

**INFORMATION SHARING AND PRODUCT INNOVATIVENESS OF DEPOSIT MONEY BANKS
IN NIGERIA**

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ABSTRACT

This research work empirically examined the relationship between information sharing and product innovativeness of deposit money banks in Nigeria. The correlational research design was deemed imperative in this study as it deals with a multivariate analysis of the relationship existing amongst the study variables such as information sharing (predictor variable) with goal setting as its dimension and product innovativeness (criterion variable) with product modification as its measure. The researcher selected all the twenty (20) deposit money banks with main branch in Port Harcourt metropolis in Rivers State as population for the study. The work was therefore a census study since the population of twenty (20) deposit money banks was a manageable size. The researcher purposively selected five (5) managerial staff from each of the twenty (20) deposit money banks making a total of one hundred (100) staff as respondents for the study under review. The researcher used both the primary and secondary data in the course of the study. The Pearson Product Moment Correlation (PPMC) statistic was adopted to test the hypothesis. The outcome of the study revealed that information sharing is positively and significantly related with product innovativeness. It was then recommended that all deposit money banks in Nigeria, should as a matter of necessity engage in employee empowerment practice such as information sharing as a means of improving product innovativeness especially the modification of product. Private firms and industries should inculcate proper information sharing channels among their managers and employees to guarantee organisation effectiveness through innovative decision and actions. Deposit money banks and other profit oriented organisations should engage highly motivated and empowered managers in order to initiate and sustain organisational innovativeness which will in turn enhance organisational productivity.

Keywords: Information Sharing, Product Innovativeness, Deposit Money Banks.

Introduction

Deposit money banks have a long history of adapting to new technology and introducing new activities. In their search for sustainable profits, deposit money banks are understandably motivated to seek out and implement operational efficiencies and pursue innovations to grow income. Today's technological advances include expanded use of artificial intelligence, machine learning, algorithms, and cloud data storage. These changes in combination with rapidly evolving consumer preferences are reshaping the financial services industry at an unprecedented rate and are creating new opportunities to provide consumers, businesses, and communities with more access to and options for products and services. Given the breadth and speed of change, deposit money banks management and boards of directors should understand the impact of new activities on banks' financial performance, strategic planning process, risk profiles, traditional banking models, and ability to remain competitive. Organisations have therefore felt the need to follow modern management approaches such as "empowerment" closely and adequately due to its importance and role in the achievement of expected aims and objectives. Obviously it will not be possible for organisations to reach their aims and objectives at the desired levels especially if

empowerment as a modern management approach is neglected according to studies. Those who fail to adapt themselves to technological advancement, changes in market and sector, the demands and expectations of customers will be doomed to fall prey to the natural selection or fail to enlarge. (Hasan, 2015). At this point, innovation steps on the stage is so essential a concept, even to the extent of saying "Innovate, or perish!" (Hasan, 2015). Communication receives frequent exploration as a key construct in the examination of relationships. Anderson and Narus (1990) defined communication as "the formal as well as informal sharing of meaningful and timely information". According to the emerging paradigm of public relations by relationship management, communication may be redefined as part of building favourable relationship between management and employees, thus acknowledging that communication facilitates employee willingness to work towards envisioning future direction and goals of the organisation and consistent displays of passion about the collective pursuit of the organisation's purpose (Conger, 1989).

Information sharing is therefore the distribution of useful information among people, systems or organisational unit in an open environment so as to get a job done effectively and efficiently. Information is strategically needed for the success of organisations (Ge & Helfert, 2008). Information sharing plays a crucial role in improving the performance of employees in particular and that of the organisation at large. (Ganesh et al., 2014; Trkman et al., 2010; Lee & Whang, 2000). Organisations need clear information sharing policies and a proactive approach to sharing information (Fawcett et al., 2011). However, a recent summary of management research argues that the 'need to share information should be the first and foremost focus of future management research (Wagner and Fearn, 2015).

Research on innovation in the public sector has revealed and shown that while elected officials and political appointees are the source of many innovations (Breux et al. 2002; Chakerian & Mavima 2000; Kellough & Nigro 2002; Wallin 1997), so are frontline employees who generate novel ideas through experimentation, accidental occurrences, and other forms of experience (Altshuler & Zegan 1997; Borins 2000a, 2000b, 2012; Kamensky 1996; Light 1998; Thompson & Sanders 1997). Many of the innovations arising out of the National Performance Review (NPR) originated from the experiences of practitioners (Kamensky 1996). Reinvention laboratories were set up in many federal agencies to give employees dispensation to modify, streamline, and reinvent processes and structures in their agencies. Altshuler and Zegan (1997), in their review of award-winning innovations in American government, found that public servants who initiated the innovation were more likely to be street-level bureaucrats in direct contact with clients than senior managers. Similarly, Borins (2000a, 2000b, 2012) has found that career civil servants at the middle manager and frontline levels are frequent initiators of innovation in government as recorded.

Studies have shown that information sharing aimed at offering financial and other rewards for performance will cause employees to feel more encouraged to innovate. Most researchers believe, however, that tying rewards to performance may discourage innovativeness in private and public organisations. Therefore the need to adopt information sharing in deposit money banks in Nigeria as a strategic tool and managerial practice to expand and enhance innovativeness of product has been advanced for proper research in this study.

Operational Conceptual Framework

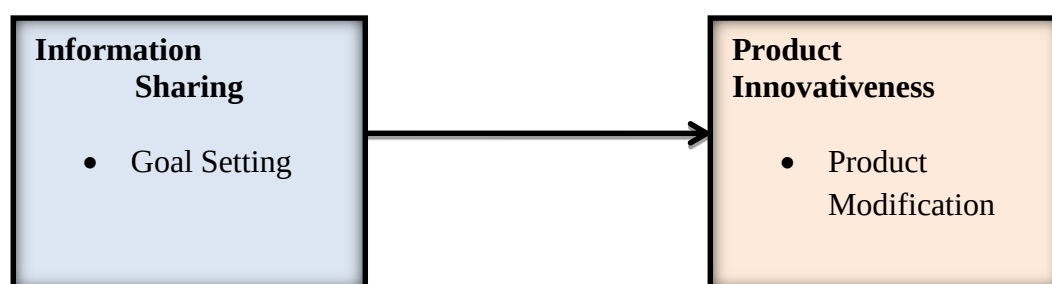


Fig 1: Operational conceptual framework showing the relationship between information sharing and product innovativeness.

Objective of the Study

To access the relationship between information sharing and product innovativeness of deposit money banks in Nigeria.

Research Question

What is the relationship between information sharing and product innovativeness of deposit money banks in Nigeria.

Research Hypothesis

H₀₁: There is no significant relationship between information sharing and product innovativeness of deposit money banks in Nigeria.

Literature Review

The theoretical framework for this study is anchored on Information sharing theory.

Information Sharing Theory

Information sharing theory provides an understanding of the factors that enable and constrain information exchange among individuals. It is based on the premise that "organisational culture and policies as well as personal factors can influence people's attitudes about information sharing" (Constant et al., 1994). Information sharing is impacted by two factors which, when combined, distinguish information exchange from other types of 'exchange' and thus justify the need for a special theory. The first factor is related to reciprocity/rational self-interest ('I help you, if you help me'). Constant et al. (1994) argued that an information exchange is like a social exchange and context-specific factors influence this sharing 'attitude' of 'why I should share information, and what is in it for me'. This constitutes the social determinants of information sharing. While these were already included in the original theory of social exchange, it did not specifically consider information exchange (Jarvenpaa & Staples, 2000). The second factor relates to social and organisational context attitudes ('usual, correct and expected' information sharing behaviour in the workplace). In other words, the more a person feels that information sharing is expected of them the more they are willing to share. People are more willing to share information if they are happier with the other party while a prosocial attitude formed by factors like work satisfaction and experience also plays a role in willingness to share information (Constant et al., 1994). This constitutes the psychological determinants of information sharing. Information sharing theory is thus believed to be a robust basis for information as well as knowledge (used as synonyms, as per Davenport & Cronin, 2000) sharing literature (Jarvenpaa & Staples, 2000). Constant et al. (1994) concluded that people's attitudes related to social and organisational factors actually moderate reciprocity and information sharing behaviour. Thus, the attitude considered in our case is willingness to share information (Bock et al., 2005; Van Den Hooff et al., 2012), which is shown by an individual's positive 'attitude' towards others (De Vries et al., 2006). The fact that 'individuals' (and not companies or machines) share information requires insights from knowledge/information sharing literature where individuals/humans are the focus. De Vries et al. (2006) define willingness to share as the level to which a 'person' is inclined to allow another 'person' access to their information capital. It is pertinent to note here that Bock et al. (2005) extended information sharing theory by identifying the motivational factors that form an individual's attitudes, which construct information sharing behaviour. These sharing attitudes and intentions are shaped by economic anticipated motivational rewards, social-psychological factors

of anticipated reciprocity, a sense of self-worth, and the organisational climate. Social Exchange Theory (SET) has often been used to examine perceived benefits and costs as well as to study the effects of motivational factors like reciprocity and trust on information sharing behaviour (Wang & Noe, 2010).

Concept of Information Sharing

Information sharing refers to the extent to which an organisation distributes information to its employees regarding policies, its relation to the general environment, and work-related goals (Boselie, Hesselink, Paauwe, & Van Der Wiele, 2000; Lawler, 1992; Pfeffer, 2005). Information sharing as a means of employee empowerment is the distribution of useful information among people (employees), systems or organisational unit in an open environment so as to get a job done effectively and efficiently. Information sharing such as communicating goals and priorities to employees and offering feedback on their performance are practices that have been found to encourage innovativeness. Specific and challenging goals in general serve to raise employee motivation and performance (Locke & Latham 1990). Top-down communication that conveys the leadership's priorities and goals can, therefore, encourage achievement-oriented employees to seek new strategies and tactics for attaining those goals. Negative feedback indicative of failure also signals the need to search for new ways of narrowing the performance gap (Cyert & March, 1963; Fernandez & Wise, 2010; Manns & March, 1978; Salge, 2011), thereby encouraging employees to innovate. While goal ambiguity in the public sector can undercut the effectiveness of goal setting as a motivational approach (Rainey 2009), at the level of the work team or the individual employee, information sharing especially goals are often sufficiently clear for this empowerment practice to have a positive impact on the extent to which an employee feels encouraged to innovate. Goal setting in this study as a dimension of information sharing is the process of developing an action plan designed to motivate and guide a person or group toward achieving a goal. Sauers and Bass (1990, p. 30) state that goal setting has been widely researched over the past years. The authors define goal setting as "a formal program of setting numerical or quantitative performance goals for individuals" and that "all formal goal setting programs share the common objectives of increasing employee motivation and performance." The importance of goal, is aptly defined by Mills (2002, p.41) as representing "a way of keeping score" and that "by helping employees define their personal goals and sharing information on goal setting, managers are putting them on the path towards achieving the organisation goals."

Communicating to employees on what is expected in terms of performance and results through goal setting is important. According to Landgon (1999, p. 54), "objectives are still useful for the communication of performance intent". This argument is reinforced by Xavier, (2002, p. 33), who posits that clarifying expectations and the roles and responsibilities of employees through "clear communications and feedback can improve manager and employee effectiveness". Additionally, Mills, (2002, p. 41) pointed out that "people who see the connection between their personal goals and the larger goals of the organisation will have a greater impact on the achievement of those goals than people who see no such connection"

Concept of Product Innovativeness

Product innovativeness is the introduction of a good (product) that is new or significantly improved with respect to its characteristics or intended uses. It is the capability of the firm to develop and introduce new or improved products to the market. Whereas highly innovative products help firms garner greater opportunities for growth, differentiation, and competitive advantage, firms are increasingly emphasizing innovation (Ahlstrom, 2010; McNally et al., 2010; Seebode et al., 2012). The question of what factors contribute to product innovativeness is a key research question, particularly in the new product development (NPD) research (Akgun et al., 2007; Talke et al., 2010; Lubik et al., 2013). Product innovativeness is the development of new products, making changes in the current product design or using new techniques and means in

the current production methods, in other words, it focuses on existing markets for existing products, differentiating through features and functions that current offers do not have. Product innovativeness can be looked at from two sides; internal side where it depends on knowledge, capacities, resources and the technologies used in the company, however; from the external side product innovativeness focuses on the consumer's needs and the owner's expectations. Given that New Product Design (NPD) can be understood as a process in which a firm identifies and defines problems and then develops and combines new knowledge to solve them (Nonaka, 1994; Cillo et al., 2010; Cooper, 2011), product innovativeness can be said to be closely related to new knowledge that the firm can provide and integrate (Duggan, 2012). New knowledge stems from both internal sources that a firm creates and external sources that a firm acquires from the outside (Enkell et al., 2009; Sofka & Grimpe, 2010). Such knowledge creation capability, which refers to a firm's abilities to create new knowledge internally (Smith et al., 2005), and absorptive capacity, which reflects a firm's abilities to acquire, assimilate, transform, and exploit external knowledge (Cohen & Levinthal, 1990), are key internal and external sources of new knowledge respectively (Wang et al., 2011; Fernhaber & Patel, 2012; Müller-Seitz, 2012). Although extant studies have highlighted their importance to new products, seldom has product innovativeness been directly taken into account (Smith et al., 2005; Lane et al., 2006). Thus, the question of how and in what way do knowledge creation capability and absorptive capacity impact product innovativeness remains underdeveloped. The continuance and the persistence of any organisation depends on its capacities to maintain its market place and face the competition which spreads rapidly and aggressively with the globalisation and the expansion of the new technologies, and while product reflects the organisation's image its whole success depends also on the product success through realising (compliance) consumers desires and needs, and developing new products. Developing highly innovative products is a cornerstone to the success of firms and economies (Ahlstrom, 2010; Seebode et al., 2012). Thus, product innovativeness has been a key topic in the NPD research (McNally et al., 2010). Product innovativeness describes the degree of newness and novelty of the product (Akgun et al., 2007; Cillo et al., 2010). A highly innovative product often has a high degree of newness, while a less innovative product tends to sit at the opposite end (Talke et al., 2010).

Atuahene-Gima (1996) acknowledges that the product innovation has the following dimensions; the product should be new to customers from the perspective of the customer, the product should be new to the firm from the perspective of the firm, product modification which means making product variation in the current products of the firm. Product modification in this study as a measure of product innovativeness is any substantial change made to the attributes (size, shape, colour, style, price, etc.) of a product; modification of a product is usually undertaken in an attempt to revitalise it in order to increase demand. It is the improvement of an existing products by making necessary changes in the characteristics, nature, size, packing and colour, etc., of the products so that the changes in demand of consumers may be dealt effectively. It is also the alteration by an organisation of an existing product to update it and improve its competitiveness in serving existing market segments or to modify it to serve new market segments. The product modification outcomes are consistent with a winner-take-all effect: Firms that modify products and introduce them first to the market take full advantage of the investment opportunity, while latecomers do not. Modifying existing products requires quickly raising funds. (Phillips & Sertsios, 2016).

METHODOLOGY

Research Design

The study is correlational in nature, and is carried out in the natural environment where work proceeds normally (non-contrived setting).

Population

The population for this study includes all the deposit money banks licensed to operate in Nigeria. According to the Central Bank of Nigeria (CBN), the number of deposit money banks in Nigeria with operational permit totals twenty two (22). Given the insecurity nature of some part of the country, not all the deposit money banks were used in the study. Table 1 below shows all the twenty (20) deposit money banks with main branch in Port Harcourt metropolis, Rivers State, Nigeria.

Hence the sample size of one hundred was chosen as follows: One Branch manager, one Operations manager, one Human resources manager, one Customer relations manager and one Internet technology manager from each deposit money bank making a total of five managerial staff from each deposit money bank and a final total of one hundred (100) managerial staff from the twenty (20) deposit money banks.

Table 1: Distribution of Sample Size

S/N	DEPOSIT MONEY BANKS	NUMBERS OF STAFF
1	Access Bank Plc.	5
2	Citibank Nigeria Ltd.	5
3	Ecobank Nigeria Plc.	5
4	Fidelity Bank Plc.	5
5	First Bank Nigeria Ltd.	5
6	First City Monument Bank Plc.	5
7	Globus Bank Ltd.	5
8	Guaranty Trust Bank Plc.	5
9	Heritage Banking Company Ltd.	5
10	Key Stone Bank	5
11	Polaris Bank	5
12	Stanbic IBTC Bank Ltd.	5
13	Standard Chartered Bank Nigeria Ltd.	5
14	Sterling Bank Plc.	5
15	Sun Trust Bank Nigeria Ltd.	5
16	Union Bank of Nigeria Plc.	5
17	United Bank For Africa Plc.	5
18	Unity Bank Plc.	5
19	Wema Bank Plc.	5
20	Zenith Bank Plc.	5
TOTAL		100

**Source: Survey Data, 2019.*

Methods of Data Analysis

The hypotheses were analysed by means of the Pearson Product Moment Correlation (PPMC). The Pearson Product Moment Correlation was calculated on SPSS 21.0 version software package to establish the relationship among the empirical referents of the predictor variable and the measures of the criterion variable.

Result

H₀₁: There is no significant relationship between information sharing and product innovativeness of deposit money banks in Nigeria.

Table 2: Information sharing and product innovativeness

		Info_sha	Prod_Inn
Info_sha	Pearson Correlation Coefficient	1	.505**
	Sig. (2-tailed)		.000
	Sum of squares and Gross Products	2005.310	939.480
	Covariance	20.256	9.490
	N	100	100
Prod_Inn	Pearson Correlation Coefficient	.505**	1
	Sig. (2-tailed)	.000	
	Sum of squares and Gross Products	939.480	1711.310
	Covariance	9.490	17.286
	N	100	100

Note: Inf_sha = Information sharing; Prod_Inn = product innovativeness; * = correlation is significant at the 0.05 level (2-tailed).

As shown from the data analysis using a sample size of one hundred (100) on table 2, the relationship between information sharing and product innovativeness is strong, positive and significant. Evidence showed that Pearson product correlation coefficient is .505 and the probability value less than the critical value (i.e. $r = .505$, $p = .000 < 0.05$). In other words, information sharing is positively correlated with product innovativeness. This means, if deposit money bank managers and employees increase their level of information sharing, product innovativeness will also increase. Therefore, the null hypothesis which states that there is no significant relationship between information sharing and product innovativeness was rejected, while the alternative hypothesis which states that there is a significant relationship between information sharing and product innovativeness was accepted.

Summary of Hypothesis

Table 3: Summary of Hypothesis Testing Result

S/N	Hypothesis	Result	Decision
H₀₁	There is no significant relationship between information sharing and product innovativeness of deposit money banks in Nigeria.	$r = .505$ $p\text{-value} = .000$	Reject H₀₁ since $p\text{-value} < 0.05$ significance level.

Source: Survey Data, 2019

Discussion of Findings

Information Sharing and Product Innovativeness

The test of the only hypotheses in this study revealed that information sharing is very strongly related with product innovativeness in deposit money banks in Nigeria. This was shown by Pearson product correlation coefficient = .505 and the probability value less than the critical value (i.e. $r = .505$, $p = .000 < 0.05$). This finding implies that an increase in information sharing was associated with a strong increase in product innovativeness. That is, deposit money banks that engages in information sharing among its managers and employees enhances their innovativeness in terms of product innovativeness. This finding is in accordance with Hasan (2015) whose research provided support to the argument that firms that consistently engage in information sharing continuously experience high product innovativeness, thereby remaining competitive in the ever competitive business industry. This however implies that information sharing enhances product innovativeness in deposit money banks in Nigeria. This finding is also in consonance with

Sergio et al's (2012) position that product innovativeness is a function of the level and magnitude of exposure to and sharing of information by managers with their subordinates. This furthermore implies that adequate information sharing leads to product innovativeness in deposit money banks in Nigeria.

CONCLUSION

Considering the research interest and the empirical finding of the present research, its conclusion was drawn from extant literature and based on the present finding. The outcome of the study revealed that information sharing is positively and significantly related with product innovativeness. Thus, the study concludes that adequate information sharing (predictor variable) improves product innovativeness (criterion variable) of deposit money banks in Nigeria.

RECOMMENDATIONS

As a result of the finding and conclusion of the study, the recommendations below are herein preferred:

- i. Deposit money banks in Nigeria are encouraged to engage in employee empowerment practice such as information sharing as a means of improving product innovativeness especially the modification of product.
- ii. Private firms and industries should inculcate proper information sharing channels among their managers and employees to guarantee organisational effectiveness through innovative decision and actions.
- iii. Deposit money banks and other profit oriented organisations should engage highly motivated and empowered managers in order to initiate and sustain organisational innovativeness which will in turn enhance organisational productivity.

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