

BUSINESS MODEL AND EMPLOYEE QUALITY OUTPUT IN MANUFACTURING FIRMS IN RIVERS STATE

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ABSTRACT

The study focused on business model and employee quality output in manufacturing firms in Rivers State of Nigeria. The study adopted the cross-sectional survey research design and used both primary and secondary data. The primary data were collected from board members, data processing managers, work study managers, supervisors and head of operations of the firms. Three hypotheses guided the study. The population of the study was 850 permanent employees drawn from 28 registered manufacturing firms in Rivers State with a sample size of 265. The study adopted a census technique. The instrument used for data collection was a structured questionnaire. The reliability of the research instrument was obtained using Test-retest method with Cronbach alpha at a 0.70 threshold. The instrument was validated by my supervisor and one expert. The data retrieved was analyzed using frequency, mean, and standard deviation at the demographic and univariate level. Spearman's Rank Order Correlation Co-efficient for the test of bivariate hypotheses at .05 level of significance. Findings revealed that business model correlate with employee quality output. Therefore, the study concluded that business model enhances employee productivity. Thus, the researcher recommended that management should train employees on ICT in order to be more productive. More so, organizations should adopt a favourable business model with less stress in introducing and implementing needed transformation.

Keywords: Business Model, Employee Productivity, Quality Output, Timeliness

INTRODUCTION

Productivity is a major concern for manufacturing firms since they determine the wellbeing of the organization and its new digital technology. Productivity is also the most vital issue at the general level. It is common knowledge that most employees agitate for better settings of technology, while employers complain of low productivity. Employees are always on the lookout for advertisements on what they describe as better jobs. These employees are ready to leave their jobs for other jobs. Others use their present jobs to develop the necessary skills and experience, a requirement for most jobs. Employers also put in several enticing settings of service and try to create healthy working conditions in an effort to gain the commitment of employees. The question that one may want to ask is whether there is any relationship between compensation and productivity. Organizational productivity has continued to be a major topical issue in the workplace. As the most value generating assets of organizations, employees' contribute their productive abilities and skills towards an organization's product or service portfolio and contribute more than three-quarter of the return on investment of the organization (Pollyn & Chukuigwe, 2018). To ensure that organizations get the desired level of productivity from its employees', various forms of organization-wide and personal productivity tools are instituted and applied. One of such productivity attainment tools is the digital transformation (Vito et al, 2018). Organizational productivity refers to the capacity of an organization, institution, or business to produce desired results with a minimum expenditure of energy, time, money, personnel, materiel, etc. A manufacturing firm's productivity is concerned with the quality and quantity of output or result the firm is able to achieve. Furthermore, productivity is the ability to compete translates into the ability to do a better job of producing quality and quantity of output. It is imperative for the firms and employees within the organizations to focus their systems, policies and resources in a coordinated way on continually improving both quality and

productivity. The most valuable resource for enhancing quality, quantity, timeliness and productivity is fair business domain. Glover and Siu (2000) in Chinese context, indicated that organizational productivity was hampered by ethical problems and shortfalls in the management practices such as biased business process, domain, poor reward management practices, poor communication and absence of career planning. They also pointed out that context specific and general models of productivity as aspect of management practices are needed for the successful operation of organizations and to eliminate productivity and digital transformation related problems experienced by the manufacturing firms.

A firm's power may lie in its ability to fire an employee; a firm can exercise this power without question because it can appeal to a higher voice of authority - the laws of its national state, perhaps. Authority structures are capable of imposing their decisions on the people who are subject to them – they can offer no resistance. The business model of a firm details the decisions that a firm imposes on the agents who work for it (Picard & Okubo, 2012). A firm's business model has two aspects: its internal constitution and its external alignment. The power the firm has over its employees gives it the ability to co-ordinate their productive activity. When interacting with other agents in the free market, a firm does not have this kind of power, and so must buy and sell resources and products by appealing to the self-interest of other parties (Porter, 2008). In a free market, however, it does retain the authority to determine which such parties it interacts with.

Finally, business models can also specify incentive structures – how much an employee stands to gain for their actions. Firms have many incentive structures to choose from – they may pay employees on a wage or salary basis, they may reward specific actions or measurable outcomes, or individual or group performance, and may increase or decrease the levels of remuneration of employees working at different organizational levels (Taylor & Greve, 2006). Incentive structures also include details about how employees earn promotion, or move up to different pay scales.

Hypothesis

Ho₁: There is no significant relationship between business model and quality of output in manufacturing firms in Rivers State.

Business model

According to Dasilva & Trykman (2013), business model is a collection of decisions implemented by the authority on its employees and its needs backed by strategy to meet business challenges. It de There are two aspects of a business model - the internal constitution of the firm and the firm's external alignment - and these are the result of the different degrees of authority a firm has over its employees as opposed to other market actors.. Setting aside this discussion temporarily, we turn our attention to strategy. The careful design of activity systems and the deployment of privileged resources promise to help firms create and sustain competitive advantage in markets that have stable structural features (technological development, consumer tastes, resource barriers, etc.). There are reasons to believe, however, that such structural features change in the long-run, so, to sustain superior returns, firms must find other, more reliable opportunities for capturing value. The dynamic capabilities approach identifies a set of opportunities to capture value that persist despite changing structural market features – opportunities that are due to imperfect competition. The persistence of 'ambivalent value' in markets - despite their structural change - offers firms another set of value capture opportunities. David (2010) opined that business articulates the logic and provides data and other evidence that demonstrates how a business creates and delivers value to customers. It also outlines the architecture of revenues, costs, and profits associated with the business enterprises delivering that value. In essence, a business model embodies nothing less than the organizational and financial architecture of a business. It is not a spread sheet or computer model, although a business model might well become embedded in a business plan and in income statements and cash flow projections. But clearly, the notion refers in the first instance to a conceptual, rather than a financial, model of a business.

We conclude by returning to the discussion of business models, and the ways in which manufacturing firms can manipulate them to negotiate for a bigger cut of the 'ambivalent value'. While scholars have considered business models as being strategically important for their ability to differentiate and create added value, they have not considered their importance in negotiating ambivalent value (Zott & Amit, 2007; Wei, 2014). We outline a variety of ways in which a firm's business model may be a means of doing so: in particular, we develop an approach that incorporates transaction cost considerations into such negotiations, and proposes the strategic value of negotiating with multiple transaction partners. Business model is human activity in a competitive market setting, usually characterized by the exchange of goods and services for money (Demil, 2015). A business refers to a real collection of people, decisions, resources, buildings, products, values, actions and any other ingredients necessary to conduct and sustain this particular human activity (Gilbert, 2005). If we accept these notions, what do we mean by a business model.

A firm is an authority structure capable of production and transaction and responsible for creating and capturing value from these business activities. Authority structures rely on sources of power and a source of legitimacy (Fredrickson, 2001).

Quality of output

Glover and Siu (2016) argued that quality output is the establishment of new factories and machinery which sufficient in itself to ensure adequately. Akin & Hopelain (1986) in Jahan (2019), defined quality of output as the key elements such as right types of human resources, identification with the job, teamwork, trust and support, status determined by knowledge of job and performance, support for accomplishment and autonomous use of skills. Daniel (1996) defined it as fundamentally relational; Quality is the ongoing process of building and sustaining relationships by assessing, anticipating setting standard, and fulfilling stated and implied needs. Quality means that the organization's culture is defined by and supports the constant attainment of customer satisfaction through an integrated system of tools, techniques, and training (Sashkin & Kiser, 1993). Furthermore, a manager who is deeply concerned on quality of output might choose to initials principle in terms of losses to reduce the tendency of loss averse employees to consecrate on quantity rather than quality. According to them, enabling Human Resource Management (productivity and quality promoting HRM system, policies and practices) is crucial in creating mutual gains for both workers and organizations. Opatha (2015) opined that to meet increasing demand of customers an organization needs to improve its quality of output via productivity. He also stated that due to increased customer expectations of high quality and increased competition organizations have to improve the quality of output. In this context, owners or managers are forced to improve their firm's productivity and the quality of products they offer while reducing costs at the same time. Without employees' involvement and support it is not possible to achieve success of any effort of improving productivity and quality. Improvement of productivity and quality is dependent upon how employees behave at work (Opatha, 2015).

Theoretical Review

This study was anchored on one theory:

Technological Determinism Theory which was developed by Thorstein Veblen in 2001. Technological determinism seeks to show technical developments, media, or technology as a whole, as the key mover in history and social change. It is a theory subscribed by "hyperglobalists" who claim that as a consequence of the wide availability of technology, accelerated globalization is inevitable. Therefore, technological development and innovation become the principal motor of social, economic or political change. Strict adherents to technological determinism do not believe the influence of technology differs based on how much a technology is or can be used. Instead of considering technology as part of a larger spectrum of human activity, technological determinism sees technology as the basis for all human activity.

'The idea that technological development determines social change (Bruce, 2002). It is the belief that social progress is driven by technological innovation, which in turn follows an inevitable course.'

(Michael & Smith, 2004). This 'idea of progress' or 'doctrine of progress' is centralized around the idea that social problems can be solved by technological advancement, and this is the way that society moves forward. Technological determinists believe that you can't stop progress', implying that we are unable to control technology (Lelia, 2007). This suggests that we are somewhat powerless and society allows technology to drive social changes because, societies fail to be aware of the alternatives to the values embedded in it technology.

As a technology is stabilized, its design tends to dictate users' behaviors, consequently diminishing human agency. This stance however ignores the social and cultural circumstances in which the technology was developed.

Rather than acknowledging that a society or culture interacts with and even shapes the technologies that are used, a technological determinist view holds that the uses made of technology are largely determined by the structure of the technology itself, that is, that its functions follow from its form (Neil, 2009). However, this is not to be confused with Daniel Chandler's "inevitability thesis", which states that once a technology is introduced into a culture that what follows is the inevitable development of that technology. Soft determinism, as the name suggests, is a more passive view of the way technology interacts with socio-political situations. Soft determinists still subscribe to the fact that technology is the guiding force in our evolution, but would maintain that we have a chance to make decisions regarding the outcomes of a situation.

Other theories relating to the study include:

Technology Acceptance Model (TAM) which was developed by Fred Davis in 1986. This theory is designed to measure the degree of acceptance and satisfaction to the individual users against any technology or information but from different view-points depending on the constructs or determinants which represent their structure.

METHODOLOGY

The research design adopted in this study was the cross-sectional survey design. The research population is **850** employees of 28 manufacturing industries in Rivers State. The Krejcie and Morgan (Sekaran, 2017) sample size determination table was used to determine the sample size for this study which is **265**. The primary data for the study was sourced through the administration of the structured questionnaire. Tests was carried out using the Spearman's rank order correlation coefficient at a 0.05 level of significance based on the adoption of a 95% confidence interval.

Hypothesis one.

H₀₁: There is no statistical significant relationship between business model and quality of output

Analysis of the effect of business model on quality of output

			Correlations	
			Business Model	Quality Of Output
Spearman's rho	BusinessModel	Correlation Coefficient	1.000	.643**
		Sig. (2-tailed)	.	.000
		N	265	265
QualityOfOutput	QualityOfOutput	Correlation Coefficient	.643**	1.000
		Sig. (2-tailed)	.000	.
		N	265	265

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

The table revealed that the Spearman rho Correlation coefficient is 0.643. This indicates a strong positive linear relationship between business model and quality of output. This Correlation test is highly significant since p-value is 0.000. The p-value is less than 0.05. A positive relationship exist

between business model and quality of output, this means that as business model increases quality of output increases.

Following this finding, the study concluded that there is a significant relationship between business model and quality of output. Therefore, null hypothesis was rejected.

CONCLUSION

Many organizations have realized the importance of business model and information technology and its impact on speeding up and accurate performance of tasks and increasing customer satisfaction, quality of output, support systems, managers' decision-making, and especially the organization's effectiveness. Such awareness has caused most organizations to quickly move towards the application of IT.

RECOMMENDATIONS

Based on the findings in this study, the following recommendations were made:

- Failure to use proper techniques can be a challenge in digital transformation. Organizations are advised to adopt a favourable procedures. Stress can be reduced if efficient ways are used to introduce and implement the needed transformation.
- Digital transformation and its use involves the constant generation, processing, and the management of the data. Therefore, it will serves as a tool for solving the problems only when it is used for the purpose of human development. In this case human capabilities ae mixed, resulting in development and productivity.
- Proper training is recommended to ensure that the workforce understand the need for the transformation and how this transformation will help them to improve their work. Today, the needed trainings and changes and orienting them through IT are performed easily and develop the organization or the society in different fields.

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