IMPACT OF WAREHOUSE MANAGEMENT ON ORGANIZATIONS PERFORMANCE IN KENYA. A CASE STUDY OF H YOUNG CO&LTD

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE DEGREE OF PROCUREMENT AND SUPPLY CHAIN IN AFRICA NAZARENE UNIVERSITY

DECLARATION

This research proposal is my authentic work that has not been presented to any institution or organization for examination by anyone. Where I have used the work done by others, proper referencing has been done.

Signature…… date…….

Kabocha Naomi

Registration number 17g01aps044

The research proposal has been submitted for examination with my approval as a university supervisor

Signature……

Mr Samson N

DEDICATION

To my loving mother, Maria Dativa, my sister Gemma Maria, my aunt Mary Kabocha, my loving niece Tamar Tanya and my late grandfather Geoffrey Munjuga.

Acknowledgment

This research proposal would not have been successful without the full contribution and support from various people. I wish to express my gratitude to my supervisor Mr Samson Ndonye for his guidance, encouragement, and advice all through the research proposal. My colleagues from Africa Nazarene University for their continued support Sharon Awour, and Sharon Waridi. Last, but not least, to my family for their immense encouragement and support throughout the writing of this proposal.

ABSTRACT

The purpose of this study is to assess for impact of warehouse management on organizations' performance in Kenya in Nairobi county. The study sort to answer the following objectives: to determine the effect of warehouse layout on organization performance, to establish the effects of warehouse safety on organization performance, and to determine the effect of order picking on organization performance in H young CO&LTD in Nairobi county. The study aims to educate on warehouse management in a construction company. This research adopted a descriptive research design because it involved collecting and assessing information from a few numbers of people from the people selected from the population. This study took place in H young CO&LTD and random sampling techniques were used. Questionnaires were used to assist in data collection that was administered to employees that work in the warehouse department. The study findings were analyzed and presented using graphs and charts.

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LIST OF ABBREVIATION

CO&LTD **:** COMPANY AND LIMITED

E.A **:** EAST AFRICA

MNGT **:** MANAGEMENT

IP **:** INDUSTRIAL PLOT

ToC **:** THEORY OF CONSTRAINTS

CHAPTER ONE

INTRODUCTION AND BACKGROUND STUDY

1.0 Introduction

warehouse management plays an important role in the organization's performance. For an organization to grow and its performance to improve it needs to take care of its warehouse management by ensuring it is running smoothly.

1.1 Background of the study

1.1.1 International perspective on warehouse management

(Vega, H, Button, & Nijikamp, 2012) defines a warehouse as facilities that act as nodes in the supply chain for purposes such as storage, deconsolidation, accumulation, and sortation. These warehouses may be at various points in the supply chain example, raw materials warehouses, components warehouse, work in process warehouses, finished goods warehouses, distribution warehouses and centres, and local despots. The precise roles of individual warehouses vary form organizations.

Management is the act of controlling or being in charge of activities taking place in an organization. It's the process of achieving organizational goals through engaging in major functions of planning, organizing, leading, and controlling.

(Hompel & Schmidt, 2007) defines warehouse management as the art of operating a warehouse and distribution system efficiently and effectively. Excellent logistics performance in warehouse management can open up a new market while customers expect quality, speed, and minimized costs from the organization in their operations while delivering its goods and services. Warehouses and material handling systems are the core elements that will help the organization to manage its flow of goods and to build up a good connection with its customers.

Through warehouse management, an organization can take control of its daily activities making sure that it is running in the most optimal way possible. These day to day activities include shipping, receiving and put-away, and picking goods. This will be used interchangeably with stock control and inventory control in the organization.

1.1.2 Local perspective on warehouse management

Many organizations in Kenya are adopting automation technologies in their organizations within their warehouse to improve their productivity, reduce logistics costs, and outperform the competition from other organizations. There is the automation of tasks performed within their warehouse from the moment of receiving the goods, storage, movement of the goods, to the intermediate location if any to the final consumer. These organizations have adopted warehouse software and systems to reduce manual work and paperwork which might be tiresome. According to (Mwende, 2017) many developers are setting up top-end warehouses to meet the rising demands for such facilities from logistics firms that are venturing into Kenya and East Africa. This shows that there is a high need for warehouses and warehouse management in Kenya in which other organizations that have the resources will construct their warehouse and either manage it directly or source services from other experts.

1.1.3 Background information of H Young CO&LTD (E.A.)

H young Co. (E.A.) is a construction company, it was founded in 1951 and has worked on projects around East Africa but most of them being in Kenya. Most of its projects deal with a diverse portfolio comprising energy, petroleum, agro-processing, telecommunication, ports, and marine. The company has its warehouse in which does the work of receiving materials that they have ordered from either local suppliers or international ones. Once the materials are received they are then distributed to the places they have their construction project. being a construction company it employs mechanics who deal with the heavy and light vehicles needed to do their work in the project sites. The organization's works include

The organization has adopted software in its warehouse to deal with inventory and stocking coming into the organization and leaving out of the organization in various project sites they have. The materials have to be monitored to avoid loss or theft so as their inventory logistics will be up to date. Most of the activities are automated. In the warehouse, they have material handling equipment to ensure that heavy materials such as engines are being able to be carried from one point to another without too much human labour instead they use robots for the work.

1.2 Statement of the problem

Failure to manage your warehouse efficiently and effectively may lead to issues such as failure to accurately track inventory, poor managing of warehouse space and layout, and inaccurate information on the inventory. (Tomasi, 2013) explains the symptoms to which show that there is a failure in warehouse services in the organization. Such symptoms are; lack of current and detailed visibility into inventory positions which will show movement across the entire distribution chain, failure to optimize space in the warehouse, failure to improve efficiency in coordination of visibility and executions across the distribution and when customers need a new service or higher service levels that can be provided.

Over the years has witnessed a shift in their profits due to issues such as duplication of inventory and stock-outs in their warehouse. This has led to inaccurate data in their inventory systems and sometimes they suffer from stock-outs which leads to some activities not running smoothly. They have also received lawsuits due to accidents that have occurred to their employees.

1.3 objective of the study

1.3.1 General objective of the study

The purpose of this study is to determine the impact of warehouse management on organization performance in Kenya, a case study of h young CO&LTD.

1.3.2 specific objectives

1. To determine the effect of warehouse layout on an organization's performance.

2. To establish the effects of warehouse safety on organization performance.

3. To determine the effect of order picking on organization performance.

1.4 Research questions

1. How does a warehouse layout affect an organization's performance?
2. How does safety in the warehouse affect an organization's performance?
3. How does order picking in a warehouse determine the effectiveness of organization performance?

1.5 Justification of the study

Warehouse management will create a big impact on an organization's performance as most issues such as safety will be taken care of through proper management of the warehouse.

The study findings in this research could help academicians to gain more knowledge on the impacts of warehouse management on organizations performance.

The findings might also help the policymakers in H young CO&LTD who are the managers and directors come up with ways to reduce losses that might occur due to mismanaging of the warehouse, which will affect the performance of the whole organization.

The findings can also help the government in the policy-making of workers working in construction companies such as H young CO&LTD such as ensuring that workers are provided with safety material handling while at work such as safety boots.

The findings could also help other organizations that want to manage warehouse in an acceptable way that will benefit the whole organization and improve its performance.

1.6 scope of the study

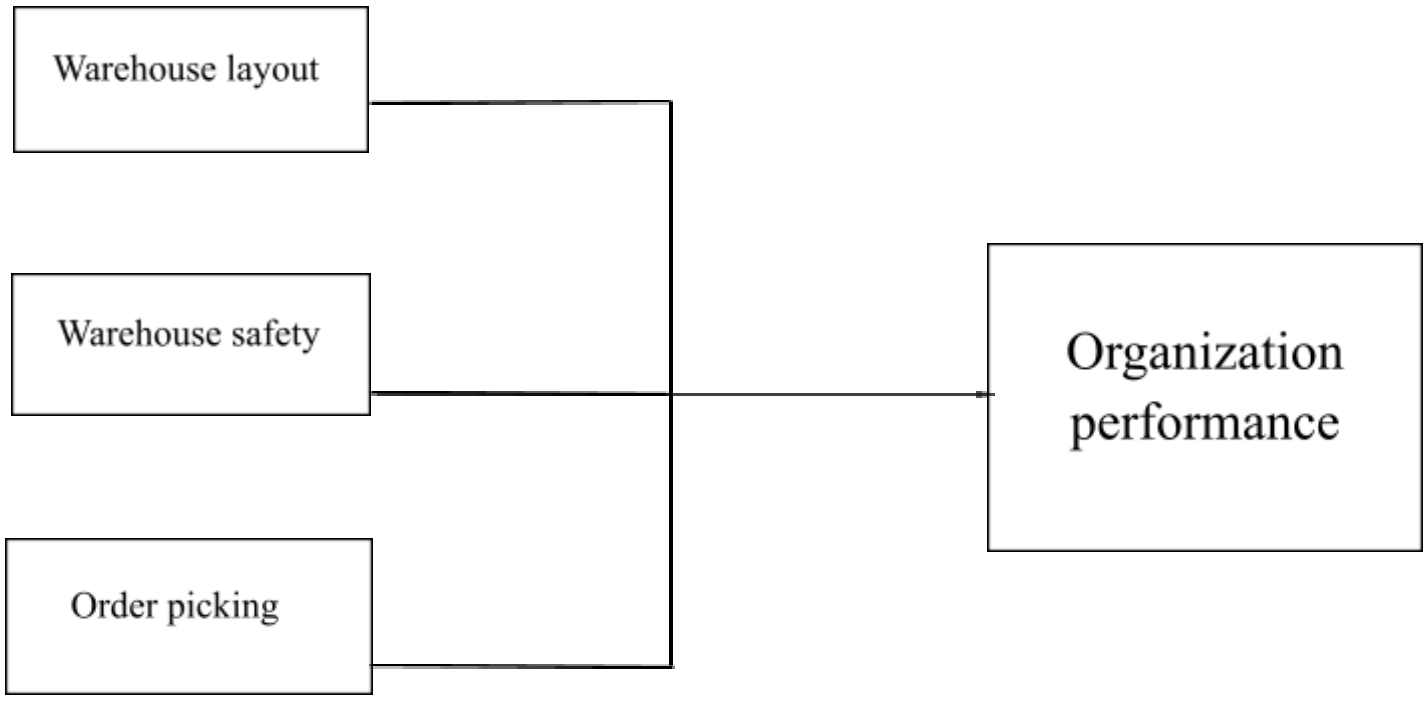
My research study will focus on H young CO&LTD which its main office is based in the industrial area Funzi road and it also has another branch in Mombasa road as its industrial plot(IP). I intend to deal with these branches in Nairobi, Kenya.

1.7 Limitations of the research design

This research study was faced with limitations such as inadequate funds to take care of the costs during the research process of collecting data such as frequent visitations to the organization, the unwillingness of some individual to take part in the research as respondents while collecting data and unfished questionnaires by some respondents while others returned the questionnaires late than the intended time scheduled for it.

1.8 Conceptual framework

The conceptual framework of the study illustrates the relationship and interaction between the independent variable and the dependent variables. It shows the relationship between warehouse layout, warehouse safety, and order picking.



Independent variables ***dependent variable***

Figure 2

1.9 Definition of key concepts

Warehouse layout: this is the physical way in which items are arranged or laid out in a warehouse.

Warehouse safety: the condition of being protected from unlikely cause or danger of a warehouse from the theft of items in the warehouse.

Order picking: the process of finding and extracting items from a warehouse.

Organizational performance: output or results of an organization as measured against its inputs.

Logistics: is the function concerned in the movement and storage of goods from the point of production to the point of consumption

Inventory control: is the systematic approach of identifying and solving the relevant stocking issues to achieve the targets set by the organization.

Supply chain: continuous link activities in an organization of moving goods from suppliers to the final destination.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter will introduce us to the theoretical framework, empirical review, and research gaps to warehouse management on the organization's performance.

2.1 Theoretical framework

2.1.1 Institutional theory

This study was based on Institutional Theory in determining the influence of Warehouse Layout Design on organizational performance. (Oliveira & Martins, M, 2011) states that institutional theory emphasizes institutional environments that are very important and crucial to the shaping of the organization structure and actions to be taken on the warehouse layout Design. This theory stipulates that organizational decisions are not controlled and driven by rational objectives if efficiency, pallet rack systems and developing an optimal warehouse layout design but institutions are driven by cultures, routines, and structures to operate at many levels (Jennings, P & Zandbergan,P, 2005)

When organizations decide on the internal and external layout of the warehouse they should put in mind the existing space. The organization needs to make business decisions concerning operation when coming up with the optimal warehouse layout design. The organization will need to assess the current space and determine the organization’s need to upsize or downsize soon to ensure maximum utilization of space. Space planning is not an easy task as it involves business decisions and planned growth (Azzizan, N & Mohammed, B, 2015).

Warehouse layout and design work together to create a warehouse system that is both expandable and able to meet the organizational demands for its operations (Wariaond & Wathe, S, 2015). By carefully analyzing decisions and demands the organization will come up with the best warehouse layout for the organization that will meet the organization's requirements. It should ensure that areas such as goods in area, main store or reserve stock area, order picking area, marshalling area and, goods out area are taken care of and included.

A good warehouse layout design should adhere to principles (Aishah, 2009)such as making the best use of the space available, minimizing overall cost, using the most suitable unit load, minimizing movement within the warehouse, controlling movement and location of items within the warehouse and, providing safe, secure and environmentally friendly condition to both the items and the people.

(Stazzone, 2020) explains some Types of warehouse layout designs include Static shelving in which these are designed to stay in one place. They are used to hold inventory that is not that heavy. The second one Mobile shelving is meant to hold your manually picked items in less space. They can be either manual or mechanized and some come with a lock for security purposes. The third one is Pallet racking which are racks made out of plastic, woods, or metals and holds inventory that is received in large boxes. The boxes are placed on the pallets racking using a forklift or an automated mechanism. Fourth is the Mezzanine flooring that is a second, third, or fourth floor that is constructed above the warehouse for space-saving storage options.

For effective and efficient warehouse management an organization should come up with a warehouse layout design that best fits the organization and will ease its operations in the routine activities within the warehouse.

2.1.2Total Safety Culture Model

Total safety culture model (Geller, 1994). This encompasses three domains identified as person, behaviour, and environment. The term ‘person’ refers to people’s attitudes, beliefs, personalities where’s ‘behaviour’ refers to safe or unsafe work practices such as compliance and communication and the term environment refers to factors in the work area such as equipment, tools, and machines.

This model explains safety-related terms and factors that would affect organization performance such as safety climate, attitude, behaviour, technology, procedure, training, perception, and other factors that are related to the safety culture of an organization. These are the safety measures that organizations are doing to ensure that their organization activities are conducted in a way that will ensure the safety of its employees and overall items in the organization.

The domain of people in warehouse safety is the involvement of the employees and others (Cigularov, Chen, & Rosecrence, 2010)stallholders are responsible for making the organization safety policies. It also reflects on the safety of the resources available in the organization. Safety knowledge will impact the employees to adopt safety behaviour in the organization.

The domain procedures in warehouse safety are the existence of safety procedures and policies that will aid in warehouse management which overall will aid in organization performance. There should also be policies that will ensure no overcrowding of employees and only those that are designated in the warehouse should be allowed to access the warehouse (Burton, 2018).

The domain technology in warehouse safety is the adoption of equipment and facilities that can improve safety and reduce risks and exposure to hazards (Brown, 1996). The warehouse can be equipped with fire safety technology such as alarms, fire safety routes, exits and signs, sprinkler to sense fire and fire wardens; lifting can be done using lift trucks and pallet trucks to avoid manual lifting which may pose risks to hazards, and slips and trips can be avoided by use of anti-slip paint, tape and shoes, making sure floors and levelled and use of cameras to ensure security is checked within the warehouse. (Burton, 2018). The warehouse should be equipped with personal proactive equipment's which may include hard helmets, high visibility jacket, safety shoes such as safety boots, eye protection items such as safety glasses, goggles and hearing protection aids such as earplugs (Brown, 1996)

The important aspect of ensuring that the total safety culture model is successful in ensuring organization performance is training. This involves the training of staff and employees in adopting safety practices within the organization.

2.1.3 Theory of constraints.

The theory of constraints(TOC) is a management philosophy that was introduced by Eliyahu M. Goldratt. In this theory, the concept is that managing constraints in any operations or an organization is for maximization of the output of operations and objectives of the business. This theory helps organizations to continuously achieve their set objectives. In this theory the main idea is to view the organization as a system and that a system is no stronger than its weakest link according to TOC. The weakest link is identified as a constraint and to make the system stronger

the system will be reconstructed to fully exploit the constraints (Davarzani, 2013).in this case, our issue is dealing with the warehouse management but also the organization as a whole. This ToC will be used to determine the effect of order picking on organization performance. This theory talks about learning your constraints, and if you are not capable of breaking them, learn how to exploit them

Order picking in a warehouse can affect the warehouse at the operational level in that there will be more time spent in locating the goods in the warehouse, increased costs and it can affect customer satisfaction due to delayed deliveries (Murray, 2019). This will require the organization to come up with an order picking system according to their requirements that will find a solution to the bottlenecks that disrupt smooth operations in the warehouse.

(Wheeler, 2017)explains some of the methods of order picking in a warehouse;

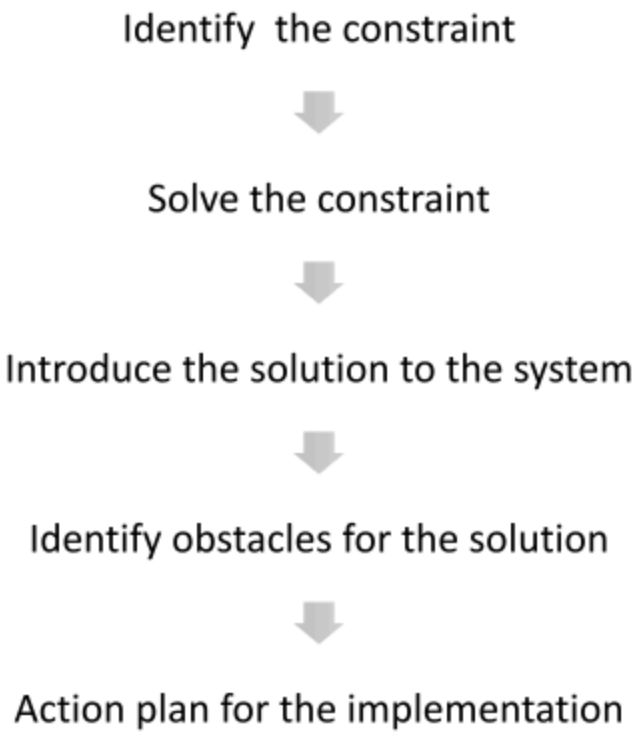
Pick to box; in this method, there is no movement of the person picking the order, the area used for picking is organized in that there are some picking stations that are connected by a conveyor. The person who picks the orders fills the box with the products and then the box moves to other picking stations until the customer order is complete.

Zone picker; this is a method where every order picker is designated in a specific section and pulls to their section when there is an incoming order. The box will move to several sections until the order is complete.

Sorting system; this is a method where there is no movement of the person picking the order instead the orders are bought to him by an automatic system such as a conveyor system, automatic storage.

Wave picking; is a method in which the order picker moves to collect the products that are necessary for the several orders he is handling.

To implement ToC to make operational work in a warehouse more effective and efficient and by that improve organization performance it is best to use the thinking process tool of ToC. It involves five steps which areas in the figure below;



Thinking process tool

Figure 3

ToC is order picking is identifying the limitations involved in it, solving the constraint, introducing a solution, identify the obstacles to the solution and action plan for the implementation. To improve organization performance there should be an efficient and effective order picking criteria that will enhance the smooth flowing or warehousing operations.

2.2 Empirical Review

2.2.1 Effect of warehouse layout on organization performance

According to (Gorvea,2011) continuous performance of the objective of any organization because it is only through better performance that the organization will be able to grow, progress, and meet its objectives and goals. Layout designs are the physical arrangement of items and elements such as workstations, machines, and materials in a firm. The aim of layout designs to aid in the smooth flow of staff, materials, and information through the organization. An organization needs to come up with a warehouse layout design that is the best fit for it because it involves a lot of input in resources and misjudgments and wrong ideas can lead to losses in the organization hence poor productivity.

(Kumar, 2014) states that a warehouse layout design is essential to the success of the organization. Even if the space is limited, if the warehouse is not optimized or laid out correctly the organization will incur losses in productivity, underutilization of space capacity and it will be forced to deal with storage inadequacies (Harold, 2010). An organization should come up with a successful warehouse design that is in line with the company's strategy and the life span of the investment. (Baker, P & Canessa, M, 2009) warehouse design is a highly complex task because it affects other functions of an organization's ability to operate effectively and curb competitiveness. The requirements and expectations of a warehouse design are changing from time to time.

The type of warehouse layout design is determined by the type of warehouse objective. There are three types of warehouses reduction, distribution, and contract warehouses. Production warehouses handle raw materials and finished goods and often have few inflows than outflows. Distribution warehouses store products that are meant to be distributed to other areas. Contract warehouses deal with a third party to handle goods on behalf of an organization.

The organization will incur high costs when coming up with a suitable warehouse layout design that best fits the organization. According (Ashayeri & Gelders, L, 1985) is important that warehouse designers come up with creative and analytical skills to handle the complex interactions between warehouse activities, future demands, and space requirements. The

warehouse designer should come up with a warehouse design layout that will satisfy the following two parts. Part one covers the warehouse objectives, strategy, and demand in the warehouse. The second part covers the faculty design including equipment setup, space requirements, and layout. All these should be considered when coming up with a successful warehouse design.

Over the years there has been optimization of warehouse layouts designs to reduce high costs in which it aims in reducing labour task force within the warehouse operations. Over the years organizations are adopting technologies into their warehouses, this might be in form of process automation in which is system automation to digitize manual processes and physical automation which is a mechanized process such as robotic systems (Caudell, 2018). Although warehouse automation is a very costly process and complex it also has some advantages such as leads to improved productivity, space efficiency, reduced costs, and product security.

2.2.2 Effect of warehouse safety on organization performance

Safety and security in a warehouse are becoming more of an important issue. Workplace safety and security are very important to both the employees and the organization. Improving employee's productivity and occupational health and safety (OHS) has an important role in improving organization performance. (Reiners, G, Cremer, K, & Buytaert, J, 2011) and (Reiners, 2010) argues that the aspect of a strong safety culture includes the dimension of people, procedures, and technology. (Fuller & Vassie, 2004) states that a majority of (near) accidents are caused by human error. This shows that for a warehouse to be safe for its employee they should have safety knowledge and skills. They should be aware of the safety guidelines in the warehouse operations to avoid accidents. There should also be a safety culture in the warehouse which includes the guidelines and rules on how to conduct the operations in the warehouse this includes even the people allowed to operate in the warehouse. Setting up such rules will reduce congestion and future accidents in the warehouse.

Organizations are adopting technology in their warehouse to improve the safety of the employees. Organizations are coming up with innovations on how to improve warehouse safety and reduce accidents that happen in the warehouse. Technology fills existing in the workforce by

taking over repetitive or dangerous tasks hence creating a safer and more productive environment for the employees (Rickard, 2019). Organizations implement advanced software that can take up many tasks and complete them faster. This software may include robotic hardware which may include conveyors to automate storage systems and retrievals, these systems run with utmost efficiency, fulfil orders, and reduce warehouse accidents that may have been caused by an employee.

The most common injury in the warehouse is caused by forklifts. Technology may take place instead of human forklift and pallet jack drivers as autonomous vehicle technology continues to evolve. This will reduce accidents between warehouse employees and forklifts (Nichols, 2019). Implementation of a warehouse safety technology can be a hard task within the organization in terms of the high initial investment in purchasing the robots and software and maintenance of the robots can be also an issue. Accidents may also occur through automation in cases where the machines overheat and may cause fire and cause injuries and to some extent death to some employees.

When implementing a safety culture in an organization it might be an issue because the organization will need resources such as time and money to hire experts to train the employees on issues concerning the warehouse guidelines and routines to avoid accidents. They will also need to equip the employees with safety equipment such as safety boots, reflectors, and aprons. It is important for an organization to also consider its leaders such as managers if they are promoting a safe and secure working environment and if they are emphasizing to their employees to ensure that the warehouse is a safe, secure, and accident-free environment to its workers.

2.2.3 Effect of order picking on organization performance

(Wubalem, 2018) explains that when conducting order picking in a warehouse a lot of errors can occur depending on the time of their detection. Such errors can include when the error is detected by the employees doing the picking, this error may not affect the customers but may affect time and cost for their correction. Another error is when the error is detected when there is an ongoing inventory inspection, this error will consume a lot of time cause its more laborious and it might

lead to restocking the wrongly picked items and generating a new order for the correct items. Another type of error that may occur is when an error is detected after the items have left the warehouse to other areas be it, final consumers, this will lead to the error being detected by the customers handling the items. This type of picking error may lead to continuous complaints from the customers. such errors that may occur when picking in a warehouse can be disastrous to the organization's performance in the long.

Order picking is one of the most important activities in the warehouse. It involves defining a sequence of visiting specific locations in the warehouse in which each part of the order is stored. The process of order picking is a very laborious and costly activity in the warehouse (Dukic, G, Ceesnik, V, & Opetuk, T, 2010). The order picking process has a direct influence on the speed of delivery of items.

Over the year's organizations have used technology as a way to automatic order picking processes in the warehouse to reduce the costs and laborious activities. An organization must develop a picking technique that perfectly fits the needs of the organization while putting in mind the challenges such as diverse inventory and revolving doorkeepers. (Glynn, 2020) defined automated warehouse picking as the implementation of robotic or semi-robotic technologies that enhance the work of human pickers. This will result in reduced walking time and shorten picking routes and support accurate picking and packing.

As technology advances daily there are all sorts of automated warehouse picking systems in the market. They include machines such as conveyors, automated storage and retrieval systems and shuttles, that help in eliminating walking and shorten fulfilment times. Automated warehouse picking includes the same steps as traditional picking methods but without the risks of human errors or slowdowns and inefficient tracking. (Glynn, 2020). An organization needs to come up with an order picking process that is beneficial to the warehouse and in the long term enhance organization performance.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This study focused on H Young Co. (E.A.) organization. The choice of the locality takes care of both the main office and its industrial plot. This chapter will introduce us to the research design, the target population of our study, sampling techniques to be used in our study, data collection methods, pilot study, and data analysis and presentation.

3.1 Research design

(Malhotra, 2010) defines research design as "a framework for conducting research project" (Kamau, Githii, & Njau, 2014) that explains that research design specifies the details of the procedures needed to obtain information to structure and solve a research problem.it is important to come up with a good research design that will communicate the features of the study. The research to be used in this study is descriptive where it will describe basic features of the data of the study.

3.2 Target population

A population refers to the total number of individuals, units, objects, and elements with common characteristics and attributes that meet the criteria of a group that a researcher will target. He targets population targeted by this study is the staff and employees who work in the warehousing department of H Young CO&LTD. The organization has employed 1000 employees in its main office and industrial plot. My main focus will be those who are dealing with warehousing operations in the organization. These include managers, stores keepers and dispatch workers.

3.3 Sampling technique methods

(Kamau, Githii, & Njau, 2014) states that sampling design is a way of identification of a proportion in a population that will be included in a research study. A judgmental sampling technique will be used in this study. The target population will be divided into sets and the choice

of the most advantaged and in a position to provide required data for this study will be selected. In this case, only those who participate in warehouse management will be selected for the study. A sample size of 50 respondents will be selected to respond to this study.

3.4Data collection methods

The primary data collection procedure will be used in this study to give the raw information. data will be collected through the administering of questionnaires to the individuals who work in the warehousing department to obtain the necessary data required for this study. This is to acquire primary data for the study. The questionnaire will be designed to obtain both qualitative and quantitative data.

3.5The pilot of the study

This is a preliminary study conducted to evaluate feasibility, duration, costs, adverse events, and improve upon the design study before the performance of a research study. The aim of the research project is to be completed in 6 months.

Data reliability will be based on the research result of this study. To ensure research validity, the researcher will apply appropriate data management techniques. Data will be checked carefully with other sources such as secondary data to ensure authenticity and accuracy.

3.6 Data analysis and presentation

Data analysis is the process of inspecting, transforming, and modelling data to come up with useful information, conclusions that support decision making. The collected data in this study will be analyzed through descriptive statistics which include percentages, means, modes, and median scores and proportions. The data will be presented using charts and tables.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction

This chapter introduces us to the data analysis, results and discussion about the findings.

4.1 Presentation of findings

Table 4.1

Instrument	**Frequency**	**percentage**
Reached respondents	38	95
Not reached	2	5
Total	**40**	**100**

Source: Field Data (2020)

Table 4.1 shows that 40 questionnaires were administered and only 38 were completed. It represented a 95% response rate.

4.2 Background information

4.2.1 Gender of the respondents

Table 4.2

Gender	Frequency	percentage
Female	15	39.5%
Male	23	60.5%
Total	38	100

Source: Field Data (2020)

It is evident that men are the majority to women in the warehouse department of the organization.

4.2.2 Age brackets of the respondents

The researcher found that the age brackets of the respondents were as follow in **Table 4.3**

Table 4.3

Category	Frequency	percentage
18-25	4	10.5
26-35	10	26.3
36-45	14	36.8
Above 45	10	26.3
Total	38	100

Source: Field Data (2020)

From table 4.3 it is evident that respondents that were in the age bracket 18-25 were 10.5%, 26-35 were 26.3%, 36-35 were 36.8% and above 45% were 26.3%. This implies that the majority of the respondents were old enough to execute warehouse operations.

4.2.3 Highest academic qualification

The researcher sought to know the academic qualifications of the respondents**. Table 4.4** shows the findings.

Table 4.4

Category	Frequency	Percentage
Certificate holder	4	10.5
Diploma holder	10	26.3
Undergraduate holder	22	57.8
Graduate	2	5.3
Total	**38**	**100**

Source: Field Data (2020)

From Table 4.4 it is clear that the majority of the respondents were undergraduate degree holders who represented 57.8%. The minority were Graduates with 5.3% and certificate holders with 10.5% and diploma holders with 26.3%. This implied that the organization had more undergraduate degree holders.

4.2.4 years of service in the organization

The researcher wanted to find out the years of service of the respondent in the organization in the current position. The results of the findings are as shown in **Table 4.5**

Table 4.5

Years of service	Frequency	percentage
Below 1 year	2	5.2
1-5 years	12	31.6
6-10 years	14	36.8
0ver 10 years	10	26.3
Total	38	100

Source: Field Data (2020)

T**able 4.5** shows that majority of the respondents have been in the organization for more than 6 years hence they have good knowledge of warehouse management in the organization.

4.3 Effects of warehouse layout on organization performance

The researcher sought to find out how the warehouse layout affects the organization performance. Table 4.6 shows the results of the findings.

5.Strongly Agree 4. Agree 3. Neutral 2. Disagree 1. Strongly Disagree

NO.	CHALLENGES	5	4	3	2	1	∑fi	∑fiwi	$\frac{\sum fiwi}{\sum fi}$
1	Is it easy to locate goods in the warehouse?	10	16	10	2	0	38	148	3.89
2	is the picking of goods in the warehouse easy to retrieve?	16	10	8	3	2	38	152	4.00
3	Is there enough inward space in the warehouse?	2	18	16	2	0	38	134	3.53
4	Is the racking system efficient?	4	4	10	4	16	36	90	2.37
5	Is the picking path efficient to make work easier?	3	18	5	4	8	38	118	3.10

From table 4.6 it was found that the majority of the respondents found that it was easy to locate goods in the warehouse, picking of the goods was easy to retrieve and the majority of the respondents found that the racking system was not efficient and that the picking path was efficient to make it easier.

The researcher also asked the respondents if there are any plans in the organization to change the warehouse layout and the results are as follows

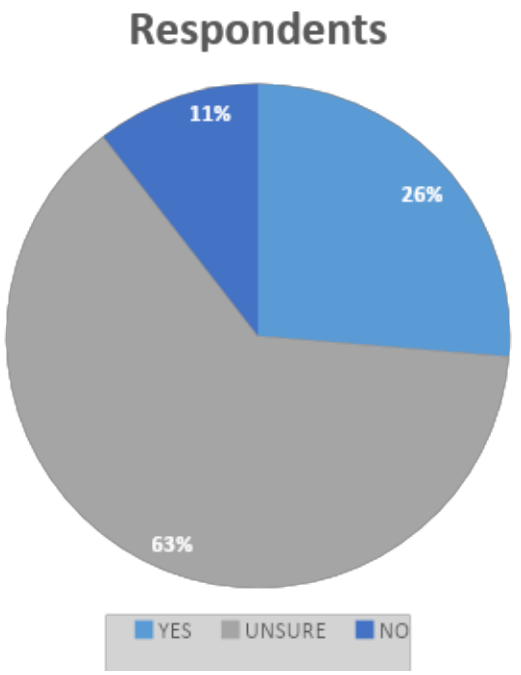


Figure 4

The chart shows that 63%, majority of the respondents were unsure about the possibility of changing the warehouse layout design

The researcher also asked the respondents if the organization warehouse layout design is appropriate for the goods that the organization handles and the following were the results

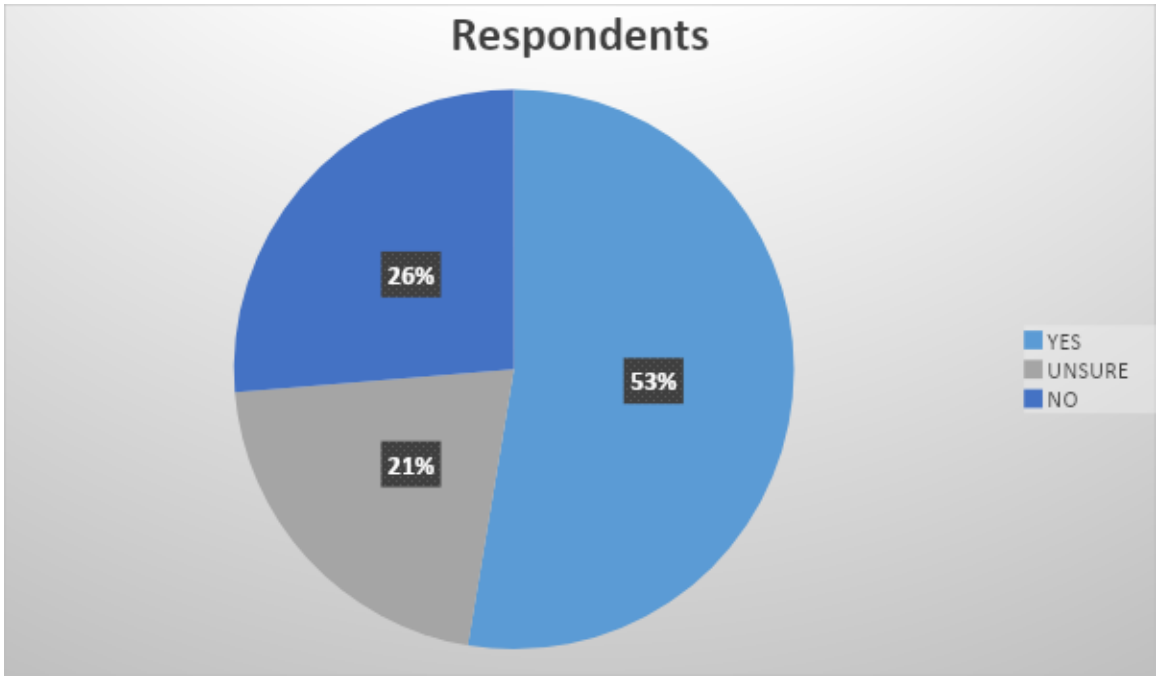


Figure 5

From the figure, 53% of the respondents said yes that the warehouse layout design was appropriate for the goods the organization handles while 21% were unsure and 26% said no.

4.4 Effects of warehouse safety on organization performance

Table 4.7 will show the findings on the effect of warehouse safety on organization performance.

i. To what extent do you agree with the following challenges of warehouse safety on organization performance.

5.Strongly Agree 4. Agree 3. Neutral 2. Disagree 1. Strongly Disagree

Table 4.7

NO	CHALLENGES	5	4	3	2	1	∑fi	∑fiwi	$\frac{\sum fiwi}{\sum fi}$
1.	Is failure to wear proper equipment a cause of accidents in the warehouse?	20	14	4	0	0	38	224	5.89
2.	Does lack safety education of warehouse operation a cause of accidents?	18	18	0	0	0	38	162	4.26
3.	Do the long hours of work affect the way you do your duties in the warehouse?	20	14	2	2	0	38	166	4.37
4.	Do you think the racks in the warehouse keep objects from falling on people from time to time?	18	20	0	0	0	38	170	4.47

Field Source Data (2020)

From table 5.7 it is evident that the majority of the respondents believe that failure to wear proper equipment can cause accidents in the warehouse, and lack of education about safety in the warehouse operations can cause accidents. Most also believe that the racks in the warehouse keep objects from falling on people. The majority also think that the long hours of work affects the way they do their duties in the operations.

The researcher also asked the respondents about the following

I. If they held meetings on regard to safety in the organization and the results are the following

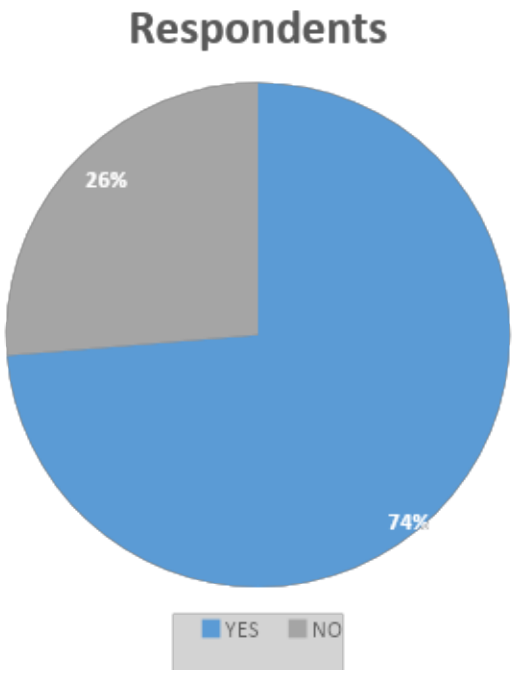


Figure 6

From the chat, 74% said yes while 26% said no

II. Training on warehouse safety procedures.

Results are as follows;

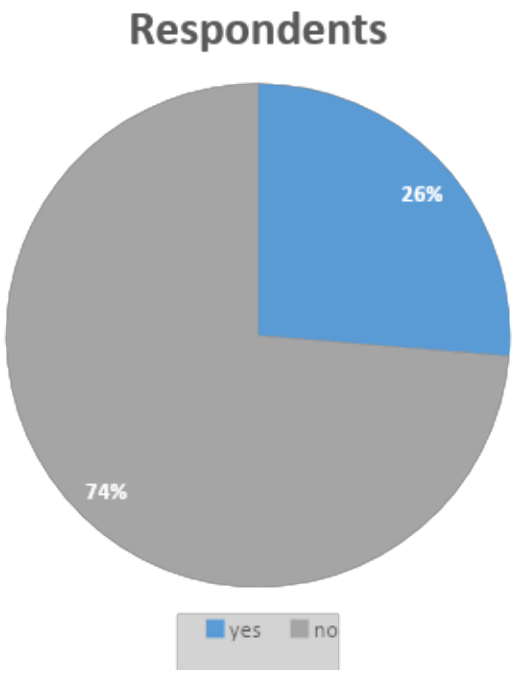


Figure 7

From the chart, 74% who are the majority said that they received no training on warehouse safety procedures while 26% said they received training procedures.

III. Medical doctors and nurses are present in the organization in case of an emergency.

The results are as follows;

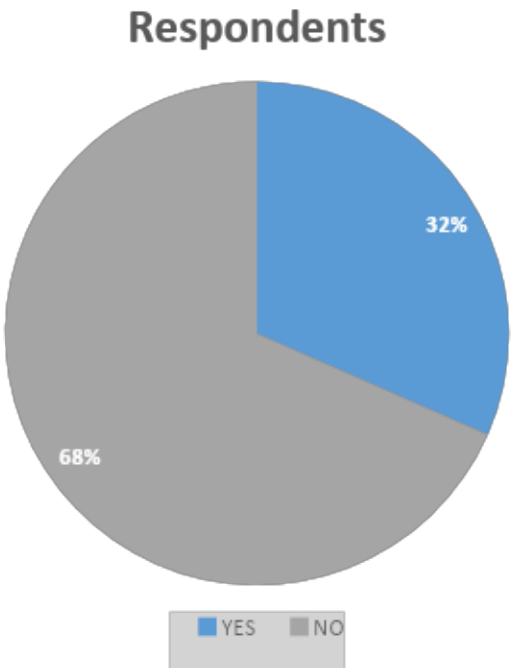


Figure 8

From the chart majority of the respondents who were 68% said that there were no available nurses or medical doctors present in the organization in case of accidents while 32% said that there were present.

4.5 Effects of order picking on organization performance

i. To what extent do you agree with the following as the challenges of order picking on organization performance.

5.Strongly Agree 4. Agree 3. Neutral 2. Disagree 1. Strongly Disagree

NO	CHALLENGES	5	4	3	2	1	∑fi	∑fiwi	∑fiwi/fi
1.	The storage of H young CO&LTD is easy for order picking	10	12	10	4	2	38	138	3.63
2.	The warehouse layout design is easy for order picking	8	12	14	2	8	388	142	3.74
3.	Are the formal order picking protocols easy and reliable?	2	2	8	12	14	38	104	2.74
4.	Is it easy to locate goods in the warehouse using less time?	10	20	0	4	4	38	142	3.74
5.	Are items assigned to specific areas to make it easy to locate them?	28	10	0	0	0	38	180	4.74

Field Source Data (2020)

Table 4.7 shows that the majority of the respondents find it easy for order picking, easy to locate goods in the warehouse and it is easy to locate goods in the warehouse using less time. The majority find the formal order for picking protocols is nor easy and reliable.

The researcher also asked other questions to respondents. The following are the questions:

I. Are there systems used to track orders in the warehouse?

The results are as follows;

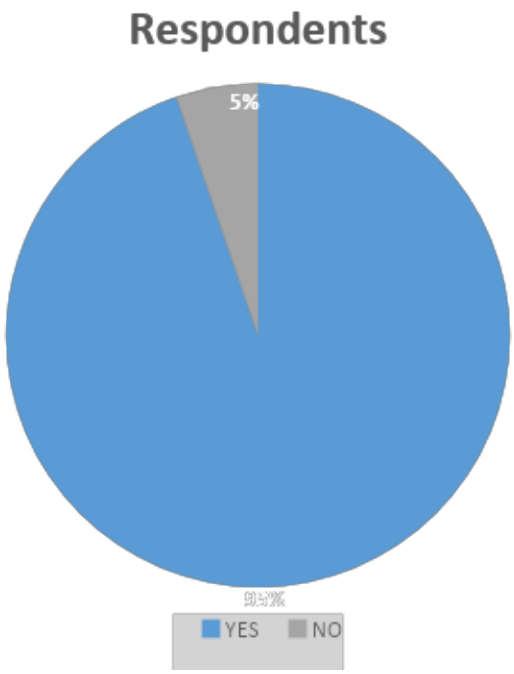


Figure 9

From the chart, 95% of the respondents said that there were systems used to track orders in the warehouse while 5% said no.

II. Do you believe there is enough manpower for the order picking

The results are as follows;

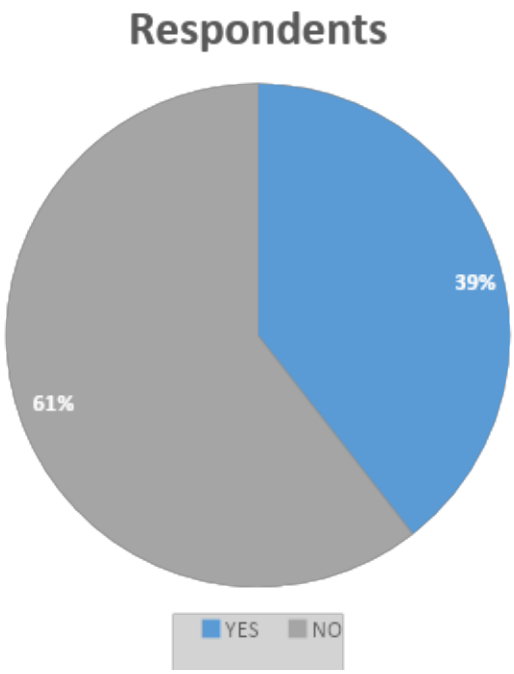


Figure 10

From the chart majority which is 61% of the respondents thought that there is not enough manpower for the order picking in the warehouse.

III. Do you think the organization is using an outdated process in the order picking

The results are as follows

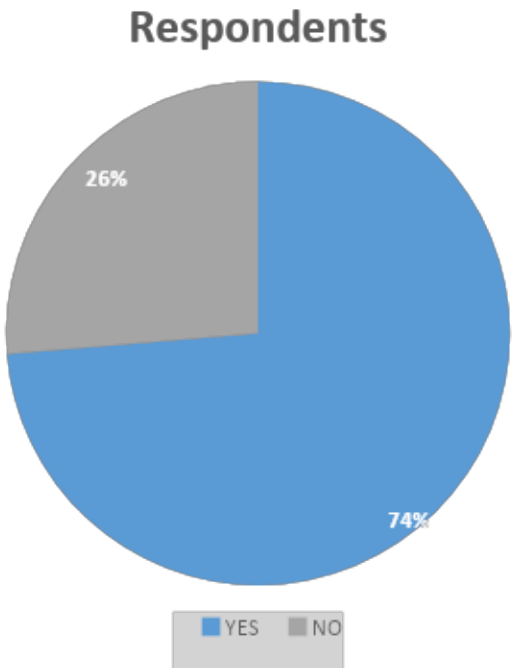


Figure 11

From the chart, 74% of the respondents think that the organization is using an outdated process in order picking. 26% said no to the question.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter will deal with the summary, conclusions and recommendations. It will explain in details the effects of warehouse management on organization performance.

5.1 Summary

The discussion in this research is centred on the three research questions raised in this study.

5.1.1 Effect of warehouse layout on organization performance.

The first research objective focused on finding out the effects of warehouse layout on organization performance. It was revealed that a proper warehouse layout that would suit the organization's goods will be appropriate to make activities inside the H Young CO&LTD warehouse easier. This will enable better cooperation between employees that are working in the warehouse. Time will also be saved as it will be easy to locate and retrieve goods from the warehouse. Warehouse layout will enhance the organization performance as employees will not waste their times to locate, and retrieve goods as through the appropriate warehouse layout it will be easy to locate and retrieve goods.

5.1.2 Effects of warehouse safety on organization performance

It was revealed that proper safety equipment's such as safety boots, helmets and proper clothing helps in safety around the warehouse this enhances organization performance as employees will be safe and will be able to do their jobs properly hence there will be smooth running of operations in the organization.

5.1.3 Effects of order picking on organization performance.

It was revealed through this study that appropriate and efficient order picking will help the organization in their operations as employees will not find it difficult to process orders and hence contribute to the smooth flowing of the organization operations.

5.2 Conclusion

based on the research findings of this study, it is concluded that warehouse layout, warehouse safety and order picking are part of warehouse management that will contribute to efficiency in the organization.

Warehouse layout should be appropriate and take into consideration issues such as space to enable goods to get in and out of the warehouse faster. This will in turn help employees have better coordination and cooperation when handling goods in the warehouse and when releasing them.

Warehouse safety is also a contribution to efficiency in the organization as it reduced accidents that will disrupt the manpower in the organization and issues such as lawsuits that may develop due to accidents and negligence.

Order picking is also a contribution to efficiency in the organization as there should be a process system that is known by all employees and adopted by them to ensure that they upheld the organization's standards for safety, security and productivity.

5.3 Recommendation

Based on the study conclusion; the researcher recommends that;

H Young CO&LTD should adopt an efficient warehouse layout that will be more spacious and enable its employees to locate and retrieve goods at ease.

H Young CO&LTD should adopt warehouse safety measures such as training as most of its employees are not aware of the standards of safety. This training should be conducted for all employees in the organization so that even those that go near the warehouse know the safety protocols and adhere to them.

H Young CO&LTD should use updated order picking systems that are current and they should use technological advancements that other firms are using that deal with the same line of business to be in line with the trends in technology.

5.4 Suggestions for further research

The study suggests further research on warehouse operation activities that will contribute to efficiency in the organization.

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APPENDIX A: REQUEST LETTER

DEAR MR/MRS,

I am an undergraduate student at Africa Nazarene University School of Business doing Procurement and Supply Chain Management. I am writing a research proposal on the effect of warehouse management on organization performance. A case study of H young CO&LTD for the partial fulfilment of undergraduate degree in procurement and supply chain management.

I am writing this letter to request some of your time to answer this questionnaire as part of my research proposal to gather data. I confirm that the information you give in this questionnaire is confidential and will not be shared with anyone. Thank you in advance for participating in my questionnaire.

Yours sincerely,

Kabocha Naomi

APPENDIX B: QUESTIONNAIRE

SECTION: 1

1. Gender F ☐ M ☐
2. Age 18-25 ☐ 26-35 ☐ 36-45 ☐ above 45years ☐
3. Highest academic qualification

certificate ☐ diploma ☐ Undergraduate ☐

Graduate ☐

4. Year of service in the current position

Below 1 year ☐ 1-5 years ☐ 6-10 years ☐ Over 10 years ☐

SECTION: 2

A. EFFECT OF WAREHOUSE LAYOUT ON ORGANIZATION PERFORMANCE

i. Kindly indicate your choice by putting the mark (✔) or (✖) on the appropriate to the following challenges that affect warehouse layout on organization performance.

5.Strongly Agree 4. Agree 3. Neutral 2. Disagree 1. Strongly Disagree

NO.	CHALLENGES	5	4	3	2	1
1	Is it easy to locate goods in the warehouse?					
2	is the picking of goods in the warehouse easy to retrieve?					
3	Is there enough inward space in the warehouse?					
4	Is the racking system efficient?					
5	Is the picking path efficient to make work easier?					

Table 1

ii. Are there plans to change the warehouse layout design?

YES ☐ UNSURE ☐ NO ☐

iii. Do you think this warehouse layout design is appropriate for the goods the organization handles?

YES ☐ UNSURE ☐ NO ☐

B. EFFECT OF WAREHOUSE SAFETY ON ORGANIZATION PERFORMANCE

ii. To what extent do you agree with the following challenges of warehouse safety on organization performance.

5.Strongly Agree 4. Agree 3. Neutral 2. Disagree 1. Strongly Disagree

NO	CHALLENGES	5	4	3	2	1
5.	Is failure to wear proper equipment a cause of accidents in the warehouse?					
6.	Does lack safety education of warehouse operation a cause of accidents?					
7.	Do the long hours of work affect the way you do your duties in the warehouse?					
8.	Do you think the racks in the warehouse keep objects from falling on people from time to time?					

Table 2

iii. Do you hold meetings concerning safety in the warehouse?

YES ☐ NO ☐

iv. Do people get training on warehouse safety procedures in the organization?

YES ☐ NO ☐

v. Are there medical nurses and doctors in the organization that can attend to any accidents that may occur?

YES ☐ NO ☐

vi. Do workers in these organizations have unions in which they can discuss their safety protocols?

YES ☐ NO ☐

C. EFFECT OF ORDER PICKING ON ORGANIZATION PERFORMANCE

ii. To what extent do you agree with the following as the challenges of order picking on organization performance.

5.Strongly Agree 4. Agree 3. Neutral 2. Disagree 1. Strongly Disagree

NO	CHALLENGES	5	4	3	2	1
6	The storage of H young CO&LTD is easy for order picking					
7	The warehouse layout design is easy for order picking					
8	Are the formal order picking protocols easy and reliable?					
9	Is it easy to locate goods in the warehouse using less time?					
10	Are items assigned to specific areas to make it easy to locate them?					

Table 3

iii. Are there systems used to track orders in the warehouse?

YES ☐ NO ☐

iv. Do you believe there is enough manpower for the order picking process?

YES ☐ NO ☐

v. Do you think the organization is using outdated processes in order picking?

YES ☐ NO ☐

APPENDIX C: BUDGET

NUMBER OF ACTIVITY	SUB ACTIVITY	AMOUNT (KENYA SHILLINGS)
1. PROPOSAL WRITING	Materials	600
	Photocopy	300
	Printing	500
	Internet	3000
TOTAL		**KSH 4,100**

Table 4

APPENDIX D: TIMETABLE AND ACTIVITIES SCHEDULE

NUMBER OF WEEKS	ACTIVITIES
4	Preliminaries and chapter 1
5	Chapter two
2	Chapter three
1	References
1	Appendices
1	Report writing
1	PowerPoint writing
2	compilation

Table 5