empowered and contribute more meaningfully to the growth and service delivery of the organization. One of such methods, as earlier mentioned is the job design. This is as job design has been described as the structuring of task configurations in such a way that not only draws significantly from the workers expertise and knowledge but also allows for his or her personal development and wellbeing. Research offers an array of various job designing techniques and dimensions.This study however, adopts the view of Alugbuo (2003) in which he highlighted three

main techniques, of job rotation, job enlargement and job enrichment.

Service Delivery

The manufacturing industry is a very sensitive industry in which customers place great emphasis on reliability and service delivery. The vision of all such businesses is to provide quality high class services to customers in order to successfully thrive and achieve their mission. According to Obonyo (2013) in his study on strategies adopted by supermarkets for competitive edge, opined that time management significantly attracts customers.Furthermore he noted that the image of the business is largely dependent on customer satisfaction. This image can be created by good customer service. Hence, service delivery cannot really be separated from the service providers; and therefore provider-client relationship should be maintained as noted byKotler,Armstrong, Harker, and Brennan, (2009).The most important value an organization will ever create is the value that comes from customers' satisfaction in terms product and service delivery. The success of Businesses largely depend on getting, keeping and growing customers (Moballeghi and Moghaddam, 2011) as in Kotler et al, (2009). Similarly, Obonyo (2013) suggests that in a hypercompetitive economy with increasingly rational buyers faced with abundant choices, a business can only win by fine-tuning the value delivery process, choosing and providing, and communicating superior value.

The measurement of subjective aspects of customer service depends on the conformity of the expected benefit with the perceived result. This also depends upon the customer's expectation in terms of service delivery and the service provider's ability and talent to deliver the expected service. Successful Companies add benefits to their offering that not only satisfy the customers but also delight them to the extent of their repeating purchase, become loyal and also an advocate for the firm and product.

Methodology

This study population consist of 550 top management and middle level staff from twenty two (22) manufacturing companies registered with Rivers State manufacturers association of Nigerian (MAN). The sample size of the study is 232 drawn from the study population using the Taro Yemeni formula.Structured questionnaire was the instrument employed in generating data, whileSpearman's rank order correlation coefficientin version 21 SPSS was used in testing the study hypotheses.

Data Analysis

The results of the analysis affirm that within the organizations investigated, respondents experience substantial levels of task flexibility, enjoy task variety, consider their job roles as transferable and are also exposed to other related role expectations within the same organization as shown in table 1.

Table 1: Data distribution for job rotation

	N	Mini-mum	Maxi-mum	Mean	Std. Deviation
Jobs in this organization involves a great deal of task variety	211	1.00	5.00	4.0047	.95866
Jobs in this organization requires the performance of a wide range of tasks	211	1.00	5.00	4.0474	.96985
Jobs in this organization requires consistent switch between roles and placement	211	1.00	5.00	4.0995	.88616
Job placements in this organization involve a great flexibility	211	1.00	5.00	4.1517	.91845
Jobs in this organization are most often revolved to enhance workers experience and exposure	211	1.00	5.00	4.1232	.88586
This organization emphasizes on job allocations that are transferable	211	1.00	5.00	4.0474	.86058
Employees in this organization are developed through task arrangements that configured to allow for variety	211	1.00	5.00	4.0332	.86401
Valid N (listwise)	211				

Source: Survey Data 2017

Job Enrichment

Table 1 reveals that most of the respondents affirm to their experiences on the variable (job enrichment) manifestations within their organizations. According to the results said, majority of the respondents agree substantially that their jobs offer high levels of content variety, their roles are considerably autonomous, and also that their skill sets are competencies when applied in the given requirements of their jobs.

Table 2: Data distribution for job enrichment

	N	Mini-mum	Maxi-mum	Mean	Std. Deviation
Jobs in this organization are afforded a great deal of content variety	211	1.00	5.00	4.1137	.80850
Jobs in this organization are designed to allow for considerable levels of autonomy	211	1.00	5.00	4.1801	.95408
Emphasis is placed on enhancing employee job responsibilities within the organization	211	1.00	5.00	4.1517	.99318
Most Jobs within this organization require a variety of skill set and experience	211	1.00	5.00	4.1137	.95934
Management ensures jobs contain a variety of responsibilities and expectations	211	1.00	5.00	4.0142	.81345
Tasks arrangement facilitates relative control of the employee over their tasks	211	1.00	5.00	4.1232	.95816
Roles are designed to accommodate varied skill sets and competencies	211	1.00	5.00	4.0711	.89425
Valid N (listwise)	211				

Source: Survey Data 2017

Job Enlargement

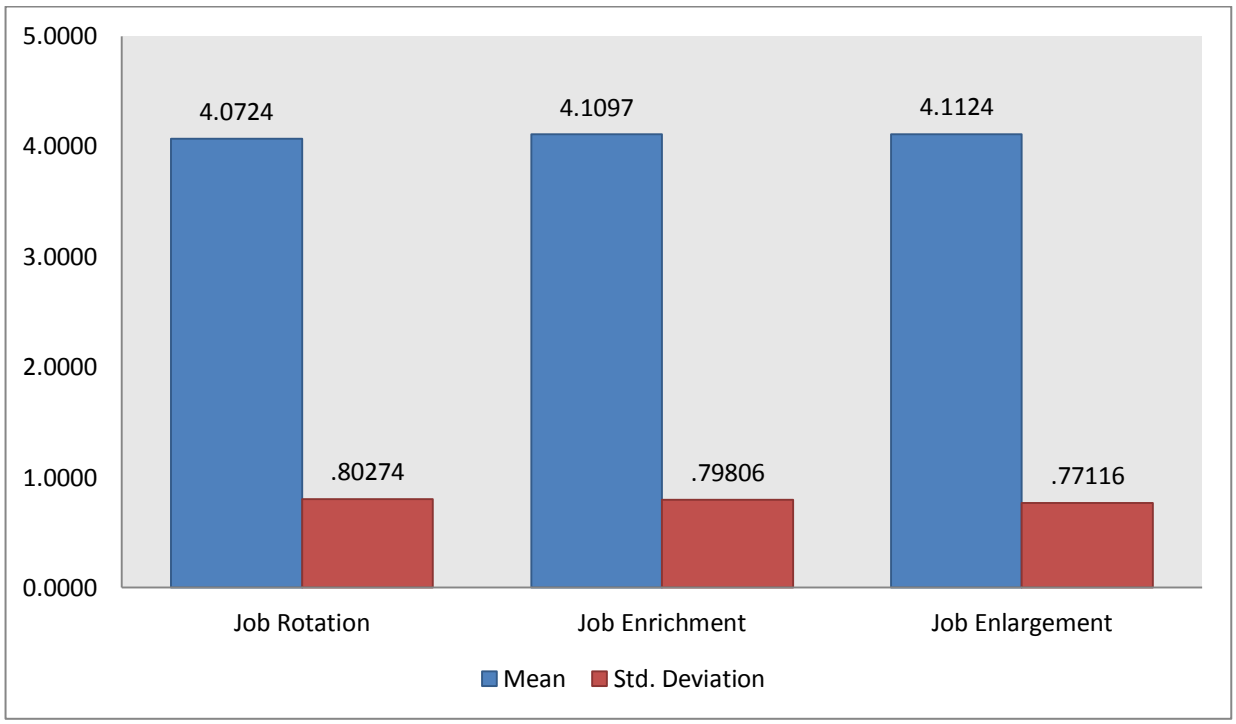
The result for the distribution for the data on job enlargement in Table 3, reveals that the respondents strongly affirm to their experiences of the manifestations of job enlargement as it relates to their jobs in their respective organizations. The data shows that on the average, majority of the respondents view job enlargement as an aspect of their job characteristic and agree to the instances of its expressions.

Table 3: Data distribution for job enlargement

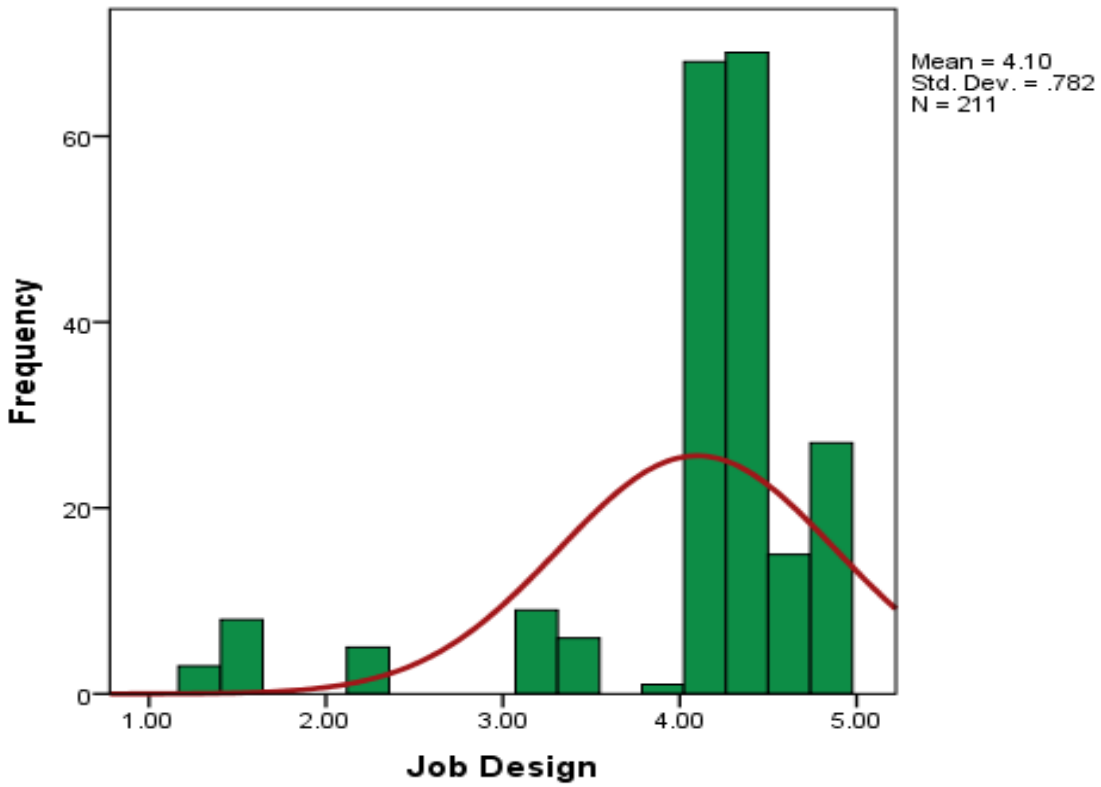
	N	Mini-mum	Maxi-mum	Mean	Std. Deviation
Jobs in this organization are designed to accommodate support for other role designations	211	1.00	5.00	4.1896	.97203
Job placements are highly flexible and inclusive of other related roles	211	1.00	5.00	4.1043	.89896
Jobs in this organization are designed to incorporate content from other designations	211	1.00	5.00	4.1611	.91683
Employee role expectations are relatively tentative and circumstantial	211	1.00	5.00	4.1232	.88586
Jobs are designed in this organization to interact and interrelate with other departments, units and designations	211	1.00	5.00	4.0379	.86657
Employees are most often assigned roles that are considered as challenging	211	1.00	5.00	4.0474	.84944
Each task is assigned a specific time window for accomplishment	211	1.00	5.00	4.1232	.80118
Valid N (listwise)	211				

Source: Survey Data 2017

The result of the analysis also reveals that within the sampled manufacturing organizations, the dimensions of job design (job rotation, job enrichment, and job enlargement), can be considered as significant and highly manifested based on the experiences of the respondents.



Above Bar-chart shows the Summary distributions for the dimensions of job design



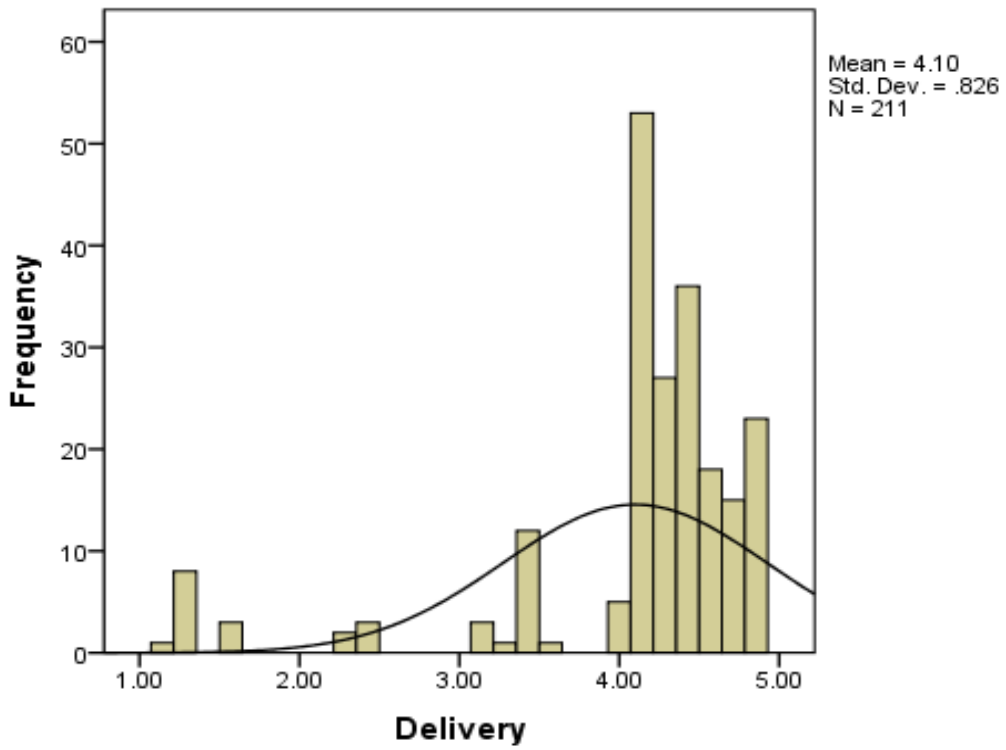
The above Histogram illustrate data distribution for job design

Table 4: Data Distribution of Service Delivery - Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
The organization can boast of effective and fast distribution of products within its geographical network	211	1.00	5.00	4.1090	.87965
The organization has a sustainable relationship with various distributors across the state	211	1.00	5.00	4.1374	.95871
Various distribution channels are afforded the organization as a result of its operational experience	211	1.00	5.00	4.0948	.97615
The organization is very strict with regards to time factor in product delivery	211	1.00	5.00	4.0758	.93805
Management always endeavours to seek out faster and more sustainable means of reaching its customers and consumers	211	1.00	5.00	4.0379	.81561
The organization maintains a highly connected network of suppliers and distributors within the state	211	1.00	5.00	4.1137	.99348
Timeliness is considered a service itself in the dissemination of products and goods	211	1.00	5.00	4.1232	.94817
Valid N (listwise)	211				

Source: Survey Data 2017

Table 4 reveal the aspects of timely product delivery such as relationship with suppliers and clients, timeliness of product delivery as a service itself, relationship with distributors across various regions or states, are very high and in affirmative.



Tests for relationship between job rotation and measures of organizational effectiveness

The results for the analyses on the tests for the relationship between job design and service delivery reveals the following:

HO_1: *There is no significant relationship between job rotation and product service delivery*

The result in Table 1.5 shows that job rotation significantly impacts on the product service delivery of the organization. This is based on the observed P value coefficient of 0.000 and a rho effect value of 0.595. Therefore this hypothesis is rejected as the tests outcome reveals that **there is a significant relationship between job rotation and product service delivery**.

HO_2: *There is no significant relationship between job enrichment and service delivery*

The outcome of test of ***HO_2*** shown in Table 1.5 reveals that job rotation significantly impacts on the timely product delivery of the organization. This is based on the observed P value coefficient of 0.000 and a rho effect value of 0.466. Therefore ***HO_2*** is rejected, and the test result reveals that **there is a significant relationship between job enrichment and service delivery.**

The test for the hypotheses between service delivery and the dimensions of Job Design

Table 5: Correlations

			Delivery	Rotation	Enrichment	Enlargement
Spearman's rho	Delivery	Correlation Coefficient	1.000	.466**	.593**	.498**
		Sig. (2-tailed)	.	.000	.000	.000
		N	211	211	211	211
	Rotation	Correlation Coefficient	.466**	1.000	.710**	.838**
		Sig. (2-tailed)	.000	.	.000	.000
		N	211	211	211	211
	Enrichment	Correlation Coefficient	.593**	.710**	1.000	.694**
		Sig. (2-tailed)	.000	.000	.	.000
		N	211	211	211	211
	Enlargement	Correlation Coefficient	.498**	.838**	.694**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	211	211	211	211

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

HO_3: *There is no significant relationship between job enlargement and service delivery.*

Similarly, the result in Table 5 also showed that job enrichment significantly impacts on the service delivery of the organization. This is based on the observed P value coefficient of 0.000 and a rho effect value of 0.523. Therefore this hypothesis ***HO_3*** is rejected, and the test reveals that **there is a significant relationship between job enlargement and service delivery.**

In the case of ***Relationship between Job rotation and Service delivery;*** the finding is consistent with the position of previous studies that assert the introduction of well-designed job rotation programs and processes facilitate workers learning and the adaptation of new skills would equip and enable them to meet up with the ever-growing demands of the market.Primary amongst them are factors such as packaging, timely delivery and

product quality (Kotler et al, 2009; Obonyo, 2013). In his study, Obonyo (2013) also utilized quantitative methods in assessing the role of skill variety in the manifestation of product service delivery. The finding of his study justifies his conclusions that job rotation enhances the working relationships and communication networks within the organization making the work more interesting, collaborative and interdependent.Hence roles and functionalities turn out to be more integrative and fluid by facilitating the achievement of effectiveness outcomes such as timely product delivery (Obonyo, 2013).

Furthermore, job rotation as confirmed in this study to serve as an excellent tool in the enhancement of role symmetry and collaboration within the workplace and thus the promptness in response to customer related issues based on time factors or geographical location as also found in Kotler, et al, (2009).

In**Relationship between Job enrichment and Service delivery;**Job enrichment can be considered a substantial predictor of product service delivery. Hence, Kinicki and Kreitner (2003) share the view that job enrichment is an attempt to build into jobs a sense of challenge, achievement and variety.Giving workers more freedom in deciding about such things as work methods, sequence and pace of the acceptance or rejection of materials, encouraging participation and interaction between workers, giving feelings of personal responsibility for their task, feedback on job performance before their supervisors get it and workers involvement in any change in the organisation. In Lawal (2005), it was observed that Job enrichment allows the employee to work innovatively and accordingly because of expansion of role and responsibility. Such relative autonomy and control over processes can be considered as advantageous with regards to delivery issues and deadlines given the placement of responsibility on the worker (Feder, 2000; Slocum & Sims, 2000).

Likewise, Slocum and Sims (2000), observed that enriched jobs offer more autonomy and freedom in executing the related responsibility and adds variety and challenge to an employee‘s daily routine. And besides the pecuniary remuneration associated to work, an enriched job renders self-fulfilment, actualization and contentment of meaningful job (Hackman and Oldham, 1980). In both academic and financial institutions, Alber (2007) discovered three essential characteristics of enriched job such as experience of meaningfulness, the experience of responsibility for outcomes and feedback as psychological conditions. This follows that through job enrichment, workers can be held responsible for the outcome of factors such as the achievement of deadlines given the awarded responsibilities and autonomy which in most cases counters the rigidity of various bureaucratic structures and protocols. The findings of this study as such tie significant aspects of product service delivery to manifestations of job enrichment which according to Hellriegel and Slocum(2009), can be considered as a tool for employee empowerment and autonomy which can lead to motivation, satisfaction, commitment and performance.

Relationship between Job enlargement and Servicedeliveryrevealed that job enlargement enhances timely product delivery within the organizations. This is consistent with that of Griffin (1991), in his experiment on workers attitudes given the evidence of work designs such as enlargement noted that workers had a higher tendency for increased interaction and social behaviour and as such were more prone to having support with regards to the delivery of services or tasks. Hellriegel and Slocum (2009) note that enlarging jobs depends highly on the individuals' perception. Employees might perceive enlarging their jobs positively as a tool or practice that improves their skills and abilities and as a sense of achievement that satisfies them and makes them feel worthwhile to the organization. However, the results from some previous studies indicate a prevalence of thought which view the enlargement of jobs as a strategy the top management uses to reduce costs of hiring new employees, so it is just a matter of workload (Dessler, 2005; Slocum and Sims, 2000).

Griffin (1991) further noted that Job enlargement strategy contradicts the principles of specialization and the division of labour whereby work is divided into small units, each of which is performed by a

specific individual. According to him, job enlargement supports the expansion of work and the inclusion of various roles into one which promotes responsibility and reduces over-dependence of roles on each other given stipulated deadlines especially with regards to product service delivery. This argument is further reiterated by the findings of this study which link outcomes of product service delivery to job enlargement especially when it has to do with the unification of work stages related to a product and the delivery of such products given specific time frames which is also consistent to that of Alber, (2007; Hellriegel and Slocum, (2009).

Conclusion

The conclusion of this study is premised on the findings evidenced from the empirical assessment of the relationship between the variables of job design and service delivery in the target organizations. Therefore, the study concludes that Job rotation, enrichment and enlargementin Nigeria manufacturing firms significantly and positivelycontributeto the effective and efficient service delivery.

Recommendations

The theoretical discourse and empirical evidence presented by this study illustrates and affirms the role of job design as an imperative strategy or tool for effective and efficient service delivery. The following recommendations will be useful to organisations' job design and meaningful service delivery:

i There is need to effectively monitor through supervision and adequate feedback on performance and relationships on Job rotation, enrichment and enlargement. This will not only keep workers on their toe, but also create and providemeaningful relationships within the organization which will create the desired service delivery.

ii In the design and configuration of jobs, consideration should be given to concepts such as flexibility, autonomy and communication adequacy. The process of job rotation, enrichment, and enlargement should systematically incorporate considerable levels or degrees of freedom and interaction so as to promote and encourage innovativeness and improve interpersonal relations with a view to facilitatingcustomer satisfaction through effective and efficient service delivery.

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