Global Journals LATEX JournalKaleidoscopeTM

Artificial Intelligence formulated this projection for compatibility purposes from the original article published at Global Journals. However, this technology is currently in beta. Therefore, kindly ignore odd layouts, missed formulae, text, tables, or figures.

CrossRef DOI of original article:

The Impact of Inconsistent Tracking on Inventory Management Case Study Societe Buns -Cameroon

Dr. Eyong Ako¹

¹ University of Bamenda

Received: 1 January 1970 Accepted: 1 January 1970 Published: 1 January 1970

Abstract

23

25

26

27

28 29

30 31

32

33

34

35

36

37

38

8 As a result of a rapid increase in inventory management and the time required to manage

inventory management, many organizations have resulted to the tracking of inventory. Due to

this, there should be some means of accurately tracking inventory. Due to this, there should

be some means of accurately tracking inventory in order to ease the management of inventory.

Some of the most useful methods of tracking inventory are barcodes where every item carries a

label that gives information on the items, stock books and the Kanban system. It is against

this background that the main endeavour of this project is to investigate if inconsistent

tracking has an impact of inventory management with specific objective being to find out the

impact of documentation on inventory management. From these objectives the following

questions were asked; what impact does inconsistent tracking have on inventory management.

18 The theories adapted to back this work were; The Just In Time theory by Taiichi Ohno

19 (1984), The Wilson?s Model for Inventory Management by R.H Wilson (1934) and the Theory

of Constraints by Dr Eliyah Goldrath (1984). The methods of data collection included

21 primary and secondary sources. Conclusions were drawn from the data collected and

recommendations were made such as making proper use of the available tracking software.

Index terms—inconsistent, tracking, inventory and inventory management.

1 I. Introduction

he lifeblood of any business is getting your products to your customers on time. And according to (Abby J. 2022), staying on top of your inventory and controlling it effectively and efficiently helps you meet demand and satisfy customers. Inventory control is a daunting task. The process and results impact every aspect of your business.

According to (L. Tundura al. 2016), Inventory control is one of the essential management areas in organizations because it plays an internal role in the organizations such as facilitation of continuous production, smoothening of operations and enhancement of customer service. Inventory control is an integral aspect of the inventory management process (Abby J. 2020). It is the daily routine of managing stock within the warehouse. Inventory control activities include receiving, storing and transferring stock, as well as tracking and fulfilling orders and returns. FIFO (First in, First out) -The oldest inventory is used first to fulfill customer orders. LIFO (Last in, First out) -The inventory received most recently is used to fulfill customer orders. FEFO (First expiring, First out) -The inventory closest to its expiration date is used to fulfill customer orders.

2 b) Statement Problem

Inventory tracking is very vital in most organizations as it helps in enhancing business operations. Tracking and traceability should be easily done but that is not always the case. Taking SOCIETE BUNS as case study, some project directors are adamant to change and do not follow the company's stated procedures for inventory

management making tracking difficult. Also, the fact that most store keepers do not send all documents used at the sites back to the central store keeper makes inventory recording and tracking difficult. Base on the above challenges, the main reasons for carrying out this research was to investigate the impact of inconsistent tracking on inventory control and specifically we have-To find the impact of documentation on Inventory Management. ? To investigate if inventory tracking software's have an impact on inventory management. ? To find out if coding has an impact on inventory management.

II. Literature Review a) Theoretical Review Theories are assumptions formulated to better explain concepts. In the context of Inventory Management, we shall be expatiating on the theories mentioned in chapter one of this work.

b) The Just in Time Theory by Taiichi ??hno (1984) Just in Time (JIT) is a Japanese management philosophy which has been applied in practice since the early 1970's in many Japanese manufacturing organisations. It was first developed and perfected within the TOYOTA manufacturing plants by Taiichi Ohno as a means of meeting customer demand with minimum delays.

The JIT method is an inventory strategy where materials are only ordered and received as they are needed in the production process. The goal of this method is to reduce costs by saving money on overhead inventory expenses. This allows the auto company to save on storing inventory and reduce waste. A JIT strategy eliminates overproduction, which happens when the supply of an item in the market exceeds demand and leads to an accumulation of unsalable inventories. These unsalable products turn into inventory dead stock, which increases waste and consumes inventory space.

3 c) The Wilsons Model for Inventory Management by Rh

Wilson ??1934) The Wilsons Model also known as the EOQ (Economic Order Quantity) system is a very widely used stock management model to reduce inventory costs in a warehouse. It is one of the simplest stock management models to implement which is why it is so widely used. It focuses on calculating the appropriate quantity of each product or raw material order of a company to reduce its inventory costs to a minimum.

This model became popular in 1934 with the publication of an article by R.H. Wilson, after whom the model is named, but it was developed originally by the engineer Ford Whitman Harris when he worked in the company Westinghouse corporation.

The model was created with the clear objective of systematising the goods that are periodically held in the warehouse and defining the quantity and date on which orders must be placed with suppliers. Although this system is commonly used to systematise the purchase of raw materials, it is applicable to optimising the purchase of any product required by the company provided purchasing costs can be determined in order and storage terms.

The method is simple and based on a formula that helps to determine when and in what quantity company orders must be placed, taking into account demand and the company minimum safety stock is.

In order to develop this model, some basic assumptions were made which are as seen below? It is based on the assumption that the company's demand is known and independent and without major fluctuations during the year, so it is therefore constant. ? The unit cost of each product or purchase must also fulfil these conditions, being known and fixed throughout the year. It is not valid therefore for seasonal products. ? Storage costs are also known and depend on the level of stock. ? Potential purchase or order volume discounts are not considered. ? The supplier's supply and loading times are also considered constant and are known.

? It is assumed that there is no stock depletion and that at any time any product quantity can be requested from the supplier.

4 d) The Theory of Constraints by Dr Eliyah Goldratt (1984)

The Theory of Constraints (TOC) first surfaced in 1984, in a book written by Dr Eliyah Goldratt. In "The Goal" that is geared to help organizations achieve their goals. This theory geared towards eradicating bottlenecks and other issues clogging up the supply chain, can be a major boon for lean manufacturing efforts. Like so many other theories, strategies and practices, the TOC is intended to improve manufacturing processes so production can flow more smoothly and result in better efficiency. But before you can employ it in your factory you will need to know what TOC is and its benefits and the issues it can reduce and prevent.

i. What is the Theory of Constraints?

The TOC is an organizational change method that is focused on profit improvement. The essential concept of the TOC is that every organization must have at least one constraint. A constraint is any factor that limits the organization from getting more of whatever it strives for, which is usually profit. The goal focuses on constraints as bottle-neck processes in a job-shop manufacturing organization. However, many nonmanufacturing constraints exists, such as market demand, or a sales department's ability to translate market demand into orders.

The theory of constraints defines a set of tools that change agents can use to manage constraints, thereby increasing profits. Most businesses can be viewed as a linked set of processes that transform inputs into saleable outputs. TOC conceptually models this system as a chain and advocates the familiar adage that a chain is only as strong as its weakest link, Goldratt defines a five-step process that a change agent that a change agent can use to strengthen the weakest link. The five steps of the Theory of constraints include: ? Identify the system constraint

The part of the system that constitutes its weakest link can be either physical or a policy. ? Decide how to exploit the constraint Goldratt instructs the change agent to obtain as much as capability as possible from a constraining component, without undergoing expensive changes or upgrades.

An example is to reduce or eliminate the down time of bottleneck operations. ? Subordinate everything else. The non-constraint components of the system must be adjusted to a "setting" that will enable the constraint to operate maximum effectiveness. Once this has been done, the overall system is evaluated to determine if the constraint has been eliminated, the change agent jumps to step five.

5 ? Elevate the constraint

Elevating the constraint refers to taking whatever action is necessary to eliminate the constraint. This step is only considered if steps two and three have not been successful. Major changes to the existing system are considered at this step. ? Return to step one, but beware of "inertia" Finished goods are items that are ready to sell.

113 6 ? Maintenance, Repair and Operations (MRO) Goods

114 MRO is inventory often in the form of supplies that supports making a product or the maintenance of a business.

7 ii. The Relationship Between Inventory Tracking and Inventory Management

Inventory tracking as the name suggests refers to the tracking of stock levels throughout a business' operations. These are continually influx as customers make purchases and new stocks are brought in, whether to replace items that have been sold to those customers or in anticipation of changing demand patterns (as in the run up for Christmas, for example).

Inventory Management is the process of ordering, storing and using a company's inventory. This includes the management of raw materials, components and finished products, as well as warehousing and processing such items.

Inventory tracking has a direct relationship with inventory management because proper and consistent inventory tracking results to better inventory management which goes a long way to reduce cost, promote accountability and for better decision making.

8 Review by Objectives

There are some objectives which will be analyzed in the paragraphs below Inventory tracking as the name suggests refers to the tracking of stock levels throughout a business' operations. These are continually influx as customers make purchases and new stocks are brought in, whether to replace items that have been sold to those customers or in anticipation of changing demand patterns (as in the run up for Christmas, for example).

Tracking has a significant impact on inventory management as accurate inventory tracking allows brands to fulfill orders on time and accurately. It also permits warehouse managers to know exactly where goods are found at a given point in time in the supply chain.

Inconsistent tracking makes inventory management more complex and accountability very difficult.

Here the researcher finds out the various impacts inconsistent tracking has on inventory management with the case of Société BUNS SA.

This situation of inconsistent tracking comes from the fact that most store keepers at the various sites do not send the various documents necessary for tracking at the appropriate time. They do not send their bon de receptions and bordereaux de livraisons back to the store keeper at the head quarter for tracking and accountability. It is also due to the fact that most Project directors at the various project sites do not respect of the Company's inventory procedures. Some even mishandle the company's.

9 iv. The Impact of Documentation on Inventory

Management Documents are a very vital part of Inventory Management. These documents are used for actions and transactions related to inventory items, whether the transactions affect the quantity of the stock or the value thereof (transit, Internal transit, consumption, composition, production, destruction, shortage, surplus.

Documentation is a very sensitive part of inventory management and needs to be seriously looks upon by BUNS. Documentation influences inventory Management in the company positively when all the necessary documents needed to control inventory are available. It facilitates the central storekeeper's work. But with Société BUNS, the central storekeeper doesn't have all the documents needed to record and keep track of inventory making it difficult to manage inventory from the various construction sites. This goes a long way in influencing inventory management negatively.

13 III. DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS A) PRESENTATION AND ANALYSIS OF DATA

v. The effects of Inventory Tracking software's on Inventory Management

Inventory tracking software have a significant impact on inventory Management. With Inventory tracking software inventory management is carried out easily.

With the Case of Société BUNS, software is not used for all their inventory operations even though they have a common software in all sites and at the base to record the flow of material. It is therefore very difficult for the central storekeeper to easily predict the number of materials which have been received at a given site and the quantity of goods which have left one site for another. This makes inventory recording and accountability difficult.

11 vi. The effects of coding on Inventory Management

The objective of coding is to identify goods in a unique way (there can't be two products with the same code. Coding has significant effects on inventory management as seen in the case of Société Buns SA.

The company has a practice of creating codes for every new item or equipment purchased by the company and are placed as tickets on the equipment such as computers, photocopying machines and other machines used at the various sides. Some Project directors and storekeepers at the construction site do not follow this inventory procedure. When new company items are purchased at the sites, some of them are not given codes and tickets making tracking and traceability difficult for those items. At the end of the construction projects, some workers throw some of the company materials and equipment's with the codes making traceability difficult.

12 e) Methodology

153

154

155

156

157

158

159

160

162

163

164

165

166

167

168

169

170

171

174

175

176

177

178

179

180 181

182 183

184 185

186

187

188

189

190

191 192

195

196

197

198

199

200

201 202

203

204

205

206 207

208

209

210

The research design used in the course of this study at Société BUNS was the non-experimental design through the use of questionnaires and interview. The sources of data collection are divided into the primary and secondary sources of data collection. The researcher used the descriptive analysis where in, tables and charts will be used in order to have the various percentages upon which conclusions will be made with respect to the research.

13 III. Data Presentation, Analysis and Interpretation of Findings a) Presentation and Analysis of Data

Section A Gender Distribution of the Respondent Table 01 shows that the workers present in the company are mostly made up of males as seen from the analysis from SPSS with a valid percent of 60%. This implies that the decision of inconsistency tracking inventory are mostly determined by the male workers. Analysis from SPSS shows that most of the workers are in the range 20-25 and 31-40 with valid percent of 36.7%. This analysis explains that the workers are not really verse with the inventory system thus making them to be inconsistent in their reports and work. Figure ?? and table 3 explains the marital status of the workers. This can be seen from statistics that most of the workers the company employs are married thus will not really affect the output of the company as they will be full concentration at jobsite. Here, that statistics shows that most of the workers that been employed by the company are qualified workers with high certificate as shown in table ??. The company has most of its workers with master's level. Figure 6 shows that respondent disagree with the fact that the organization practices good inventory tracking methods as this can be from the percent given which is 36.7%. this therefore affirms the inconsistency in inventory management system. From data collected and analysis from the software SPSS, we can clearly see that respondent to this question strongly disagree to the fact that inventory Procedures are followed to the latter by project directors and store keepers. This can be seen above from figure 7 as it shows that 43.3% of the respondent affirms the fact of inventory procedures not followed to the latter. Indications from analysis shows that the respondent disagree with the fact that the company Tracking procedures are flexible as this can be seen from the table with a valid percent of 46.7 and same with figure 8 portraying a great section of the disagree respondent. SPSS analysis and data imputed from respondent indicates that the organization uses inventory tracking software's for inventory Management as we can see from the above table having valid percent of 40 % as the agree to the fact. Analysis shows that the respondents strongly disagree with that aspect that the organizations software's are properly used by all company store keepers as we can see that they have a valid percent of 33.3 of the total percent and total respondent who actually responded to the question. Table 11 shows that the respondent strongly agree to the fact that the company's software's are efficient in the tracking of inventory as this gives us a valid percent of 40% out of the total respondent. This can also be seen from figure 11 showing a greater portion of those who strongly agree to the fact that the software's are efficient in the tracking of inventory. Respondent to this question strongly disagree to the fact that the organization practices good inventory tracking methods as figure 12 from SPSS analysis show us a valid percent of 43.3% of the total percent. Statistics from SPSS shows that the respondent made up of 30 with a valid percent of 100, 46.7 % strongly agree that documents play a vital part in inventory management as we can also see from figure 13 indicating portion of strongly agree respondent. Analysis shows that respondents agree to the fact that incomplete documents disturb the inventory management process as we can see from the statistics from SPSS table which gives us a valid percent of 46.7% and figure 14 showing a greater proportion of those who agree to the aspect of incomplete document disturb inventory management process. Significance level = 0 which is below

211 0.05 which means we reject the null hypothesis of the mean being equal to 5 which therefore implies the mean is 212 not equal to 5. Better still, we are 95% sure that the level of tracking on inventory management is not equal to 5.

14 Table 4: Educational Level

15 Section D: Documentation (DC)

16 IV. Discussions, Conclusions, Recommendations a) Discussion of Findings and Implications

The main focus of this study was to verify if inconsistent tracking has an impact on inventory management of Société BUNS, if documentation has an impact on inventory management in BUNS SA, if inventory tracking software's have an impact on inventory management and if coding has an impact on inventory Management and equally if inventory procedures are respected. These four hypotheses resulting from the four objectives which were formulated.

17 i. Documentation has a Significant Impact on Inventory Management

From the statistics from SPSS table, we have a valid percent of 46.7% who strongly agreed showing a greater proportion of those who agree to the aspect of incomplete document disturb inventory management process. This therefore shows that documentation plays a vital role in inventory management. This implies that every organization has to pay special attention to documentation for accountability and for traceability.

ii. Inventory Tracking Software's have an impact on Inventory Management Analysis shows that Inventory tracking software have an impact on inventory management. In the case of Société BUNS, it is more of a negative impact the respondents strongly disagree with that aspect that the organizations software's are properly used by all company store keepers as we can see that they have a valid percent of 33.3 of the total percent and total respondent who actually responded to the question. These responses go a long way to show that inventory tracking software have an impact on inventory management and its more of a negative impact in the case of Société BUNS since it's not properly used. This implies that the company has to take all measures to make sure that the storekeepers and controllers use the inventory tracking software properly.

iii. Coding has a Significant Impact on Inventory Management From the analysis above. It shows that respondent strongly agree to the fact that coding has a significant impact on inventory management as most of the respondents strongly disagree to the fact that coding and its procedures are respected by the employees in charge as the percentage is at 43%.

18 b) Conclusions

After investigations on this research study, we can conclude that the purpose of the study was to educate on the Impact of inconsistent tracking on inventory management and the necessity to accurately track inventory in order to carry out inventory management properly. It should be noted that most organisations do not pay much attention to assessing their levels of inventory tracking. According to the first hypothesis, it can be seen that documentation has a significant effect on inventory management as the statistics show that 46.7% of the respondents strongly agree. It impacts inventory management negatively at Société BUNS as incomplete documentation disrupts inventory recording and tracking. Also, it is very important for the organization to ensure that the tracking software be used properly and in case of any issue it should be arranged. It is also important for the organization to constantly check and make sure storekeepers and controllers use the software properly.

In addition, it is also important that workers respect the coding procedures so it remains easy for the storekeepers to track inventory. Therefore, in a nut shell, it is but normal that Inconsistent tracking will have an impact on inventory management.

19 c) Policy Implications

Société BUNS SA should use both long term and short-term measures to implement new policies which will solve the inconsistency in Inventory tracking in order to ease inventory management and increase organizational performance.

20 d) Recommendations

After carrying out this research, the following recommendations were made to help the organization reshape her Inventory tracking methods and inventory management method.

1. The Company should use more of inventory software so that it can ease traceability of inventory. 2. Management should try to arrange the existing software used by the company in such a way that all the storekeepers at the various sites will be able to record Material flows in the system making it visible to all

other storekeepers and controllers. 3. The company should sanction employees who do not submit the necessary documents needed to record inventory after 48hours. 4. Management should sensitize workers especially project directors on the importance of codes and the importance of respecting inventory procedures. 5. The Central storekeeper should give good estimates for the purchase of office equipment's in order to avoid constantly running out of stock

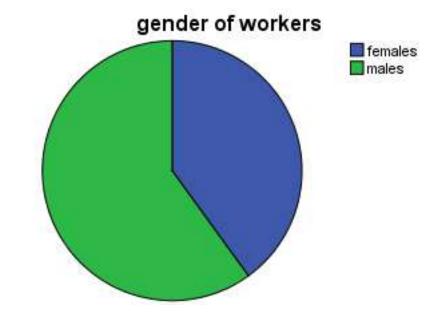


Figure 1: FrequencyFigure 1:

268

1

264

265

 $^{^1 \}odot$ 2022 Global Journals The Impact of Inconsistent Tracking on Inventory Management Case Study Societe Buns -Cameroon

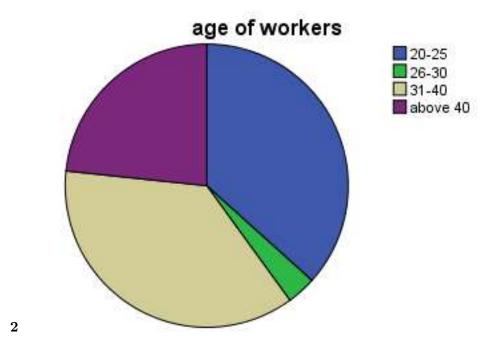


Figure 2: Figure 2:

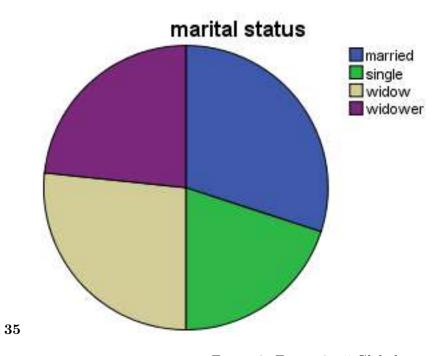


Figure 3: Figure 3: 5 Global

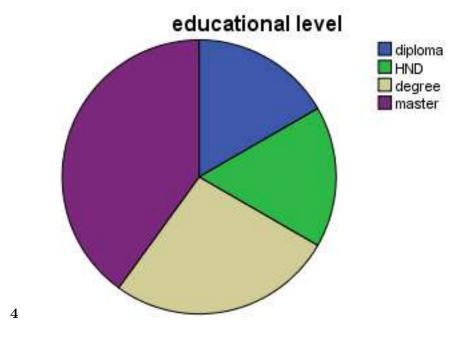


Figure 4: Figure 4:

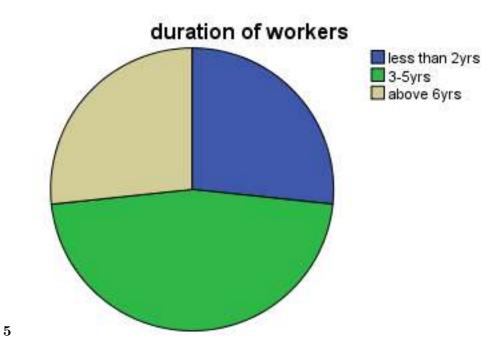


Figure 5: Figure 5:

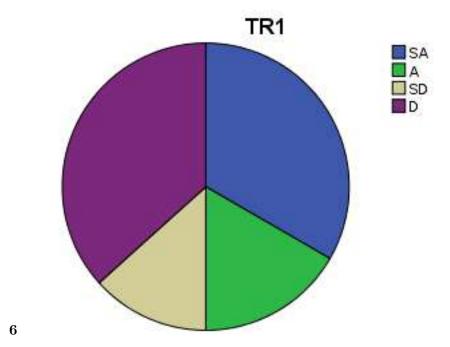


Figure 6: Figure 6:

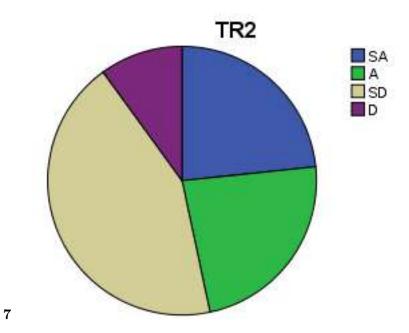


Figure 7: Figure 7:

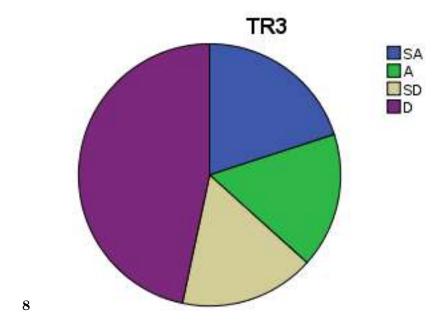


Figure 8: Figure 8:

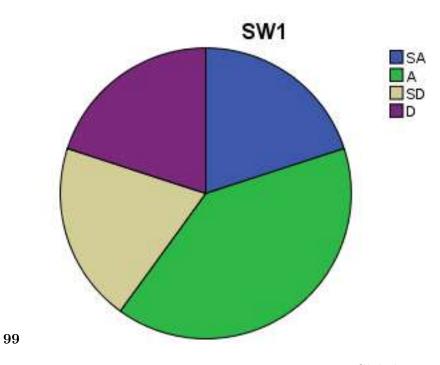


Figure 9: Figure 9: 9 Global

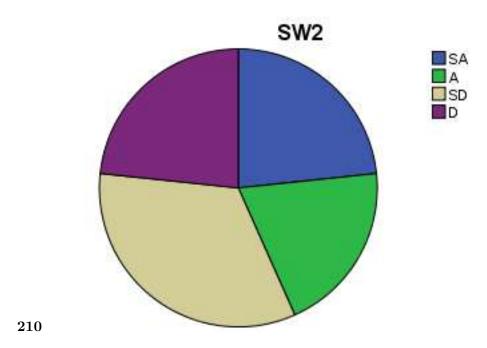


Figure 10: Table 10: SW 2 Frequency Figure 10 :

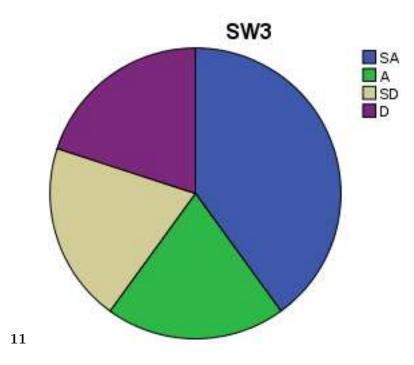


Figure 11: Figure 11:

12

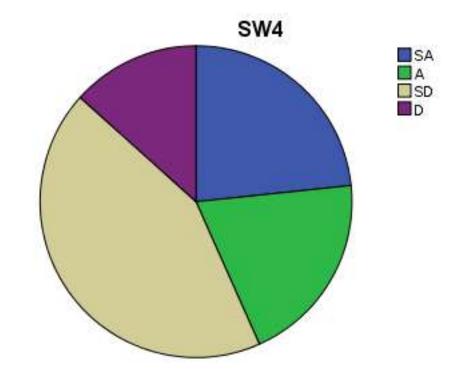


Figure 12: Figure 12:

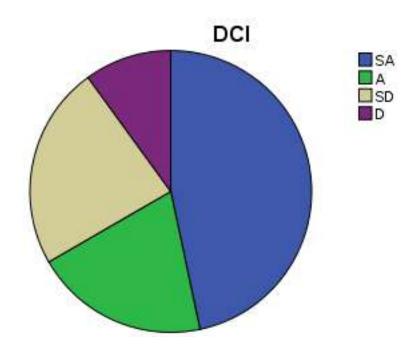


Figure 13: Figure 13:

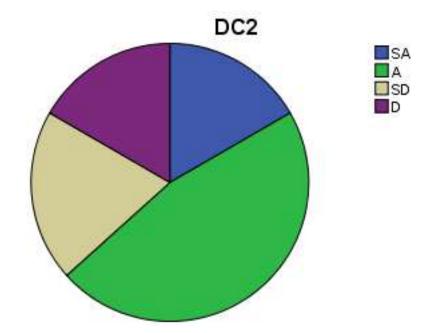


Figure 14:

1

Figure 15: Table 1:

2

	Frequency	requency Percent Valid Percent Cumulative Percent			
20-25	11	36.7	36.7	36.7	
26-30	1	3.3	3.3	40.0	
Valid31-40	11	36.7	36.7	76.7	
Above 40	7	23.3	23.3	100.0	
Total	30	100.0	100.0		

Figure 16: Table 2 :

	Frequency Percent Valid Percent			Cumulative Percent	
Married	30	30.0	30.0	30.0	
Single	34	20.0	20.0	50.0	
ValidWidow	8	26.7	26.7	76.7	
Widower	8	23.3	23.3	100.0	
Total	80	100.0	100.0		

Figure 17: Table 3:

 $\mathbf{5}$

	Frequency Percent Valid Percent			Cumulative Per-	
				cent	
Less than 2 yrs	20	26.7	26.7	26.7	
3-5 yrs	20	46.7	46.7	73.3	
Valid					
Above 6 yrs	40	26.7	26.7	100.0	
Total	80	100.0	100.0		

Figure 18: Table 5:

6

	Frequency Percent Valid	Cumulative		
				Percent
SA	25	33.3	33.3	33.3
A	25	16.7	16.7	50.0
Valid SD	15	13.3	13.3	63.3
D	15	36.7	36.7	100.0
Total	80	100.0	100.0	

Figure 19: Table 6:

7

Figure 20: Table 7:

8

	Frequency Percent Valid		Cumulative	
				Percent
SA	25	20.0	20.0	20.0
\mathbf{A}	11	16.7	16.7	36.7
Valid SD	11	16.7	16.7	53.3
D	33	46.7	46.7	100.0
Total	80	100.0	100.0	

Figure 21: Table 8:

	Frequency	Percent Valid Percent Cumulative Percent		
SA	7	23.3	23.3	23.3
A	6	20.0	20.0	43.3
Valid SD	13	43.3	43.3	86.7
D	4	13.3	13.3	100.0
Total	80	100.0	100.0	

Figure 22: Table 12:

13

	Frequency Percent Valid Percent			Cumulative Percent
SA	40	46.7	46.7	46.7
Valid				

Figure 23: Table 13:

14

 $Year\ 2022$ Volume XXII Issue III Version I () Global Journal of Management SAFrequency Percent Valid Percent 10 16.7 16.7 40 46.7 46.7 Cum and Business Research Α Perce 63.3 Valid SD20 83.3 20.020.0D 10 16.716.7100.0 Total 80 $100.0 \ 100.0$

Figure 24: Table 14:

SA	Frequency Percent	Valid Pe	rcent 12 20.0 20.0	Cumulative Percent 20.0	Year 2022 13 Volume XXII Issue III Version I
A	14	16.7	16.7	36.7	()
Vali \$ D	40 14 80	46.7	46.7	83.3 100.0	Global Journal of Management
D		16.7	16.7		and Business Research
To-		100.0	100.0		
tal					

Figure 25: Table 15:

- ²⁶⁹ [Arrow et al. (ed.)] K J Arrow, S Karlin, Scarf. 1958a. Studies in the Mathematical Theory of Inventory and Production, HE (ed.) (Stanford, CA) Stanford University Press.
- 271 [Carlson et al. ()] M L Carlson , G J Miltenburg , J J Rousseau . Economic order quantity and quantity, 1996.
- ²⁷² [Brown ()] Decision Rules for Inventory Management, R G Brown . 1967. Holt, Rinehart and Winston, New York.
- ²⁷⁴ [Eilon and Lampkin ()] S Eilon , W Lampkin . *Inventory Control Abstracts*, (Oliver & Boyd, Edinburgh) 1968. 1953-1965.
- 276 [Erlenkotter ()] Ford Whitman Harris and the economic order quantity model, D Erlenkotter . 1990.
- 277 [Naddor ()] Inventory Systems, E Naddor . 1966. New York: John Wiley and Sons.
- ²⁷⁸ [Goyal and Gunasekaran ()] 'Multi-stage production-inventory systems'. S K Goyal , A Gunasekaran . *European Journal of Operational Research* 1990. 46 p. .
- [Bar-Lev et al. ()] 'On the EOQ model with inventory level-dependent demand rate and random yield'. S Bar-Lev , M Parlar , D Perry . *Operations Research Letters* 1994. 16 p. .
- [Baker et al. ()] 'The effect of commonality on safety stock in a simple inventory model'. K R Baker , M J Magazine , H L W Nuttle . $Management\ Science\ 1986.\ 32\ (8)\ p.$.
- [Atkins ()] 'The inventory joint replenishment problem with a general class of joint costs'. D R Atkins . European Journal of Operational Research 1991. 51 p. .
- [Goyal et al. ()] 'The trended inventory lot sizing problem with shortages under a new replenishment policy'. S K Goyal , M A Hariga , A Alyan . Journal of the Operational Research Society 1996. 28 (2) .