

ADOPTING MARKETING INFORMATION SYSTEM AMONG SMALL AND MEDIUM SCALE BUSINESS IN NIGERIA: AN INSSUE FOR ECONOMIC DEVELOPMENT

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Abstract: *The social economic imperatives of the Nigeria economy of today are systematically shifting in favour to the growth of small and medium scale business that hold the ace for Nigerian development. Preliminary findings has shown that small and medium scale business sectors in Nigeria are deficient in gathering and processing information to help in their operations and this has resulted to low sales. In today's business environment, professional managers in both private and public sectors cannot afford to ignore information system. It help to create competitive firms, manage global corporations and provide useful products and services to customers. The objective of this study is to assess the level of adopting marketing information system by small and medium scale businesses. Data were collected from selected business sectors in Kaduna State, Benue State, Plateau State and Abuja the Federal Capital Territory of Nigeria. One hundred and twenty five (125) employees of the business sectors were surveyed. Analysis was conducted using SPSS statistical tool. T-test was use to test the hypothesis in order to determine whether small and medium scale business differ significantly on their orientation to marketing information system. The findings revealed that small and medium scale business are equally not clearly oriented to marketing information system and the level of awareness to the practice of marketing information system is minimal. It was recommended that effort should be made to enlighten them on marketing information system, it application and practice is necessary so as to enable them fit into the global competitive world.*

Key Words: *Marketing, Information System, Small, Medium, Business, Competitive, Products.*

1. INTRODUCTION:

The proliferation of small and medium sized enterprises (SMEs) is emerging, since the SMEs contribute significantly to job creation, social stability, and economic welfare (Ladzani & Van Vurren, 2002; Steiner & Solen, 1988). In business environment, business leaders have to unlearn traditional management principles and replace them with new thinking and new behavior that not only incorporate change but also create the necessary change in the market place (Oghene, 2010).

For a long time Nigeria government had taken centre stage hoping to carefully and centrally plan the economy. Since it became an Independent Nation in 1960, it has been suffering from so many epileptic economic policies and situations that have let it a grossly underdeveloped country. To get out of this economic and development quagmire, Nigeria policy makers and experts in and outside government, including members of the organized private sector, seem to agree that, the catalytic process must start with the urgent setting up and empowering of as many Small and Medium Scale Enterprises (SMEs) as possible in Nigeria. This is because available facts, figures, cases and trends. In global economic development, show that SMEs indeed hold the key to the development of developing nations. (Onah, 2004).

Onodugo, (2004) observed that, the socio-economic imperatives of Nigerian economy of today are systematically shifting in favour to the growth of small and medium scale business. Among the reasons for this trend is the sudden realization of the colossal waste associated with public sector domination of the economy.

In today's business environment, professional managers in both private and public sectors cannot afford to ignore information systems. They must learn how to use information technology to create competitive firms, manage global corporations and provide useful products and services to customers (Ayandele, in Onuoha, 2011).

2. STATEMENT OF THE PROBLEM:

Available statistics shows that 95% of establishments in the organized manufacturing sector in Nigeria fall into SME category. More disheartening is the fact that at least three out of every four SME fail every year (Nzelibe, 1996, Tinubu 2002) most SMEs fail as soon as they are started because those who start them do not properly appraise themselves and their business idea before embarking on the venture (Onodugo, 2004).

This shows that the level of awareness in the contents of marketing information system by SME is low and the functions perform by marketing information system in Nigeria business sector is deficient.

3. OBJECTIVES OF THE STUDY:

The main objectives of the study is:-

To assess the level of adopting marketing information system by SMEs, in Nigeria. The specific objectives of the study are:-

- i. To examine the level of managers orientation to the practice of marketing information system in their organization
- ii. To examine the level of employees orientation with regard to marketing information system in their organization
- iii. Proffer useful recommendation on the contents of marketing information system.

4. RESEARCH QUESTIONS:

- i. To what extent do SMEs adopt marketing information system in decision making?
- ii. To what extent are managers oriented on the practice of marketing information system?
- iii. To what extent are employees oriented on marketing information system?

5. SIGNIFICANCE OF THE STUDY:

The study has potential implication for business sectors. It will help to awaken information consciousness among Nigerian business sectors.

6. REVIEW OF LITERATURE:

Small-Scale Business Enterprises (SBEs) in Nigeria

In Nigeria, several government agencies, institutions and ministries created for the purpose of promoting SBEs have advanced many definitions of SBEs, this is especially when different government agencies come up with different version of SBEs' definition. Federal Ministry of Industry (FMI) (1972), define a Small Scale Enterprise (SBE) as an enterprise having investment capital in land, building, machinery and equipment, and working capital up to ₦60,000 and employing not more than 50 persons. The definition was later reviewed in 1973, 1979 and 1981 by adjusting the investment capital to ₦150,000, ₦250,000 and ₦500,000 respectively while leaving number of employees unchanged.

Salami (2004) noted that later in 1991, SBE was recognized by National Council of Industry (NCI) as an enterprise with total project cost excluding cost of land and including working capital that does not exceed ₦5 million. Yet, it defines the concept in 1996 as an enterprise with total cost (inclusive working capital but excluding cost of land) above ₦1 million but not exceeding ₦40 million, with a labour size of between 11 and 35 workers. While SMEDAN (2007) defines SBEs as any enterprise with 11 to 49 employees, and with asset worth of ₦5 million or more but not exceeding ₦50 million.

These parameters used in defining Small-Scale Business Enterprises do not provide uniform benchmark for all industries and for all time. Ezeife (1998) noted that what could pass for a big capital in food and beverage industry will certainly be small when compared to that in steel or aviation industry. That what is big today may become small in five years to come.

Small and Medium Scale Enterprise SME

NCI (2001) classified industrial enterprises in Nigeria as follows:-

- i. Micro/Cottage Industry:- As an industry with a total capital employed of not more than ₦1.50 million, including working capital but excluding cost of land, and/or, a workforce of not more than 10 workers.
- ii. Small-Scale Industry:- As an industry with a total capital employed of over ₦1.50 million, but not more than ₦50 million including working capital but excluding cost of land and/or a workforce of 11-100 workers.
- iii. Medium – Scale Industry:- As an industry with a total capital employed of over ₦50 million, but not more than ₦200 million, including cost of land, and/or, a workforce of 101-300 workers.

From the above definitions it can be seen that Small-Scale Business Enterprises (SBEs), as the name implies, refers to all commercial undertakings whose system elements and organizational features are relatively small compare to the medium and large enterprises. System inputs like employees, capital, land, factory buildings and other resources vary significantly between small and other types of enterprises. The SBEs' production and operation processes such as factory machinery and other equipment equally differs in size with that of large firms; the system's outputs in terms of product and services are also in small quantities compared with that of big enterprises. Following these classification, Onodugo defined Small and Medium Enterprises (SMEs) as business organizations whose total capital is above ₦1.5 million, but not more than ₦200 million including the cost of land and workforce capacity of between 11 – 300.

Marketing Information System (MKIS)

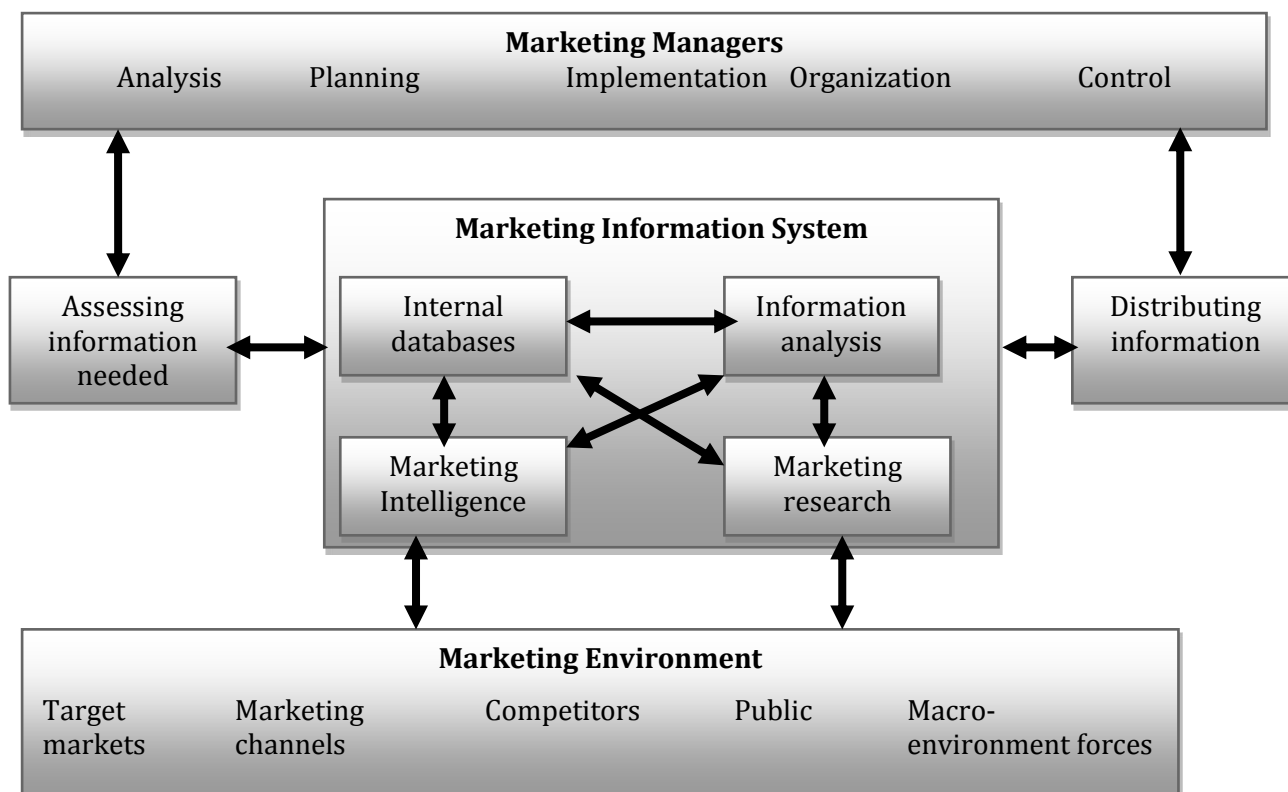
Etzel, Walker and Stanton (2001) defined marketing information system as an ongoing, organized procedure to generate, analyze, disseminate, store, and retrieve information for use in making marketing decisions. Onah and Thomas (2004) noted that the collection and analysis of all data and information relevant to forecasting and control activities is too often either neglected or indeed deliberately avoided by many companies and management. Their information system is either non-existent, or disorganized, due to dislike of analysis or fear that the information will get into the wrong hands. This aversion to information gathering and analysis must be avoided because information is fundamental to good managerial decision-making.

Kotler and Armstrong (2001) define Marketing Information System as a system which consists of people, equipment, and procedures to gather, sort, analyze, evaluate and distribute needed, timely, and accurate information to marketing decision makers. McLuhan (2001) is of the view that in order to serve the information needs of the organization and to support decision-making, marketers need to focus not only on collecting data and information, but also on how to handle and manage issues of storage, access and dissemination. The complexity of managing a continuous flow of information into the organization demands a well thought-out information gathering, storage and retrieval system. Zikmund and d’Amico (1993) sees MKIS as an organized set of procedures and methods by which pertinent, timely and accurate information is continually gathered, sorted, analyzed, evaluated, stored and distributed for use by marketing decision makers.

The SMEs operates in a competitive environment, therefore, it is very important to be able to assess competitors responses to general changes in the marketing environment and moves in major battles within the market. In order to produce superior value and satisfaction for customers, the SME’s need information at almost every turn. Kotler and Armstrong (2001) observed that in today’s marketing, a company’s information may prove to be its chief competitive advantage. Competitors can copy each other’s equipment, products, and procedures, but they cannot duplicate the company’s information and intellectual capital.

In designing an effective MKIS, Etzel, Walker and Stanton (2001) assert that managers must identify the information that will help them to make better decision. Working with researchers and systems analyst, managers then determine whether the data needed are available within the organization or must be procured, how the data should be organized, the form in which the data should be reported and the schedule according to which the data will be delivered.

A structure of marketing information system is diagrammatically shown below:-



Source: Adapted from Philip Kotler and Gary Armstrong; “Principles of Marketing” 9th Edition (2001).

The figure shows that MKIS begins and ends with marketing managers. First, it interacts with these managers to assess information needs. Next, it develops needed information from internal company data, marketing intelligence activities, marketing research, and information analysis. Finally, the MKIS distributes information to managers in the right form at the right time to help them make better marketing decisions.

The Role of Stakeholders in Information Flow:-

Polonsky (1996) recommends several strategies encouraging stakeholders communications. The firm may work alone, as one isolations approach. Or, the firm may work directly with stakeholders and considered an aggressive approach. A more subtle adaptation approach may modify behavior toward stakeholder concerns. Lastly, employment of a cooperative approach lends itself to a specific set of outcomes, is another possibility. These strategies are important, because marketers’ network with internal and external stakeholders directly. A shift toward a learning organization should occur, but the barriers may be significant like fear of intellectual property loss or organization activities leading a decline in competitive strategy.

The tradic alignment between design, marketer and stakeholder is substantial. All too often, designers are brought to the table later than needed or are the wrong type. There are eight stages for new product development, including: 1. Idea generation; 2. Screening; 3. Conceptual development and testing; 4. Market strategy; 5. Business analysis, 6. Product development; 7. Market testing; and 8. Commercialization.

Kotler and Rath (1984) state that designers are not brought into the product design phases until stage six, product development. In the ever competitive environment, it may be more advantageous to bring designers in at an earlier point to help build stakeholder camaraderie and maximize horizontal communication flow.

7. RESEARCH METHOD:

Primary data for this study were collected from selected SMEs from the following states; Kaduna, Benue, Plateau and Abuja the Federal Capital Territory of Nigeria. The sample population was grouped on equal percentage of 35 respondents using purposive sample technique. One hundred and twenty five (125) staff of the SMEs were surveyed. Analysis was conducted using SPSS statistical tool. T-test was used to test the research questions.

Statements of Hypothesis

Hypothesis I: SMEs will not differ significantly on their adoption of MKIS

Hypothesis II: Management orientation to MKIS will not differ significantly by their nature of Enterprises.

Hypothesis III: Employees orientation on MKIS will not differ significantly by their nature of enterprises.

Results and Discussions

Table I: Nature of Business Enterprises

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Small scale	90	72.0	72.0	72.0
	Medium scale	35	28.0	28.0	100.0
Total		125	100.0	100.0	

The table shows that 90 (72%) of respondents are small scale business owners while 35(28%) are medium scale business owners.

Table II: Questionnaire Distribution and Collection

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Kaduna	35	28.0	28.0	28.0
	Benue	35	28.0	28.0	56.0
	Plateau	30	24.0	24.0	80.0
	Abuja	25	20.0	20.0	100.0
Total		125	100.0	100.0	

The table shows that 30(24%) respondents returned there questionnaire, 5 questionnaire were not returned at Benue State while 10 questionnaires were not returned at Abuja, others were fully returned.

Table III: Analysis of Research Questions

Level of adopting MKIS in decision making by SMEs

Variables	Strongly disagreed	Disagreed	Indifferent	Agreed	Strongly agreed	Total
MKIS is been used while planning the marketing activities	8(6%)	80(64%)	25(20%)	12(10%)	-	125(100%)
MKIS is been reviewed from	2(2%)	90(72%)	9(7%)	24(19%)	-	125(100%)

time to time so as to meet up with the market trend						
MKIS issues are mostly topics of discussion at the board meeting	-	6(5%)	20(16%)	85(68%)	14(11%)	125(100%)
Other functional units benefits directly from the activities of MKIS	4(3%)	75(60%)	25(20%)	21(17%)	-	125(100%)

The result of the report show that 64% of the respondent disagreed that MKIS is been used while planning the marketing activities. 72% disagreed that MKIS is been reviewed from time to time to meet up with the market trend. However, 68% agreed that MKIS are mostly topics of discussion at board meeting and finally, 75% disagreed that other functional units benefits directly from the activities of MKIS.

Table IV: Analysis of Research Question II: Managers Orientation to the Practice of MKIS

Variables	Strongly disagreed	Disagreed	Indifferent	Agreed	Strongly agreed	Total
The use of MKIS in SMEs will help business development	-	5 (4%)	15 (12%)	85 (68%)	20 (16%)	125(100%)
There are employees and equipments to carry out MKIS	8(6%)	80(64%)	25(20%)	12(10%)	-	125(100%)
Sustaining the use of MKIS will help to improve business activities	-	3(2%)	10(8%)	90(72%)	22(18%)	125(100%)

The result of the report show that about 68% of the respondents agreed that the use of MKIS will help business development, and 90% agreed that sustaining the use of MKIS will help to improve business activities. Unfortunately, (65%) shows that there are not employees or equipment to carryout MKIS.

Table V: Analysis of Research Question III: Orientation of employees on MKIS

Variables	Strongly disagreed	Disagreed	Indifferent	Agreed	Strongly agreed	Total
Do you undertake courses in MKIS during your undergraduate period	-	17(14%)	20(16%)	80(64%)	8(6%)	125(100%)
Do you have high knowledge of MKIS	2(2%)	89(71%)	9(7%)	25(20%)	-	125(100%)
Have you gone to MKIS workshops, seminars and conferences	8(6%)	80(64%)	25(20%)	12(10%)	-	125(100%)
Do you discuss MKIS related issues with fellow employees	8(6%)	64(51%)	6(5%)	45(36%)	2(2%)	125(100%)
Do you discuss MKIS at the departmental meetings	2(2%)	74(59%)	5(4%)	40(32%)	4(3%)	125(100%)
Do your organization encourage MKIS consciousness	14(11%)	61(49%)	16(13%)	31(25%)	3(2%)	125(100%)
MKIS orientation leads to marketing developments	-	22(18%)	8(6%)	90(72%)	5(4%)	125(100%)
MKIS is balancing internal and external marketing goals	3(2%)	10(8%)	-	95(76%)	17(14%)	125(100%)
For marketing to develop it must be socially responsible	1(1%)	25(20%)	2(2%)	88(70%)	9(7%)	125(100%)
MKIS is an emerging marketing principles for growth and development	-	29(23%)	5(4%)	85(68%)	6(5%)	125(100%)

It could be seen taken together, employees are not clearly oriented on MKIS as shown in responses of item 2,3,4,5 and 6.

Test of Hypothesis

HI: SMEs will not differ significantly on their adoption of MKIS.

T-Test: Statistical test used to find the mean difference between two different sample/groups.

The P-value are tested at 0.05 level of significance. Reject null hypothesis if t-value is less than 0.05 otherwise accept.

Table VI: T-test on mean difference between Small and Medium Scale Enterprises on their adoption of MKIS

		Means	Mean difference	Std. Dev.	df	t	p-value	Decision
SMEs adoption of MKIS	Small scale	3.3399	-.09711	.39610	123	-1.284	.202	NS*
	Medium Scale	3.4370						

* Not significant

Using t-test, SMEs do not differ significantly on their adoption of MKIS, $t = 1.284$, $p = 2.02$. The null hypothesis was therefore supported (Accepted). This shows that the small scale enterprises (SS = 3.3399) is not significantly lower than that of medium scale enterprises (ME = 3.4370) therefore the SMEs are equally not clearly adopting the MKIS.

H2: Management orientation on MKIS will not differ significantly by their nature of enterprises.

Table vii: T-test of mean difference between Small Scale Enterprises and Medium Scale Enterprises on MKIS Orientation

		Mean	N	Mean Diff.	Std. Dev.	df	t	P-value	Decision
Management orientation on MKIS	Small scale enterprise	3.3901	95	-.09711	.35232	123	1.206	.230	NS*
	Medium Scale Enterprise	3.2941	30		.45826				

*Note Significant.

The t-test statistics shows that the management of SMEs do not differ significantly on their orientation to MKIS, $t = 1.206$ and $p\text{-value} = .230$. the null hypothesis was supported (accepted). It means therefore, that small scale enterprise orientation (SS = 3.3901) was not significantly higher than that of the medium scale enterprise (MS = 3.2941).

H3: Employees Orientation on MKIS will not differ significantly by their nature of Enterprises

Table viii: t-test of the mean difference between small scale enterprises and medium scale enterprises on MKIS orientation

		Mean	N	Mean Diff.	Std. Dev.	df	t	P-value	Decision
Employee Orientation on MKIS	Small scale enterprise	1.4737	95	-.19298	.82310	123	-1.075	.284	NS*
	Medium Scale Enterprise	1.6667	30	-	.95893				

*Note Significant.

The t-test shows that the employees of SMEs do not differ significantly on their orientation to MKIS as shown by the t-value of .284 which is higher than 0.05 significance level. The null hypothesis was therefore supported (accepted).

8. RESEARCH FINDINGS:

- On the level of adopting MKIS in decision making by SMEs the result of the report show that 64% of the respondent disagreed that MKIS is been used while planning the marketing activities. 72% disagreed that MKIS is been reviewed from time to time to meet up with the market trend. However, 68% agreed that MKIS are mostly topics of discussion at board meeting and finally, 75% disagreed that other functional units benefits directly from the activities of MKIS.
- On managers orientation to the practice of MKIS the result of the report show that about 68% of the respondents agreed that the use of MKIS will help business development, and 90% agreed that sustaining the use of MKIS will help to improve business activities. Unfortunately, (65%) shows that there are not employees or equipment to carryout MKIS.
- On orientation of employees on MKIS employees are not clearly oriented on MKIS as shown in responses of item 2,3,4,5 and 6 of table v.
- Result of t-test on mean difference between small and medium scale enterprises on the adoption MKIS using t-test, SMEs do not differ significantly on their adoption of MKIS, $t = 1.284$, $p = 2.02$. The null hypothesis was therefore supported (Accepted). This shows that the small scale enterprises (SS = 3.3399) is not

significantly lower than that of medium scale enterprises (ME = 3.4370) therefore the SMEs are equally not clearly adopting the MKIS.

- Result on t-test of mean difference between small scale enterprise and medium scale enterprises on MKIS orientation the t-test statistics shows that the management of SMEs do not differ significantly on their orientation to MKIS, $t, -1.206$ and $p\text{-value} = .230$. the null hypothesis was supported (accepted). It means therefore, that small scale enterprise orientation (SS = 3.3901) was not significantly higher than that of the medium scale enterprise (MS = 3.2941).
- Results of the mean difference between small scale enterprise and medium scale enterprises on MKIS orientation the t-test shows that the employees of SMEs do not differ significantly on their orientation to MKIS as shown by the t-value of .284 which is higher than 0.05 significance level. The null hypothesis was therefore supported (accepted).

9. CONCLUSION:

In conclusion, developing information system to business problems is a major responsibility of contemporary managers, especially those managing small and medium scale enterprises. The collection and analysis of all data and information relevant to forecasting and control activities is fundamental to good managerial decision-making. When these information are properly gathered and analyzed, it becomes a key to increasing the effectiveness of performance and hence profit improvements, and no SMEs manager should be willing to put any obstacles in the way of profit improvement. Therefore, SMEs are expected to have a continuous system designed to generate, store and analyze information from sources within the firm and outside the firm for use as a basis for decision making.

10. RECOMMENDATIONS:

- SMEs in Nigeria should adopt the use of MKIS its application and practice will help provide information that they need for decision making. Table III 1,2 and 4 and table VI shows that the SMEs are not clearly adopting the MKIS.
- Managers of SMEs should go for training on MKIS. A good marketing information system balances the information managers would like to have against what they really need and what is feasible to offer. Unfortunately the managers of SMEs are aware of the benefits of MKIS but they do not have the experience and equipment to practice MKIS as shown in table IV. Item 2 and table VII.
- Employees in the various SMEs should be encouraged to attend training on MKIS its knowledge and application will enable the organization fit into the global competitive world. They are not clearly oriented as shown in table V item 2,3,4,5&6 and table viii.
- Whatever type of information storage system is being adopted, there is need for it to be relevant and consistent to the need of the organization. For instance, large companies handling large volume of documents and instructions might find it expedient to utilize the service of computers and other electronic devices while smaller firms might be contented with manually operated equipment for its records. For these devices to function well, there will be need to employ competent and experienced hands to operate the system adopted by these SMEs.
- Government should as a matter of urgency improve the deplorable status of infrastructural facilities, especially electricity supplies which forces SMEs to use other sources of power generation.

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