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# FACTORS INFLUENCING WAREHOUSE LOCATION DECISIONS IN PRIMARY MANUFACTURING FIRMS IN KENYA; A CASE OF SELECTED FIRMS IN BOMET COUNTY

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Abstract: Primary manufacturing firms in Kenya face a major decision of identifying an appropriate location for store and warehouse facilities. Many firms worldwide strive to locate their warehouses at the ultimate locations where they would benefit from uninterrupted production process besides having a proper linkage between their firms and the final consumer. Warehousing has become a critical function in the recent decade since it ensures customer satisfaction, value addition and improvement of overall business performance. It's at the back of this development that this study sought to establish factors influencing warehouse location decisions in primary manufacturing firms in Kenya; a case study of Bomet County.

**Objectives:** To achieve the main objective of the study, the researcher was guided by several research objectives which included; to examine the influence of raw materials availability on warehouse location, to assess the influence of finished product characteristics on warehouse location and lastly to determine the effect of target market accessibility on warehouse location in the primary manufacturing firms in Bomet County, Kenya.

**Theories & Methodology:** A number of theories have been considered in the literature review in relation to warehouse location. The research reviewed the Central Place, Spatial Interaction, Land Value and The Principle of Minimum Differentiation theories to explain the relationship between independent and dependent variables. A descriptive research design was adopted with a target population of 344 members. The research target population was divided into four levels of management employment where a proportionate stratified sampling method was applied to select a representative sample of 30%. Quantitative and qualitative data collection and analysis methods were used. Interviews schedules and questionnaires were used as data collection tools. These ensured a positive response rate of 91% was achieved. Raw materials availability and target market accessibility both had a positive influence on the warehouse location decisions with significant levels of .003 and .000 respectively. While finished product characteristics insignificantly influenced warehouse location decisions with a significant level of .377 which is higher than 0.05. The study would be of great importance to the management of primary manufacturing firms when making warehouse location decisions.

Keywords: primary manufacturing firms, warehouse decisions

# **BACKGROUND TO THE STUDY**

In the past, a warehouse was referred to as cost centres and rarely adding value. However, there was the increasing need to transfer products far from the production region such as Far East, Western Countries amongst other places. Warehouse is most likely involved in various stages of sourcing, production and

distribution of goods from the handling of raw materials, work-in-progress through to finish products. It is therefore apparent that different activities take place at a warehouse and thus require different nature of facilities, staff as well as equipment to suit each function (Gregory & Platt's, 2005)

In America, agricultural activity is mainly concentrated on the Great Plains; which is a vast expanse of flat arable land. Corn is extensively grown in the Corn Belt region, a traditional area in the Midwestern United States, roughly covering Western Indiana, Illinois, Iowa, Missouri, Eastern Nebraska, and Eastern Kansas. Due to the uprising of commercial agriculture in the Great Plains, huge cylindrical-shaped concrete structures known as Grain elevators were built in the surrounding countryside to assist farmers with local storage facilities to handle surplus production before shipping to domestic or international markets. The grain elevator is a facility that stores dry, small cereal grains; it handles grain in bulk rather than in bags or sacks, and it stores, moves, and processes grain vertically. Vertical handling and storage are desirable because grain flows by gravity in tall, narrow bins, and thus less power and labour are needed. These warehouses were strategically located along railroad tracks in the small towns of the Great Plains. Local producers thus benefitted by holding their grain for a better price, protection against waste and spoilage, accommodate large quantities of grain during a peak harvest season, and enjoy lower storage rates than warehouses located at the ports.

There has been a steady rise in warehousing facilities in African regions. Take for instance Ghana a leading producer of cocoa, store and warehousing plays a continuous major role in cocoa production right from farming to finished product. From the dense forest regions of the country where Cocoa farming is done beans are produced and transported to warehouses at the three major ports, namely: Port Tema, Port Takoradi and Kumasi Port (which is an inland port). With their strategic positions, the three ports makes it greatly efficient for cocoa distribution to both the local and overseas factories and markets. The purchase of beans is done by licensed buying companies and other haulers on behalf of Ghana Cocoa Board (GCB). The cocoa beans are then transported to the ports from where they are later distributed to the consumers locally and overseas. The warehouse at the three ports with a primary aim of controlling the movement, storage and processing of materials forms a key aspect of the supply chain. The shipping, receiving, and picking processes are major functions of the whole process. The efficiency in ports links makes it cost friendly as it impacts positively on the costs of construction resources, infrastructure, and markets, labour force, quality and reliability of modes of transportation, and proximity to customers, stakeholders and management.

Among the East African countries, Tanzania is well known for having the largest number of primary manufacturing firms, ones that especially deal with tea and sugar processing. There are three main tea-growing areas in Tanzania namely Southern Highland Zone (Mufindi, Njombe, and Rungwe Districts), the North East Zone (Lushoto, Korogwe and Muheza District) and Northwest Zone (Bukoba, Muleba district). The three main foreign companies producing tea in Tanzania are Brooke Bond Tanzania Ltd, George Williamson Tanzania Ltd., and the Mufindi Tea Company Ltd. which together manage some 4,500 ha in the Southern Highlands. They produce about 10,000 tonnes of tea each year.

The warehouse facility practice is growing at a higher rate as new management philosophies are adopted by Kenyan firms. With the firms practicing agile, Just in Time, cross docking, globalization and e-commerce, they have to rely on outsourcing for warehouse facilities and third party logistic providers. This practice is also brought about due to inadequate storage space, lack of expertise, stringent working regulations and high cost of warehouse installations Tozay, (2012), defines third party warehouse as an independent organization specializing only in integrated warehousing operations that are tailored, scaled and customized to meet certain

customer's needs with regard to the market conditions, the demand and delivery requirements for their products and materials.

Kenya is the largest producer of tea in Africa, and it has quadrupled its exports over the last decade. Currently, Kenya prides itself as one of the world's leading black Tea producers with Pakistan, the UK and Egypt being the biggest buyers. Kenya is ranked third in annual tea production after China and India. The tea produced in Kenya accounts for about 10% of the world production and about 22% of the export share. As regards tea exports, Kenya has been second largest exporter in 2004 after Sri Lanka (Kinya A.M & Muturi W, 2013).

In Kenya, most of the farmers around Kericho area mainly practice tea farming hence primary manufacturing firms in the region majorly take part in tea growing and processing. Some of the firms in Kericho which deal with tea growing and processing are; James Finlay Kericho and Unilever Tea Kenya Limited. Located in the heart of Kericho these firms own extensive tracts of land on which they carry out tea farming. James Finlay for instance, has five automated factories that process tea and it produces about 23 million kilogram of tea every year. The produced tea is temporarily stored in company warehouses located at the factory before being transported to Mombasa by road. Most of these teas are sold through the Mombasa auction, with only a small portion being sold to local retail stores and local consumers. On reaching Mombasa, the processed tea is stored in warehouses owned by registered members of the East African Tea Trade Association such as the Chai Trading warehouse. The choice of Mombasa as a warehouse destination must have been informed by the desire for these tea manufacturing farms to be closely stationed near their customers and or export zones. It is important for the product to be availed as and when required compared to if they were inland. Inland location would have been detrimental to the business since it would have been out of reach for the customer. Other than these tea producing firms in the South Rift region, there are other manufacturing firms in Bomet County which are our area of study.

The manufacturing firms store manufactured commodities in warehouses that are located within all factories' premises. On average, most warehouses have an average capacity of 100,000 kilograms of the processed commodities, which are then stacked in order to ensure maximization of the available space. These products are then held for a certain period of time before they are transported by road in containers or by other means such as the railway to Mombasa and other ports for sales by auction or through direct sales.

Close to 96% of the produced tea is exported to Europe and the Middle East thus leaving only about 4% for the local market. This tea is mostly sold through the Mombasa Auction and by direct orders from UK buyers.

# STATEMENT OF THE PROBLEM

The Primary Manufacturing Sector in Kenya has for many years struggled with finding ideal locations for their warehouses, which would ensure continuity in their production processes and accessibility to their final consumers. Customer satisfaction is a key consideration where warehouse location decisions are to be made (Tozay, 2012).

Warehouses located inside the manufacturing plants usually have smaller capacity meaning they are unable to hold a lot of stocks needed to ensure continuous flow of products into the market, this informs the need to acquire a bigger warehouse close to the market. (Gesimba et al., 2005)

Since getting an ideal warehouse location is a challenge, these firms are constantly under pressure to evaluate various factors that would affect their decisions in finding the ultimate warehousing solution .A previous study by Changwony (2012) found out that some firms either ended up locating their warehouses in regions that are not conducive for their businesses because they are usually far from the market points or are forced to

outsource the services of several distributors of their finished products who own warehouses in locations that are favourable and mostly found in outlet towns.

We also have organizations who have access to resources such as land but their main activity is not primary processing. These organizations build warehouses strictly for leasing and hiring to the highest bidder. Other research materials show that, apart from the widely known factors that influence the location of warehouses, other factors keep cropping up, especially with the ever changing factors such as climatic conditions, political atmosphere and economies. This study shall form a basis for solutions on matters concerning warehouse location, for decision makers of primary manufacturing firms. (Gesimba et al., (2005)

It is also important to mention that since business continuity and profitability are the primary aims of manufacturing concerns, it's therefore evident that the decisions on warehouse location is an important consideration. The aim of the researcher in this study therefore, was to establish factors influencing warehouse location decisions in primary manufacturing firms in Kenya with a precise focus to a few identified primary firms in Bomet. The implementation of the study's outcome is expected to see a steady increase in business operations which will in turn place primary manufacturing firms in a competitive edge.

## **OBJECTIVES OF THE STUDY**

#### **General Objectives**

The study aimed to investigate factors influencing warehouse location decisions in primary manufacturing firms in Kenya with a precise focus to selected primary manufacturing firms in Bomet.

#### **Specific Objective**

- To determine the effects of raw materials availability on warehouse location decisions in primary manufacturing firms in Kenya.
- To determine how finished product characteristics influence the location of warehouse decisions in primary manufacturing firms in Kenya.
- To investigate the effects of target market accessibility on warehouse location in primary manufacturing firms in Kenya

#### Factors affecting warehouse location decisions in primary manufacturing firms in Bomet County



## **RESEARCH METHODOLOGY**

A descriptive research design was adopted with a target population of 344 members. The research target population was divided into four levels of management employment where a proportionate stratified sampling method was applied to select a representative sample of 30%. Quantitative and qualitative data collection and analysis methods were used. Interviews schedules and questionnaires were used as data collection tools. These ensured a positive response rate of 91% was achieved. The researcher used SPSS to facilitate data analysis process giving results of both inferential and descriptive statistics which were presented in the form of frequencies, percentages, and tables. The data was analysed by use of means, standard deviation, correlation and regression analyses. Raw materials availability and target market accessibility both had a positive influence on the warehouse location decisions with significant levels of .003 and .000 respectively. While finished product characteristics insignificantly influenced warehouse location decisions with a significant level of .377 which is higher than 0.05. The study would be of great importance to the management of primary manufacturing firms when making warehouse location decisions.

## **RESEARCH FINDINGS AND DISCUSSIONS**

#### **Influence of Raw Materials**

This was the first objective of the study where the researcher sought to establish the influence of raw materials on warehouse location in primary manufacturing firms. Several statements were fronted to which the respondents were to indicate the extent of agreement with the statements. The responses were rated on a 5 point likert scale ranging from; 5= strongly agree, 4= Agree, 3 = Neutral, 2 =Disagree, 1=Strongly Disagree. The study then computed mean and standard deviation to aid in the analysis.

#### **Table 1 Influence of Raw Materials on Warehouse Location**

Statement	Ν	Mean	Std. Deviation
Our Raw Materials mainly come from local area	94	4.7021	.78740
Our Raw Materials are mainly Imported	94	1.3511	.85141
Our Raw Materials are perishable	94	4.0851	1.26712
The transport networks for transporting our raw materials t the factory are developed	<sup>0</sup> 94	3.7447	.96092
Raw materials availability is affected by government policie and regulations	<sup>es</sup> 94	3.2979	1.26005

From the analysis most respondents indicated that their raw materials come from the local area as shown by a mean of 4.70 and standard deviation of 0.787 while very few indicating that their raw materials are imported with a mean of 1.35 and standard deviation of 0.851. This is a true fact based on the fact that the nature of the firms under study were primary manufacturing firms, meaning they process the raw materials in their original state. For example the tea farmers would sell their produce from their firms directly to the manufacturing plants. This would not have been the case were it that the raw materials were imported. This therefore implies that most primary manufacturing firms chose the location of the warehouse with respect to the source of raw materials. From the analysis also majority of the respondents indicated that their raw materials are perishable represented by a mean of 4.09 and standard deviation of 1.267 thus the location of the warehouse has to facilitate faster processing before the condition of the raw material deteriorates. A good number also indicated

that their transport network to transport raw materials to factory are developed, this was represented by a mean of 3.74 and a standard deviation of

0.961 an implication that developed transport network is necessary for transporting raw materials. This is in line with objectives of Vision 2030(GOK 2010) of infrastructure development by the government through Public Private Partnerships. Majority also indicated that government policies affects availability of raw materials as shown by a mean of 3.30 and standard deviation of 1.26. The government regulates players in the different manufacturing sectors of the industry through establishing Agencies like the Tea board of Kenya (TBK) and Kenya Tea Development Agency (KTDA).

#### **Influence of Product Characteristics**

Table 2 Influence of Product Characteristics on Warehouse Location
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Statement	Ν	Mean	Std. Deviation
Our finished product is highly perishable	94	2.4894	1.43493
Our finished product is usually stored in a moisture warehouse	free <sub>94</sub>	4.4468	.75658
Our product is bulky, it needs a lot of storage space	94	4.4362	.74138
The products that needs to reach the market faster is st in warehouses with ease access to market routes	ored <sub>94</sub>	4.0638	1.02452
The texture of our product determines its storage location	on 94	2.8404	1.43162

There was also need to establish the influence of product characteristics on location of warehouse in primary manufacturing firms. A number of respondents with a mean of 2.49 and standard deviation of 1.435 indicated that their finished products are perishable thus the need to have warehouses with latest preservation systems . A majority of the respondents with a

mean 4.45 and standard deviation of 0.757 indicated that the finished products are stored in a moisture free warehouse. This therefore implies that finished products like tea need to be stored in warehouses that are moisture free in order for it have a longer shelf life .The packaging used to protect the tea from absorbing moisture is usually water proofed by having an aluminium foil lining. Majority of respondents at a mean of 4.44 and standard deviation of 0.741 indicated that their product is bulky and needs a lot of storage space. This means that the warehouse layout has to be well designed and spacious enough to allow stacking of pallets for which the finished products are placed on after packaging. The response of those who agreed that the finished products that needed to reach the market faster should be stored in warehouses with ease access to market routes, had an average mean of 4.06 and standard deviation of 1.025. A few of the respondents with a mean of 2.84 and a standard deviation of 1.431 stated that the texture of their products determines its storage location.

#### **Influence of Target Market**

**Table 3 Influence of Target Market on Warehouse Location** 

Statement	Ν	Mean	Std. Deviation
We sell our products to the local market	94	3.4574	1.08425
Our products are sold through distributors /wholesalers	94	3.2340	1.37899
Our finished product warehouse is located close to the market	94	3.9681	1.21330
There is continuous flow of our finished product to the market	94	4.3936	.83238

Direct selling of finished products to final consumers yield 94 4.0106 .97820 more returns

The researcher also sought to establish the influence of target market on ware house location in primary manufacturing firms. From the results of the analysis. Most of the respondents agreed that they sell their products to the local market with a mean of 3.46 and standard deviation of 1.084. They also agreed that these products are sold through distributor/wholesalers as indicated by 3.23 mean and 1.379 standard deviation. Majority also indicated that their finished product warehouse is located close to the market. This is represented by a mean of 3.97 and 1.213 standard deviation. This can be concluded that a warehouse located close to the market facilitates easy access to customers, and also aid in boosting sales not to mention the fact the firm will interact more intimately with its customers thus understand their requirements better. The respondents also agreed that there was a continuous flow of finished products to the market. This is shown by a mean of 4.39 and 0.832 standard deviation. This could be attributed to the fact the finished products are stored in a warehouse close to the target market hence the continuous flow. They also agreed that selling finished products to the final consumers yield more returns with a mean of 4.01 and a standard deviation of 0.978. By directly dealing with its customers, a firm cuts down the costs charged by middle men or distributors therefore making huge profits on sales . The firm also saves on operational expenses and time relating to selling through other channels .The finished product reaches the customer within the shortest time hence boosting the customer relations.

# Warehouse Location

**Table 4 Warehouse Location** 

Statement	Ν	Mean	Std. Deviation
Our warehouse is located near a road network	94	4.5319	.66724
Our warehouse is located close to the source of raw material	94	2.6383	1.42067
Our warehouse is located near export route	94	3.9149	1.25003
Our warehouse is located close to local market points	94	3.2447	1.26734
Our warehouse is located close to skilled labour workforce	94	3.1915	1.20283

Here the research sought to find out the relationship between warehouse location and a few other factors relating to transport network, raw material source, market points and labour workforce. The respondents were asked to state whether their warehouse was located close to these factors as illustrated in the table above. From the findings majority agreed that their warehouse is located near road network as indicated by a mean of 4.53 and standard deviation of 0.667. Majority also agreed that their warehouse is located close to the source of raw materials. This is shown by a mean of 2.64 and a standard deviation of 1.421. Similarly most respondents as indicated by a mean of 3.91 and standard deviation of 1.267 agreed that their warehouse is located close to local market points. Lastly on this analysis majority also agreed that skilled labour is an important factor in determining the location of 1.202 agreed that their warehouse is located close to skilled labour workforce.

## **Other Factors Influencing Warehouse Location**

Other than those factors stated by the researcher, this question sought to find out if there were any other factors that could influence warehouse location. The respondents were therefore asked to specify. From the findings, the following are some of these factors as stated by the respondents; infrastructure availability, government policy and capital .Basic infrastructures like power ,water and waste disposal affect warehouse location decisions in that manufacturing industries require uninterrupted power supply throughout the production

process .The rules and regulation with regards to labour laws, building codes ,employee safety among others factors stipulated by the government affect warehouse location. For instance the government may offer exemptions or tax subsidy to firms that locate their warehouses in certain areas e.g. the Export Processing Zones. (EPZs). Capital consideration is also a factor influencing warehouse location in that huge investments are channelled toward building or renting warehousing premises. Fixed Capital costs for building and construction vary from region to region, this informs the need to set up a warehouse at a cost friendly location.

## **Correlation Analysis**

The correlation analysis is one of the most common and most useful statistics. A correlation is a single number that describes the degree of relationship between two variables (Wilcox D. W, 2010). For this study a Pearson's correlation analysis conducted at 95% confidence interval and 5% confidence level 2-tailed between each of the variables was used to determine both the significance and degree of association of both the dependent and the independent variables. Table 5 below indicates the correlation matrix obtained.

Correlations		Raw Material	Target Market	t Product	Warehouse	
				Characteristics	Location	
Davy Matarial	Pearson Correlation	1				
Raw Material	Sig. (2-tailed)					
Target Market	Pearson Correlation	.012	1			
	Sig. (2-tailed)	.905				
Draduat Characteristics	Pearson Correlation	.080	.313	1		
Product Characteristics	Sig. (2-tailed)	.445	.020			
	Pearson Correlation	.030	.025	.101	1	
Warehouse Location	Sig. (2-tailed)	.774**	$.807^{**}$	.332		
	Ν	94	94	94	94	

**Table 5: Summary of Pearson's Correlations** 

\*\*. Correlation is significant at the 0.05 level (2-tailed).

The results indicate that there was a positive relationship (r=.774) between raw materials and warehouse location in primary manufacturing firms in Bomet. The results also indicated that there was a positive relationship (r=.807) between target market and warehouse location. However, the research did not find out any correlation between product characteristics and warehouse location since the results were negative at (r=.332).

## **Regression Analysis**

In statistical modelling, regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modelling and analyzing several variables

when the focus is on the relationship between a dependent variable and one or more independent variables (Marshall, C., 2012).

In this study, multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. Regression analysis was conducted to find the proportion in the dependent variable which can be predicted from the independent variables (raw materials, product characteristics, and target market). Table 6 presents the regression coefficient of independent variables against dependent variable.

The results of regression analysis revealed there is a significant positive relationship between dependent variable and the combined independent variables. The independent variables reported R value of .870a

indicating that there is perfect relationship between dependent variable and independent variables. R square value of 0.757 means that 75.7% of the corresponding variation in warehouse location decisions in primary manufacturing firms can be explained or predicted by (raw materials, product characteristics and target market) which indicated that the model fitted the study data. The other 24.3% variation is caused by other factors not incuded in this model. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and the combined independent variable at ( $\beta = 0.757$ ), p=0.000 <0.05).

#### Table 6 Model Summary

Model	R	R Square	Adjusted R SquareStd. Error of the Estimate			
1	.870 <sup>a</sup>	.757	.727	1.27626		

a. Predictors: (Constant), Raw Materials, Product Characteristics, Target Market

## Analysis of Variance (ANOVA)

It is a statistical method used to test differences between two or more means. In testing the significance level, the statistical significance is considered significant if the p-value is less or equal to 0.05. From the results of the study the significance of the regression model is as shown in Table 7 below with P-value of 0.000 which is less than 0.05. This indicates that the regression model is statistically significant in predicting factors influencing warehouse location in primary manufacturing firms in Bomet County.

#### Table 7 ANOVA

Model		Sum	ofDf	Mean Square	F	Sig.	
		Squares					
	Regression	6.215	3	2.072	5.298	.000 <sup>b</sup>	
1	Residual	35.189	91	.391			
	Total	41.404	94				
a. Dep	endent Variab	le: Warehou	se Location				

b. Predictors: (Constant), Raw Materials, Product Characteristics, Target Market

## Coefficients

## **Table 8: Coefficients**

Model		Unstandardiz	zed	Standardized	t	Sig.
		Coefficients		Coefficients		
		В	Std. Error	Beta	_	
	(Constant)	3.542	1.967		1.800	.000
	Raw Materials	.050	.057	.107	.877	.003
	Product Characteristics	.227	.312	.425	0.728	.377
	Target Market	.010	.057	.018	.175	.000

a) Predictors: (Constant), Raw Materials, Product characteristics, Target

b) Dependent Variable: Warehouse Location in Primary Manufacturing firms

The formula illustrated below was used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where;

Y = the dependent variable (Warehouse Location)

X1 = Raw Materials

X2 = Product Characteristics

X3 = Target Market

The regression equation is therefore;

Y = 3.542 + 0.050X1 + 0.227X2 + 0.010X3

The regression equation above established that taking all factors into account (raw materials, Product characteristics, and Target Market) to be constant at zero, the warehouse location in primary manufacturing firms will be an index of 3.542. The findings presented also shows that

raw materials availability statistically influenced the warehouse location decisions since it had a significant level of .003 which is less than 0.05. The  $\beta$  value was .050 and standard error of .057. This therefore means that taking all other independent variables at zero, a unit increase in raw materials will lead to a 0.050 increase in the scores of warehouse location decision.

Product characteristics on the other hand failed to influence warehouse location decisions because it had a significant level of .377 which is higher than 0.05. The  $\beta$  value was .227 and standard error of .312, meaning a unit increase in product characteristics will lead to a 0.227 decrease in the scores warehouse location decision.

Finally, the third objective which was target market also had significant influence on warehouse location decision in that it yielded a significant level of .000 which is less than 0.05. The  $\beta$  value was .010 and standard error of .057, which means that assuming other independent variables at zero, a unit increase in target market will lead to a 0.010 increase in the scores of warehouse location decision

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

# **Summary of Findings**

The main objective of the study was to find out factors influencing warehouse location decisions in primary manufacturing firms in Kenya: A case study of Bomet County. The researcher employed the use if standard multiple regression analysis to determine the variation of the independent variable to the dependent variable. Two independent variables i.e. raw materials availability and target market accessibility yielded a significant positive relationship in relation to warehouse location decision in primary manufacturing firms while one independent variable of finished products characteristics yielded a negative relationship to warehouse location decisions.

# Influence of Raw Materials Availability on Warehouse Location

The study found out that raw materials availability significantly influenced warehouse location decisions. Therefore the researcher confidently summarizes that source, availability and accessibility of raw materials is an important factor when it comes to making decisions regarding warehouse location in primary manufacturing firm's. Transport network aids in faster transportation of the raw materials for processing to avoid spoilage.

It's also important to mention that with proper government policies the availability of raw materials is ensured, the government regulates importation of inputs by levying duties that favour local suppliers of raw materials. The findings is a strong pointer that most primary manufacturing firms would choose a warehouse location that is close to the source of raw materials.

## Influence of Finished Product Characteristics on Warehouse Location

Product characteristics was found to be insignificant in influencing warehouse location decisions. Very few respondents agreed that the texture and bulkiness of their finished products influenced their storage location. Most warehouses nowadays are designed to include products of all shapes and sizes . The key decision to be made under this variable is the warehouse design and layout but not location.

## Influence of Target Market Accessibility on Warehouse Location

Target market accessibility also had significant influence on warehouse location decision. Proximity to the final consumer is a key aspect for consideration when making warehouse location decisions because it ensures customer satisfaction and loyalty. There should be continuous flow of products in the market thus necessitating a warehouse that will cater for the customer's needs consistently. Direct selling of finished product to final consumer yields more returns. Some customers prefer buying from manufacturers directly because they get favourable discounts as opposed to buying from middlemen who include their mark-up in the prices. As a result, these customers buys the manufacturers products in large volumes in order to benefit from quantity discount. This in turn translates into huge sales by the manufacturers hence yielding more returns.

## **Conclusion of the Study**

Based on the study findings, it is evident that warehouse location decision is a critical strategy for primary manufacturing firms'. That the target market greatly influences the warehouse location since it forms the customer base for the firm to sell its goods. Therefore the market has to be located close to the warehouse. The study also discovered that raw materials availability is an important consideration when it comes to making warehouse location decisions. The inputs have to reach the manufacturing plant in good condition with respect to quality, so proximity to warehouse is a key factor. Finally the study recognized the fact that the characteristics of finished products does not necessarily affect warehouse location decisions. Products attributes can be considered in the layout and design of the warehouses as opposed to physical location.

## **Recommendations of the Study**

In consideration of the findings of this study and the conclusions drawn, the study recommends that;

Primary manufacturing firms in Bomet County should ensure that they have clearly defined or identified their target market before making informed warehouse location decisions in order to avoid making errors.

The manufacturers also need to locate their warehouses close to raw materials source, especially for the locally available raw materials to ensure smooth running of the production process.

The government of Kenya on the other hand should have better policies and regulations that will benefit the local manufacturing industries by creating a conducive environment for them to set up their warehouses at an affordable cost and in suitable locations.

## **Areas of Further Research**

The study was centred mainly on factors influencing warehouse location decisions in primary manufacturing firms in Kenya and particularly in Bomet County. The research findings clearly demonstrated the importance

of raw materials availability and target market accessibility when it comes to location of warehouse decisions in primary manufacturing firms. Existing literature indicates that as a future avenue of research, there is need to undertake similar research in other manufacturing firms in other counties Kenya and other countries in order to establish whether the explored factors herein can be generalized. Also, a research needs to be conducted in future to determine the effect of warehouse location on the profitability of manufacturing firms in Kenya. **REFERENCES** 

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