A CASE STUDY ON CONNECTION BETWEEN INVENTORY MANAGEMENT AND COMPANY PERFORMANCES

International Journal of Information Technology and Management

Vol. X, Issue No. XVI, August-2016, ISSN 2249-4510

AN INTERNATIONALLY INDEXED PEER REVIEWED & REFEREED JOURNAL

International Journal of Information Technology and Management
Vol. X, Issue No. XVI, August-2016, ISSN 2249-4510

A Case Study on Connection between Inventory Management and Company Performances

Devendra Kumar Pandey*

Professor, Saudi Electronic University, Riyadh, KSA

Abstract – This paper reports the discoveries of a connected research on inventory management at a textile chain store in India. It particularly analyzed the connection between inventory management and company's performance. Meetings with the organization management were led to distinguish the inventory management issues and framework utilized by the organization. The connection between the inventory management and company performance was resolved in view of inventory days and return on asset (ROA) examination. The examination found that organization X had a couple of inventory issues, for example, disorderly inventory course of action, vast measure of inventory days/no cycle checking and no precise records funds to be paid to untalented laborers. The examination additionally demonstrated that there was a noteworthy connection between return on asset (ROA) and inventory days.

Keywords:— Inventory Management, Performance, Company.

- - - - - - - - - - - - - - X - - - - - - - - - - - - - -

INTRODUCTION

Inventory management assumes a vital part in each organization as any insufficient inventory framework will bring about loss of clients and deals. A compelling inventory management can create more deals for the organization which straightforwardly influences the performance of the organization. Consequently it requires an efficient inventory management which is overseen by a collection of representatives who are specialists here.

Most investigations in the assembling division focus on the western organizations as the awareness about deliberate inventory management exist in the west. Accordingly this examination endeavors to extend the geological extension by looking at a textile chain store in India.

There are two issues that underlie this examination. The first emerged when the stakeholders raised the issue of wasteful inventory management that prompt the organization misfortunes as detailed in The Star On the web, that Organization X's Overseeing Executive, Mr. Y presently feels uncertain about his situation in the organization after an endeavor by two investors to expel him from the organization. The explanation behind the two investors needed to remove Mr. Y as Overseeing Executive was on account of they were miserable with the way inventories and inventories were taken care of by organization X (Khoo, 2013).

The second issue in view of the ratio of inventory turnover, which demonstrates that organization X having a low turnover of 1.26 beginning in the years 2011 as contrasted in 2013 and 1.28. Besides, having a low turnover shows that the organization is encountering wasteful performance since there are an excessive number of inventories left in a distribution center or capacity.

To see advance illumination as far as the issues tended to, specialists had directed an examination with an intend to answer what is the issue with Organization X's inventory management, what is the inventory framework utilized what is the connection between inventory days and return for asset and what is the best arrangement and proposal should Organization X apply to enhance their inventory management?

OBJECTIVES OF THE INVESTIGATION

The general aim of this examination is to analyze the inventory management issues and look for the best proposal to be drilled by organization X to enhance their inventory management by testing the connection between inventory days and return for asset (ROA). Subsequently, this examination particularly endeavored to address the accompanying aims:

1. To investigate the issue in inventory management at organization X.

2. To recognize the framework utilized by organization X in dealing with their inventory management.

3. To look at the connection between inventory days and return on asset (ROA) of organization X.

Scope of the Examination

The extension was centered on the inventory management issues, framework utilized, connection between inventory management and performance of organization X India.

Significance of the Investigation

Hypothetically, this investigation will add to the inventory management writing. For all intents and purposes, it will likewise give helpful data to the organization X and in addition the specialist to rehearse a similar suggestion keeping in mind the end aim to enhance their inventory management.

LITERATURE SURVEY

The reason for this exploration is to contemplate the best strategy for inventory management keeping in mind the end aim to prescribe this to organization X, where they can rehearse this to have a superior management and control their misfortunes and benefit. Keeping in mind the end aim to make the exploration more organized, the scientists talked about four sorts of writing audits.

A. Inventory Management

Each organization has their own particular inventory where every one of the organization deals with the inventory by different methods for overseeing. Be that as it may, the motivation behind the inventory is, where the inventory should constantly prepared to be utilized and the inventory cost must be low. Inventory management alludes to every one of the exercises associated with creating and dealing with the inventory levels either the inventory is crude textiles, semi-completed textile or completed great, so the satisfactory supplies must be constantly accessible and the frame must ensure the cost of over or under inventorys are constantly low (Kotler, 2002). The part of inventory management is to keep up a coveted inventory level for each particular item or things, where the frameworks that arrangement and control inventory must be founded on the item, client, and the procedure for item that accessible in the inventory (Toomey, 2000). Besides, in light of the significance of inventory on the accounting report of organizations, inventory is a benefit on the monetary record of organizations where has taken an expanded fundamentally due to numerous organizations play a few procedures by decreasing their interest in settled assets, plants, distribution centers, places of business, gear and hardware (Coyle, et. al., 2003).

B. Connection between Inventory Management and Company Performances

Organization performance relies upon numerous factors; either relies upon deals, advertising, great human asset, less creation cost, either achievement inventory (Bourne and Walker, 2005). For this examination, it centers around one of the factors which is inventory management. Inventory management is a significant piece of a firm since botch of inventory undermines an association's suitability, for example, a lot of inventory expends physical space, makes monetary weight, and builds the likelihood of harm, deterioration and misfortune (Lwiki, et. al., 2013). To accomplish great organization performance, the organization must ready to make the most astounding benefit at the least cost.

C. Inventories Days

Inventories Days can be characterized as to gauge how long by and large it takes for the inventory to turnover (Sahari, et. al., 2015), which implies to what extent the organization or firms takes keeping in mind the end aim to make the following requesting inventory. The most astounding number of inventory days may acquire in view of overload in the inventory and having a high measure of inventory for extensive stretches of time isn't useful for business as a result of inventory storage, out of date quality, and expiry, deterioration costs and without a doubt more business disappointments can be caused by an overloaded or under loaded condition than some other factor (Shafi, 2014).

D. Return on Asset (ROA)

From a diary composed by (Kabajeh, et. al., 2015), said return on assets is a ratio that figured as net benefit after assessment isolated by the aggregate assets and this ratio measure for the working effectiveness for the organization in light of the association's created benefits from its aggregate assets. The examination utilized ROA on the grounds that benefit turnover is another factor for beating the weights on productivity because of rivalry or client interest for bring down cost (Ghose, 2015). Where is the ROA rate is a gauge that can be utilized to quantify the benefit commitment required for new hypothesis, all things considered, it distinguishes the rate of return required at any rate to keep up current performance bone-dry can be utilized to set up an obstacle rates all new venture must meet for endorsement expressed (Lindo, 2011).

RESEARCH METHODOLOGY

Research design

Both qualitative and quantitative were conveyed to address the examination targets. The qualitative research was directed to comprehend the issue in inventory management by leading an organized meeting with Organization X and for the quantitative research configuration expected to measure the data and specialists ascertain ratio examination which is the data got from yearly report.

Data collection sources

With the end aim of this investigation, the analysts utilized both essential and auxiliary data to finish this examination as required for both qualitative and quantitative techniques has been utilized which data was gotten from organized meeting as essential sources and optional sources, for example, yearly report, diary, article and course reading.

Data Collection Strategies

In this investigation, the scientists acquire the data from talking the respondent on the issues of premium and archived data from yearly report had been utilized to compute ratio examination. Results from ratio examination at that point will regress utilizing E-see 7.0 to test the connection between two variable of this exploration.

Unit of analysis

The unit of analysis in this examination is the inventory management framework led in organization X The data around a inventory management framework in organization X acquired from organization X's illustrative in light of the fact that it includes the discourse amongst agent and scientists.

Limitation

There were a few Limitations that the specialist looked in finishing this investigation, for example, data exactness where there was sure territory where the data was viewed as private and classified, absence of earlier reference sources and absence of aptitude and encounters.

Variable and Measurement

The reasonable system of this examination comprises of inventory management as the autonomous variable and company X performance as reliant variable. As proposed from past research, inventory management can be estimated by inventory days and performance of the organization can be estimated as the arrival of the benefit (ROA) (Gun, 2011).

RESEARCH HYPOTHESIS

The literature indicates that there is positive connection amongst inventory management and performance (Eroglu and Hofer, 2011). Along these lines, in light of this past research, the specialists expect that there is a connection between inventory management in organization X and performance. Along these lines, that is conjectured that: Theory 1

H0: There is no relationship between inventory management and performance of organization X.

H1: There is a relationship between inventory management and performance of organization X.

DATA ANALYSIS

For qualitative data, the analysts condensed some featured focuses to answer the aims of the examination. For quantitative research, data has been examined utilizing factual data, for example, ratio examination of data that acquired from money related explanation in five years beginning from year 2011 until the point that 2015 to find in clear picture how inventories management influence the organization performance. After data were gotten from ratio investigation, the specialists at that point relapsed the relationship to break down elucidating insights, and connection coefficient so as to test the legitimacy and unwavering quality of the data for this examination. This model of investigation was planned to inspect the impacts of free factors on subordinate factors. Every one of the data gathered were broke down utilizing E-Perspectives 7.0 for windows.

FINDINGS

1. To investigate the issues in inventory management at organization X

The Fishbone Graph as appeared in Fig. I beneath portrays the discoveries of target one.

The primary issue distinguished was indistinct request estimate, where organization X can't conjecture the correct interest for their up and coming season and make organization X looking with sub-cause issue like surplus inventory and furthermore lack inventory. This surplus inventory and lack inventory make organization X neglected to meet the market necessity amid the opportune time with the correct amount of inventory. The specialists accept if organization X figure out how to meet the market prerequisite consummately by knowing the request gauge of the market, organization X ready to make more benefit since organization X can satisfy the client's request.

The second factor that caused insufficient inventory management was the scattered inventory. scattered inventory that the scientists discover was organization Xhas no particular class of inventory, where organization X just made their inventory as one component of business. The sub-reason for the scattered inventory was sloppy inventory, where organization X left the inventory as what organization X got from providers.

The second sub-cause was no cycle tallying where organization X has no particular cycle checking where it can help organization X to distinguish the particular cycle inventory for them. The third sub-cause was no precise records adjust, where the specialists trust the data of records inventory adjust will help organization X to discover the following of inventory development in the business. The analysts accept, if organization X sorted the inventory, organization X can improve plans for their business development.

2. To recognize the framework utilized by organization Xin dealing with their inventory management The meetings uncovered that the organization X utilized Retail POs (Retail Purpose of-offers) inventory framework that organization X purchased from Organization ABC. The organization's illustrative shared their full report of inventory management framework with the analysts. Retail POs framework enables clients to make, adjust, see and erase the inventory and thing in one report.

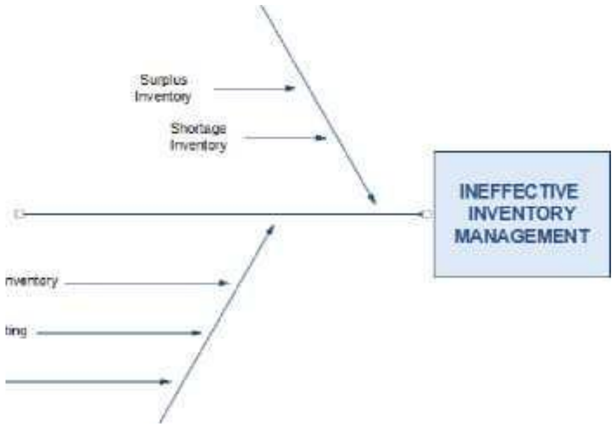
Retail POs framework additionally gives completely utilitarian of dealing with the inventories. One of the Retail POs capacities is inventory ace. Inventory Ace enabled the client to embed changes, and erase to embed the new inventory. Inventory Ace has plausibility of data excess, particularly when they have to embed a considerable measure of data in one time. As specified by organization X's illustrative, revolution of specialists influenced their inventory management framework in light of the fact that there is an absence of expert laborers to deal with Retail PoS because of incessant pivot of specialists.

Quantitative Outcome

3. To Inspect The Connection Between Inventory Days and Return For Asset (ROA) of Organization X.

Inventory days indicate how long by and large it takes for the inventory to turnover. It demonstrates how long the organization takes to supplant the new request. In the interim, ROA Measures Organization's performance which is a bookkeeping based measure. It can gauge an association's performance change in inventory turnover as an Measurement for inventory management towards return on assets (ROA). The investigation (Gun, 2011), demonstrates that when the impacts of time were considered turnover change all things considered held a somewhat negative on ROA. The quantitative outcomes were estimated by ratio examination, enlightening measurement, connection investigation and hypothesis testing.

CAUSES OF INEFFECTIVE INVENTORY MANAGEMENT UNCLEAR DEMAND FORECAST



SCATTERED INVENTORY

Figure 1. Fishbone diagram

Ratio Examination

Table I demonstrates the consequence of Measurement of inventory turnover and inventory days from2011 to 2015.

Table I. Inventory Days and Return on Asset (ROA)

	2011	2012	2013	2014	2015
Return on Assets (ROA), %	2.9	6.67	4.62	4.93	5.07
Inventory Days, Days	299	292	283	289	319

Table I demonstrates that organization X has poor inventory management. The inventory days began to increment in 2013 until 2015, which the esteem began to increment from 283 days to 319 days. This implies organization X has moderate inventory movement in term of supplanting new request where it took just about multiyear to meet their next inventory request point. For a textile organization this could be shown that past season form was still in the inventory which typically expands the holding cost.

Table I demonstrates that organization X performance isn't reliable. The outcome demonstrated that Arrival on Asset (ROA) was diminishing in 2013 from 6.67% to 4.621% yet marginally expanded in 2014. In 2011 until 2015 the productivity ratio of the organization had enhanced, however in little rates. Implying that the organization had produce benefit yet in a little sum as looked at in

2012 where organization X figured out how to create benefit up to 6.67%.

Descriptive Measurement

Expressive measurements table as appeared in Table II is gotten from E-see 7.0 which is to decide the base and most extreme days (Segment ID) organization X takes to supplant new request, while segment ROA is to decide least misfortunes and greatest benefit that organization X will pick up if keep up the present example of supplanting request days.

Table II Descriptive Statistic; connection between Return on Asset and Inventory Days

	ID	ROA
Average	296.5306	4.8395
Std deviation	13.9133	1.3451
Minimum	283.118	-2.9
Maximum	319.154	6.67

In view of the Measurement of how inventory days been ascertained, the outcomes can be outlined as it will take least 283 days and most extreme 319 days for organization X to supplant new request. The outcome likewise expressed that the base misfortunes that the organization X will get if organization X still keep up the example of supplanting long periods of inventory is 2.9% and the greatest benefit that organization X may pick up is 6.67% yearly. It implies that if organization X as yet honing the long inventory days for supplanting the new inventory, organization X just can increase most extreme benefit of 6.67% and not more than that. In the event that organization X needs to accomplish over 6.67%, benefit, organization X must change the cycle of inventory days shorter than 283.118 days every year.

Correlation Examination

This relationship investigation as appeared in Table III uncovered reliable outcome as past research, for example (Gun, 2011) and different examinations which found that inventory turnover ratio was negative associated with net edge (Kolias, et. al., 2011). In light of econometric, examination led on the example budgetary data for the Greek retail firm for the time of 2005-2010 (Kolias, et. al., 2011). They found a negative connection between net edge and inventory turnover.

TABLE III. Connection Investigation; Connection between Return for Asset (ROA) and Inventory Days

ROA		
	Correlation Coefficient	Sig (2-tail)
ID	-0.0787	0.00

[1]Notes: Correlation is significant at Alpha level 0.05*

From the outcomes acquired, it demonstrated that there was a connection between inventory days and return for asset (ROA) in organization X. This outcome underpins the Clear table as appeared in Table II which implies that if the organization X still keep up the example of dealing with the inventory, the most extreme benefit that organization X may get just 6.67% yearly. Result appeared, inventory days and return for asset in organization X were steady with past research. The lower the quantity of days the inventory is held in a firm before its turnover, the better the performance of the firm (Sahari, et. al., 2015).

Hypothesis testing

This area will talk about the testing of the hypothesis result utilizing the relapse condition display. Hypothesis testing used to inspect two factors in this examination. Table IV indicated basic direct relapse at 5%Alpha level.

TABLE IV. Simple Linear Regression Table: Connection between Return for Asset and Inventory Days

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.098235	16.51448	0.429819	0.6963
I0.6963D	-0.07617 1	0.055643	-0.136895	0.0358

[1]Notes: Correlation is significant at Alpha level 0.05

H0: There is no connection between return on asset (ROA) and inventory long periods of organization X.

H1:There is connection between return on asset (ROA) furthermore, inventory long stretches of organization X.

The investigation demonstrates that there is relationship negative critical connection between return on asset (ROA) and inventory days. It demonstrates that 1% increments in inventory days will diminish the arrival on asset by 0.0761%.This is predictable with the past examination expressed (Sahari, et. al., 2015) which expressed that effective inventory management, it would be normal that the quantity of inventory days will be bring down where it will expand firm performance. This likewise demonstrates inventory management just give minor effect to organization performance and company X ought to consider different components.

CONCLUSION AND FUTURE WORK

For the initial two research targets there are a couple of minor issues influenced the incapable inventory management at Organization X that are disorderly inventory, no exact record adjust and there is no cycle of re-tallying. The third research objective appears to help claim made by the organization X's investors which expressed that Organization X had inventory issue that prompt close down a few branches. The ratio investigation demonstrated that the organization turnover result indicates Organization X took longer period to meet their next turn over for the inventory.

The hypothesis testing neglected to acknowledge Ho which implies that there is a connection between the inventory management and their performance. The outcome is reliable with the past examination (Gun, 2011), who expressed that inventory turnover ratio and inventory days are negative relationship with net edge (Gun, 2011). This is critical for any organization to accomplish bring down inventory days since it demonstrated that the organization does not have high holding cost for taking care of inventory and it brings the meaning of continuous re-inventory mirroring a decent in item deals. For the textile business, if the inventory days take longer, it demonstrates that the organization holds an obsolete mold.

A. Recommendations for Organization X and Future Exploration

In the wake of leading some examination and perception on the ebb and flow thinks about, the specialists give a few proposals to Organization X and in addition for future research. The Organization X is prescribed to

1) Enhance request forecasting

This will help Organization X to evaluate request, for example, utilizing deals drive composite. It is a determining strategy which in light of businessperson's appraisals of expected deals. The data assembled through this technique can be utilized by the management to conjecture request utilizing Jury Official Feeling strategy.

2) Enhance scattered inventory

Organization X is prescribed to characterize the inventory in light of cost which gives Organization X which item gives high benefit. So the inventory is recommended to be isolated into high, medium and low cost before it can be revamp in light of office, brand, inventory and classification.

3) Inventory cycle tallying

The Organization X additionally is proposed to enhance cycle checking where a little subset of inventory, in a particular area, is relied on a predefined day. So the organization needs to record the inventory by gifted specialist.

B. For Future Exploration

1) Incorporate more samples

The researchers propose to incorporate more examples in future research since one sample won't not mirror the real issue of the organization. It likewise creates better measurable investigation comes about particularly testing connections between inventory management and company performance.

CONCLUSION

The specialists trust that if the proposals are connected by the organization Xit ought to have the capacity to enhance the inventory management practice and prompt better performance as far as benefits, lessening inventory cost and amplify usage of assets.

REFERENCES

A. R. Gun (2011). "Inventory change and monetary performance," Global Diary of Creation Economies, vol. 115, pp. 581-593.

C. Eroglu and C. Hofer (2011). "Lean, less fatty, excessively lean: The inventory performance connect returned to," Diary of Tasks Management, vol. 29, pp. 356-369.

D. Ghose (2015). Expanding Return for Asset through in Sourcing Strategic.

D. K. Lindo (2011). "Asset management is your activity in super vision," vol. 69, no. 1, pp. 14-18.

D. Khoo (2013, June 27). Kamdar MD says he feels 'secure' about position. The Star. [Online]. Accessible: http://www.thestar.com.my/Business/Business- News/2013/06/27/Kamdar-MD-says-he-feels-secure-in regards to position/

G. D. Kolias., S. P. Dimelis, and V. P. Filios (2011). "An exact examination of inventory turnover conduct in the Greek retail area: 2000-2005," Global Diary of Generation Financial, vol. 133, no. 1, pp. 143-153.

J. J. Coyle, E. J. Bardi, and C. J. Langley Jr (2003). The Management of Business

Coordinations. A Supply Shain Point of view, seventh ed. South¬Western Canada.

J. W. Toomey (2000). Inventory Management: Standards, Ideas and Methods, The Netherlands: Kluwer Scholarly distributer.

L. Bourne and D. H. T. Walker (2005). "Picturing and mapping partner impact," Diary of Management Choice, vol. 43, no. 5, pp. 649-660.

M. A. Majid Kabajeh, S. M. A. Al-Nu'aimat, and F. N. Dahmash (2015). "The connection between the ROA, ROE, and return on initial capital investment ratio with Jordanian protection open organizations piece of the pie costs," Universal Diaries of Humanities and Sociology, vol. 2, no. 11, pp. 115-120.

M. Shafi (2014). "Management of inventories in textile industry: A cross-country investigate survey," Singaporean Diary of Business Economies and Management Studies, vol. 2, no. 7.

P. Kotler (2002). Advertising Management: The Thousand years Release, second ed. New Delhi: Prentice Slope of India.

S. Sahari, M. Tinggi, and N. Kadri (2015). "Inventory management in India development firms: Effect of performance," Diary of Management, vol. 2, no. 1.

T. Lwiki, P. B. Ojera, N. G. Muginda, and V. K Wachira (2013). "The effect of inventory management hones on money related performance of sugar manufacturing firms in Kenya," Global Diaries of Business, Humanities and Innovation, vol. 3, no. 5, pp. 75-85.

Corresponding Author

Devendra Kumar Pandey*

Professor, Saudi Electronic University, Riyadh, KSA

E-Mail – **devkp60@rediffmail.com**