

Stock Management Effectiveness In Manufacturing Industries: Insurance Perspective. (A Case Study Of Metal Furniture Nigeria Limited In Lagos, Nigeria)

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ABSTRACT

Insurance is needful in everyday today activity. Insurance cuts across all fields of endeavor. It will be disastrous running into a loss and not having insurance policy in place. In a nutshell, insurance gives an individual, businessman or even the government of a nation a great deal of rest of mind because of the insurance policy that is in place. Stock Management effectiveness in manufacturing industries is the system of recording, forecasting and monitoring stores movement. Insurance can be defined as a risk transfer mechanism whereby an individual, a business organization and even the government transfer their uncertainty of loss unto the shoulder of the insurance company by paying a token amount known as the premium. The significant aims of any inventory management are: to avoid excessive and inadequate levels of inventories and maintain sufficient inventory for smooth production and sales operation. These aims may not be achieved where there is fluctuation in supply and demand. The fluctuation brings in the risks of running out of stock. Therefore this study will be useful to manufacturing companies in determining the minimum and maximum amount of stock to hold at every point in time. The study will also serve as a reference point to researchers that are willing to dwell in this area of study. The researcher adopted a simple random sampling technique for the study. The major tool that was employed in the collection of primary data for the study was questionnaire which was designed in such a way that it answered the research questions. The analysis reveals that Inventory Management has a positive influence on Manufacturing Output. The result shows that effective Inventory Management account for 82.4% in the variation of manufacturing output, given the value of the R^2 (0.824). Having analyzed the data and tested the hypothesis, the following are the findings deduced from the study. A reduction in the holding costs lead to proportionate increase in the profitability of a company. Well designed management policies help in maintaining smooth operations with little or no hindrance in any activities. Prudent inventory management is inevitable in manufacturing firms. Continuous inventory control curtails fraud more effectively than an annual stock-taking. Adequate finished goods to meet customers requirement avoid costs associated with stock-out. First-in-First-out (FIFO) method of valuing stocks is the most efficient way of valuing stocks especially when it comes to tracing the movement of stock. Inventory form a significant proportion of a company's assets. In conclusion, any manufacturing company stock and its effective management are obviously essential. Stocks make up a large proportion of manufacturing companies assets and therefore its effective management should definitely contribute to the effective management of the business.

Key words: insurance, stock management (inventory management), manufacturing industries.

INTRODUCTION

Stock Management could as well be referred to as Inventory Management. It is vital in the control of materials and goods that have to be held (or stored) for later use in the case of production or later exchange activities in the case of services. The principal goal of inventory management involves having to balance the conflicting economics of not wanting to hold too much stock. Thereby having to tie up capital so as to guide against the incurring of costs such as storage, spoilage, pilferage and obsolescence and, the desire to make items or goods available when and where required (quality and quantity wise) so as to avert the cost of not meeting such requirement. Inventory problems of too great or too small quantities on hand can cause business failures. If a manufacturer experiences stock-out of a critical inventory item, production halts could result (Schroeder, 2000). Moreover, a shopper expects the retailer to carry the item wanted. If an item is not stocked when the customer thinks it should be, the retailer loses a customer not only on that item but also on many other items in the future. The conclusion one might draw is that effective inventory management can make a significant contribution to a company's profit as well as increase its return on total assets. It is thus the management of these economics of stockholding, that is appropriately being referred to as inventory management. The reason for greater attention to inventory management is that this figure, for many firms, is the largest item appearing on the asset side of the balance sheet.

Inventory Management is, therefore, the system of recording, forecasting and monitoring stores movement. It also involves the purposeful concentration of responsibility and authority for the control of all activities leading up to the production and eventual shipment of finished materials (Kotler, 2002). The essence of inventory management is to minimize costs invested in stock, protect stock, ensure that there is no improper disbursement of stock, and to ensure accuracy and dependability of accounting and operating information. It is therefore one of the most active elements of business operations in manufacturing industries, and as well a vital concern not only to the management but also to the stock holders who are concerned with any drastic changes that might occur anytime within the industry. Stock comprises of large part of a business capital and a major current asset of most manufacturing companies hence the need to have an effective control over it.

STATEMENT OF THE PROBLEM

Manufacturing companies in recent times are faced with the problem of high cost of production. Significant part of this cost could be traced to the cost of inventories which result from the inability of the management to have an effective control over them. Most manufacturing organizations have always centered on having adequate inventory for their production and hence their survival. Essentially, inventory management, within the context of the foregoing features involves planning and control. The planning aspect involves looking ahead in terms of the determination in advance: What quantity of items to order; and (ii) How often (periodicity) do we order for them to maintain the overall source-store sink coordination in an economically efficient way?

The control aspect, which is often described as stock control involves following the procedure, set up at the planning stage to achieve the above objective. This may include monitoring stock levels periodically or continuously and deciding what to do on the basis of information that is gathered and adequately processed. Effort must be made by the management of any organization to strike an optimum investment in inventory since it costs much money to tie down capital in excess inventory. In recent time, attention was focused on the development of suitable mathematical tools and approaches designed to aid the decision-maker in setting optimum inventory levels. Economic order quantity model (EOQ) has thus been developed to take care of the weaknesses emanating from the traditional methods of inventory control and valuation, which to some extent has proved useful in optimizing resources and thus, minimizing associated cost.

SCOPE AND LIMITATION OF THE STUDY

The scope of the study will be limited to Metal Furniture Nigeria Limited. It is expected that the findings from the sample will be representative of all manufacturing companies in Nigeria. Meanwhile, the time available for the study and the cost in terms of money are limiting factors.

Insurance is needful in everyday today activity. Insurance cuts across all fields of endeavor. It will be disastrous running into a loss and not having insurance policy in place. In a nutshell, insurance gives an individual, businessman or even the government of a nation a great deal of rest of mind because of the insurance policy that is in place. These are some of the below mentioned insurance policies that can be considered by a manufacturing company.

Although insurance needs vary widely from one business to the next, here's a quick checklist of policies you'll want to consider.

1. Business owner coverage. Otherwise known as "catch-all" coverage, business owner insurance provides damage protection from fire and other mishaps. Owner coverage also offers a degree of liability protection.
2. Property insurance. Property insurance covers damage to the building that houses your business, as well to as items inside, such as furniture and inventory.
3. Liability insurance. In our litigation-looped society, this may be as important a form of coverage as you can get. This covers damage to property or injuries suffered by someone else for which you are held responsible. This can take in a range of disasters, from the postal worker who sues you for a dog bite incurred during a delivery to your home business, to the clumsy customer who scorches himself after you make your complimentary coffee just too darn hot.
4. Product liability insurance. You might want this form of coverage if you make a product that could conceivably harm someone else. For instance, catering businesses worried about some dicey-looking truffles or Brie would do well to tack on this coverage.
5. Errors and omissions insurance (Professional liability insurance (PLI), also called professional indemnity insurance (PII) but more commonly known as errors & omissions (E&O) in the US, is a form of liability insurance that helps protect professional advice- and service-providing individuals and companies from bearing the full cost of defending against a negligence claim made by a client, and damages awarded in such a civil lawsuit. The coverage focuses on alleged failure to perform on the part of, financial loss caused by, and error or omission in the service or product sold by the policyholder. These are potential causes for legal action that would not be covered by a more general liability insurance policy which addresses more direct forms of harm. Professional liability coverage sometimes also provides for the defense costs, including when legal action turns out to be groundless. Coverage does not include criminal prosecution, nor a wide range of potential liabilities under civil law that are not enumerated in the policy, but which may be subject to other forms of insurance. Professional liability insurance is required by law in some areas for certain kinds of professional practice (especially medical and legal), and is also sometimes required under contract by other businesses that are the beneficiaries of the advice or service.

This coverage is particularly important to service-based businesses, offering protection should you make a mistake or neglect to do something that causes a customer or client some harm. A good example is doctor's medical malpractice insurance, which practicing physicians are required to carry.

http://en.wikipedia.org/wiki/Professional_liability_insurance

6. Business income insurance. This is disability coverage for your business. This ensures you get paid if you lose income as a result of damage that temporarily shuts down or limits your business.

In view of the above, the study sought to do the following: The **main objective** of the study is to examine the stock management effectiveness in manufacturing Industries in Nigeria. Specifically the study is set to:

1. Outline the means of maintaining enough inventories so that production does not run out of raw materials and supplies.
2. Identify the problems encountered by the management in the process due to inadequate inventory control and suggest solutions to the problems.
3. Identify the available inventory management methods in the company with a view to deciding their effectiveness.
4. Know the importance of having appropriate investment in inventory.

WHAT IS INVENTORY?

Inventory is defined in the International Accounting Standard (IAS) as tangible properties:

- a. Held in the ordinary course of the business
- b. In the process of production for such sale or
- c. To be consumed in the production of goods or services for sale.

The above definition suggests that the existence of an inventory reflects a temporary lull between two activities which are termed the demand and supply processes.

Transaction motive arises from the absence of synchronization of supply with demand of inventory stock. Thus, inventories are maintained to compensate for this lack of synchronization.

The precautionary motive assumes that materials are maintained because demand and supply cannot be predicted with certainty. Thus, buffer stock is maintained under speculative motive, inventories are maintained to overcome speculation in prices. A firm can buy in advance when increase in prices is anticipated, or holds its finished goods at lower price in order to sell at higher price later.

2. THEORETICAL FRAMEWORK

DETERMINISTIC CONTINUOUS-REVIEW MODELS: THE (EOQ) MODEL

The most common inventory situation faced by manufacturers, retailers, and wholesalers is that stock levels are depleted over time and then are replenished by the arrival of a batch of new units. A simple model representing this situation is the following economic order quantity model or, for short, the EOQ model. (It sometimes is also referred to as the *economic lot-size model*.) Undoubtedly, the best-known and most fundamental inventory decision model is the Economic Order Quantity Model. Its origin dated back to the early 1900s. The purpose of using the EOQ model in this research is to find out the particular quantity, which minimize total inventory costs that is the total ordering and carrying costs.

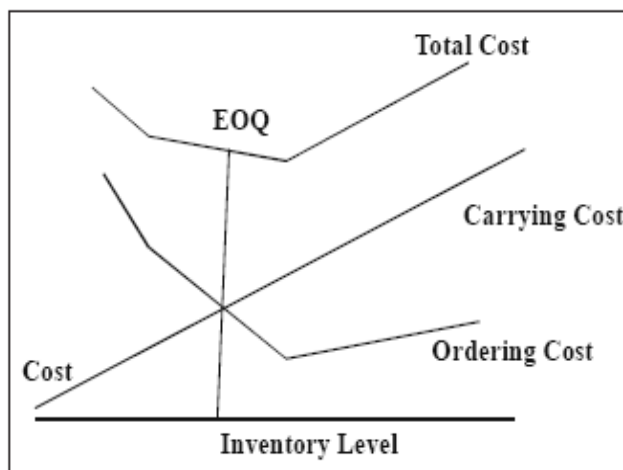


Fig 1.Presentation of EOQ graphically

Source: Lucey T. 1992. Quantitative Techniques. 4th Edition

INFORMATION SHARING AND INVENTORY MANAGEMENT

Information sharing plays an important role in inventory management (Bolton, R.N., Lemon, K.N. and Verhoef, P.C. (2004). This enables chain partners to plan properly, avoid inventory bottlenecks in the chain and avoid safety stocks both for all the channelmembers (Arnold, Maltz& Elliot (2008).Normally, when a buyer needs a product, he places an order to a supplier. With information, chain partners are able to know when and how much to order and what to put in the inventory plan (Eckert (2007). In order to share information, a partnership is formed between the supplier and buyer in which the supplier takes care of the orders and replenishing.To accomplish this, the supplier (retailer or distributor) gets regularly information on the inventory level and sales data of the buyer via the web or Electronic Data Interchange (EDI) (Kampala, Uganda), Thus, when inventory drops below a certain level, orders are generated automatically on behalf of the buyer. In this case, it is the supplier who creates and manages the inventory plan. Continuous replenishment (CR) and vendor managed systems are used to share information that is used to manage inventory levels (Reinikka, R. / Svensson, J. (2001)).According to Keth L, A Muhlemen, J Oakland (1994).with information chain, partners are able to get accurate inventory information. Trying to control inventory with bad information is futile (Taylor, 2000).

A lack of inventory record accuracy clearly reduces chain profits due to lost sales and inventory carrying costs, which may run as high as 10 percent of existing profitsMonks JG 1996. Information sharing enables the chain partners to achieve revenue enhancements. Information sharing through collaborative efforts

enables chain partners focus on co-managed inventory by considering different levels of demand uncertainty which enables them to improve fill rate, increase inventory turnover and enhance sales Eckert (2007). They improve fill rates ensuring that all customer orders are delivered on time. This leads to sales enhancement through repeat purchases and increased number of customers. It also leads to increased responsiveness to market demands, customer service and increases market share. Customer service and responsiveness are increased through increased flexibility. Information sharing enables chain partners to make products or services available to meet individual demand of customers and also making changes in products or services or delivery dates based on the customer's requirement. Market share is increased through chain partners being able to have the best service level compared to competitors. To be competitive, chain partners must compare their service to those of their competitors. Information sharing enables the chain partner to compress lead times, improve faster product to market cycle times, higher flexibility in dealing with supply and demand uncertainties (Arnold, Maltz & Elliot (2008)

3. RESEARCH METHODOLOGY

It must be noted that the validity of any research must solely depend on the validity of the source and type of data, mode of collection and analysis of data obtained. In considering this study, it becomes highly imperative to conduct a research work. The method employed in realizing the aim and objectives of this study are based on information obtained from structured questionnaire and other source of data. For the purpose of this study, survey research method was used. Survey research entails studying a group of people or items known as sample to collect and analyze data which are considered representative of a bigger population. In the course of this research work, a total number of fifty (50) questionnaires were distributed. Twenty five (25) were distributed to Quantity Surveyors and twenty five (25) to building contractors. The major instrument used for data collection for this research work is Questionnaire. Questionnaire is the major instrument used in survey, for any research work. It was employed in the collection of data for this research in order to avoid biased response and to obtain substantial data and information relating to the study from the respondent. The questionnaire was properly drawn to ensure proper coding, interpretation and analysis of the response in relations to the research question. Close ended questionnaire were used which has options. Options provided for the respondents by the research Questionnaire and what respondent has to do is to choose appropriately from the various options. It is simple and straightforward for easy understanding and relevant to the research study.

The data used in carrying out this research work were collected through both primary and secondary source of information and questionnaire. The data is concerned with direct observation of the event and control of research situation including performance and responses to questionnaires from respondents.

4. METHOD OF DATA ANALYSIS

The data gathered will be analysed using statistical tool of regression analysis and chi-square where applicable.

DATA PRESENTATION

SECTION A: BIO DATA OF THE RESPONDENTS

Table 1: Sex Distribution Of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	7	14.9	14.9	14.9
Valid Male	40	85.1	85.1	100.0
Total	47	100.0	100.0	

Source: Field Survey (2013)

The above table reveals that 85.1%(40) of the respondents are males while 14.9%(7) are female respondents.

Table 2: Age Distribution Of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20-29	6	12.8	12.8	12.8
30-39	24	51.1	51.1	63.9
40-49	9	19.1	19.1	83.0
50 and above	8	17.0	17.0	100.0
Total	47	100.0	100.0	

Source: *Field Survey (2013)*

The above table shows that 12.8 percent of the respondents are between age brackets 20-29 while 51.1, 19.1 and 17.0 percent of the respondents are between age bracket 30-39, 40-49 and 50 above respectively.

Table 3: Qualification Distribution of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid BSC/HND	23	48.9	48.9	48.9
M.Sc	18	38.3	38.3	87.2
NCE/ND	4	8.5	8.5	95.7
Ph.D	2	4.3	4.3	100.0
Total	47	100.0	100.0	

Source: *Field Survey (2013)*

The above table shows that 4 of the respondents representing 8.5 percent are ND/NCE holders, 23 respondents representing 48.9 percent are B.Sc/HND holders while 18 respondents representing 38.3 are MSc holders and 2 are Ph.D holder.

Table 4: Department Distribution of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Accounting	7	14.9	14.9	14.9
Administration	6	12.8	12.8	27.7
Production	9	19.1	19.1	46.8
Store	25	53.2	53.2	100.0
Total	47	100.0	100.0	

Source: *Field Survey (2013)*

The analysis in the table 5 shows that 14.9 percent of the respondents are in accounting department, 12.8 percent are administrative department while those in production department and store are 9 and 25 percent respectively.

Table 5:No of Years With The Company

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Three years and above	12	25.5	25.5	25.5
Under one year	10	21.3	21.3	46.8
Under three years	13	27.7	27.7	74.5
Under two years	12	25.5	25.5	100.0
Total	47	100.0	100.0	

Source:Field Survey (2013)

Table 5 reveals that 12 of the respondents have spent 3 years and above in the company. 13 have spent under three years, 12 have spent under two years and 10 have spent under one year.

SECTION B:General Question on theResearch Topic

Table 6:How does your company obtain the raw materials needed for production?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Internal source	14	29.8	29.8	29.8
External source	18	38.3	38.3	68.1
Both internal and external sources	15	31.9	31.9	100.0
Total	47	100.0	100.0	

Source:Field Survey (2013)

It can be seen from the table that the company obtained its raw materials from two sources, External and internal.

Table 7:How often does the company replenish the stock?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Monthly	27	57.4	57.4	57.4
Quarterly	14	29.8	29.8	87.2
Half yearly	6	12.8	12.8	100.0
Total	47	100.0	100.0	

Source:Field Survey (2013)

Table 8:What types of stores records are in operation?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Bin cards	12	25.5	25.5	25.5
Stock Record	5	10.6	10.6	36.2
Cards				
Goods Received	10	21.3	21.3	57.4
Notes				
Computer Application	20	42.6	42.6	100.0
Total	47	100.0	100.0	

Source:Field Survey (2013)

Table 9: Which of the following inventory control techniques is in operation?

	Frequency	Percent	Valid Percent	Cumulative Percent
EOQ	16	34.0	34.0	34.0
Valid Perpetual Inventory	31	66.0	66.0	100.0
Total	47	100.0	100.0	

Source: *Field Survey (2013)*

Table 10: Perpetual inventory the most realistic technique of inventory control

	Frequency	Percent	Valid Percent	Cumulative Percent
Neutral	18	38.3	38.3	38.3
Valid Agreed	8	17.0	17.0	55.3
Strongly Agreed	21	44.7	44.7	100.0
Total	47	100.0	100.0	

Source: *Field Survey (2013)*

The response to the above question as displayed in the table above shows that 21 of the respondents strongly agree, 8 agree and 18 are neutral that Perpetual inventory is the most realistic technique of inventory control as revealed in the literature review.

Table 11: The company undertakes stock-taking and stock checking.

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagreed	4	8.5	8.5	8.5
Valid Neutral	10	21.3	21.3	29.8
Agreed	11	23.4	23.4	53.2
Strongly Agreed	22	46.8	46.8	100.0
Total	47	100.0	100.0	

Source: *Field Survey (2013)*

The response to the above questions as displayed in the table above shows that 22 of the respondents strongly agree, 11 agree, 18 are neutral and 4 of the respondents disagree that The company undertakes stock-taking and stock checking.

Table 12: Which of the following is in operation?

	Frequency	Percent	Valid Percent	Cumulative Percent
Periodic Stock-taking	28	59.6	59.6	59.6
Valid Continuous stock-taking	19	40.4	40.4	100.0
Total	47	100.0	100.0	

Source: *Field Survey (2013)*

Table 13:What method of stock valuation does the company apply?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid FIFO	16	34.0	34.0	34.0
LIFO	17	36.2	36.2	70.2
Weighted Average	7	14.9	14.9	85.1
Other	7	14.9	14.9	100.0
Total	47	100.0	100.0	

Source: Field Survey (2013)

Table 14:The company has experienced stoppage in production before.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Neutral	5	10.6	10.6	10.6
Agreed	15	31.9	31.9	42.6
Strongly Agreed	27	57.4	57.4	100.0
Total	47	100.0	100.0	

Source: Field Survey (2013)

The response to the above question as displayed in the table above shows that 27 of the respondents strongly agree, 15 agree and 5 are neutral that the Company has experienced stoppage in production before.

Table 15:What was the causes of the stoppage?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Non availability of sufficient raw materials	20	42.6	42.6	42.6
Breakdown of production machine	7	14.9	14.9	57.4
Power failure	8	17.0	17.0	74.5
Decline in sales	7	14.9	14.9	89.4
Lack of adequate motivation for production staff	5	10.6	10.6	100.0
Total	47	100.0	100.0	

Source: Field Survey (2013)

Table 16: The stock of raw materials forms a significant proportion of a company's assets?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagreed	7	14.9	14.9	14.9
Neutral	11	23.4	23.4	38.3
Agreed	9	19.1	19.1	57.4
Strongly Agreed	20	42.6	42.6	100.0
Total	47	100.0	100.0	

Source: Field Survey (2013)

The response to the above question as displayed in the table above shows that 20 of the respondents strongly agree, 9 agree, 11 are neutral and 7 of them disagree that the stock of raw materials forms a significant proportion of a company's assets

Table 17: Prudent inventory management is inevitable in manufacturing companies?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagreed	4	8.5	8.5	8.5
Disagreed	7	14.9	14.9	23.4
Neutral	7	14.9	14.9	38.3
Agreed	13	27.7	27.7	66.0
Strongly Agreed	16	34.0	34.0	100.0
Total	47	100.0	100.0	

Source: Field Survey (2013)

The response to the above question as displayed in the table above shows that 16 of the respondents strongly agree, 13 agree, 7 are neutral, 7 of them disagree and 4 strongly disagreed that prudent inventory management is inevitable in manufacturing companies

Table 18: The effective management of stock leads to reduction in stock-taking costs and consequently increases profitability?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagreed	2	4.3	4.3	4.3
Disagreed	4	8.5	8.5	12.8
Neutral	10	21.3	21.3	34.0
Agreed	17	36.2	36.2	70.2
Strongly Agreed	14	29.8	29.8	100.0
Total	47	100.0	100.0	

Source: Field Survey (2013)

The response to the above question as displayed in the table above show that 14 of the respondents strongly agree, 17 agree, 10 are neutral, 4 of them disagree and 2 strongly disagreed that effective management of stock leads to reduction in stock-taking costs and consequently increases profitability

TEST OF HYPOTHESIS

To validate the research topic, the hypothesis are hereby tested as follows;

Hypothesis I

H₀: Effective stock Management does not lead to reduction in stock – holding costs and consequently increases profitability.

H₁: Effective stock Management leads to reduction in stock – holding costs and consequently increases profitability.

Response	O	E	O-E	(O-E) ²	(O-E) ² /E
SD	2	9.4	-7.4	54.76	5.8255
D	4	9.4	-5.4	29.16	3.1021
N	10	9.4	0.6	0.36	0.0382
A	17	9.4	7.6	57.76	6.1447
SA	14	9.4	4.6	21.16	2.2511
					17.6286

$$X^2C = \frac{(O-E)^2}{E} = 17.6286$$

Level of significance = 0.05

Degree of freedom (d.f.) = p(r-1) = 5-1 = 4

Critical value (X^2_T) = 11.071

Decision: Since $X^2_C > X^2_T$ i.e. 17.6286 > 11.071, the null hypothesis (H_0) is therefore rejected and the directional hypothesis (H_1) is accepted.

Conclusion: The statistical test supported the research hypothesis which states that effective stock Management leads to reduction in stock – holding costs and consequently increases profitability.

Hypothesis II

H_0 : There is no significant influence of inventory management on manufacturing output

H_1 : There is a significant influence of inventory management on manufacturing output

Variable	Co-efficient	Standard-error	t-statistics	Sig
Constant	2.314	.154	15.009	.000
Inventory Management	.553	.038	14.528	.000

Source: Output of Regression Analysis (See Appendix)

R = 0.908, $R^2 = 0.824$, Adjusted $R^2 = 0.820$ F-Statistic = 211.077

The estimated equation is thus presented as follows:

Manufacturing Output = 2.314 + 0.553 (Inventory Management)

(0.154)* (0.038)*

(15.009)**(14.528)**

Interpretation and Decision: The above table displays the result of the analysis of the effect of Inventory Management on Manufacturing Output. The analysis reveals that Inventory Management has a positive influence on Manufacturing Output. The result shows that effective Inventory Management account for 82.4% in the variation of manufacturing output, given the value of the R^2 (0.824). With these, it can be concluded that there is a significant influence of inventory management on manufacturing output.

Hypothesis III

H_0 : Stock of raw materials do not form a significant proportion of a company's assets.

H_1 : Stock of raw materials form a significant proportion of a company's assets.

Response	O	E	O-E	(O-E) ²	(O-E) ² /E
D	7	9.4	-2.4	5.76	0.6128
N	11	9.4	1.6	2.56	0.2723
A	9	9.4	-.4	0.16	0.0170
SA	20	9.4	10.6	112.36	11.9531
					12.8552

$$X^2_C = \frac{(O-E)^2}{E} = 12.8552$$

Level of significance = 0.05

Degree of freedom (df.) = p(r-1) = 5-1 = 4

Critical value (X^2_T) = 11.071

Decision: Since $X^2_C > X^2_T$ i.e. 12.8552 > 11.071, the null hypothesis (H_0) is therefore rejected and the directional hypothesis (H_1) is accepted.

Conclusion: The statistical test supported the research hypothesis which states that stock of raw materials form a significant proportion of a company's assets.

SUMMARY OF FINDINGS

This study examines the stock management effectiveness in Manufacturing Industries in Nigeria and also coins in the usage of insurance as a protective device to combat uncertainties in the aforementioned industries. The researcher adopted a simple random sampling technique for the study. The major tool that was employed in the collection of primary data for the study was questionnaire that was designed in such a way that it answered the research questions. The analysis reveals that Inventory Management has a positive influence on Manufacturing Output. The result shows that effective Inventory Management account for 82.4% in the variation of manufacturing output, given the value of the R^2 (0.824). Having analyzed the data and tested the hypothesis, the following are the findings deduced from the study.

1. A reduction in the holding costs lead to proportionate increase in the profitability of a company.
2. Well designed management policies help in maintaining smooth operations with little or no hindrance in any activities.
3. Prudent inventory management is inevitable in manufacturing firms.
4. Continuous inventory control curtails fraud more effectively than an annual stock-taking.
5. Adequate finished goods to meet customers requirement and avoid costs associated with stock-out
6. First-in-First-out (FIFO) method of valuing stocks is the most efficient way of valuing stock especially when it comes to tracing the movement of stock
7. Inventory form a significant proportion of a company's assets

RECOMMENDATIONS

In the light of the analysis, discussion and interpretation of data collected from the field survey of this research, the under-mentioned recommendations are made to metal-furniture Nigeria limited with the hope of boosting their performance. it is also hoped that the recommendations would help in boosting the performance of other firms in the manufacturing industry if adopted.

1. Metal furniture (Nig) Ltd. should team up with other firms in the industry as a common front to present to the federal government the problems inherent in the present exchange regulations as regards the importation of raw materials.
2. Serious consideration should be given to the stores department. in the course of the study, it was discovered that the numbers of staff in stores department is relatively low when compared with the size and division of the department and the hectic exercises involved in stock-keeping.
3. First-in-First-out (FIFO) method of valuation and issuing is recommended in order to prevent the materials from staying more than necessary in the store.
4. Good storage system should be maintained for effective implementation of inventory control techniques.
5. Sufficient stock should be held in order to prevent stock-out.
6. For effective control and avoid manipulations of figures, those in the stores department should not partake in the counting of stock.
7. The company should adopt the technique of economic order quantity(EOQ).this would enable them to know when to order, in what size should the order be, how many times to place orders in a year and how many to hold as safety stock.
8. The management should not deviate from their present system of stock taking viz., continuous checking. It guide against obsolescence, stock-out, pilferage, etc. and it enables the stores officer to know how and when to make purchase requisition.
9. There should be a well defined organizational chat in the stores department to spell out the responsibilities, authorities and lines of reporting.
10. Most of the raw materials used are imported. The total reliance on imported raw materials should not be allowed to continue. Hence there should be a research and development program carried out by the industry for possible import substitution.

CONCLUSION

In any manufacturing company, stock and its effective management are obviously essential. Stocks make up a large proportion of manufacturing companies assets and therefore its effective management should definitely contribute to the effective management of the business.

Nonetheless, the crux of the problem is that the stock control techniques are based on wide range of assumption. Also, for metal furniture (Nig.) Ltd., the crux of the problem includes that of getting sufficient raw materials for production. It is therefore the opinion of this research that if the aforementioned recommendations are properly implemented, they will enhance the advancement of stock and eventual business management in the industry.

APPENDIX (REGRESSION ANALYSIS)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.908 ^a	.824	.820	.291	.824	211.077	1	45	.000

a. Predictors: (Constant), INVENTORY MANAGEMENT

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.888	1	17.888	211.077	.000 ^b
	Residual	3.814	45	.085		
	Total	21.702	46			

a. Dependent Variable: OUTPUT

b. Predictors: (Constant), INVENTORY MANAGEMENT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	2.314	.154		15.009	.000
	INVENTORY MANAGEMENT	.553	.038	.908	14.528	.000

a. Dependent Variable: OUTPUT

REFERENCES

Arnold, Maltz & Elliot (2008). Customer service in the distributor channel empirical findings *Journal of Business Logistics*

Bolton, R.N., Lemon, K.N. and Verhoef, P.C. (2004), "The theoretical underpinnings of customer asset management: a framework and propositions for future research", *Journal of Academy of Marketing Science*, 32, 3, 271-92

Dervitsiotis KN 1981. *Operations Management. USA: McGraw-Hill series in Industrial Engineering and Management Science.*

Eckert (2007). Inventory management and its effects on Customer satisfaction *Journal of Business and Public*

Lucey T. 1992. *Quantitative Techniques. 4th Edition*

Kampala, Uganda: Faculty of Computing and Management Science, Makerere University.

Keth L, A Muhlemen, J Oakland 1994. *Production and Operations Management. London: Pitman Publisher.*

Kotler P 2002. Marketing Management. 2nd Edition. The Millennium Edition. New Delhi: Prentice Hall of India.

Lucey T 1992. Quantitative Techniques. 4th Edition. London: Ashford Colour Press.

Monks JG 1996. *Operations Management*. Schaum's Outline of Theory and Problems. 2nd Edition. USA: McGraw Hill Companies Inc.

Pandy I.M; 1981. Financial Management; Vichas Publishing House PUT Ltd.: India, 1981 Pg. 396

Reinikka, R. / Svensson, J. (2001). Confronting Competition: Investment, Profit and Risk

Schroeder RG 2000. Operations Management- Contemporary Concepts and Cases. USA: International Edition.

Taylor.D (2000). Demand amplification: has it got us beat? International Journal of Physical Distribution & Logistics Management, 30, 6, 2000, 515-533.

Whybark, C. D and William, J. G. 1986. Materials Requirements Planning Under Certainty. Decision Science, 7(1): 595 – 606.

http://en.wikipedia.org/wiki/Professional_liability_insurance.