

**FACTORS INFLUENCING PERFORMANCE OF LOGISTICS MANAGEMENT
COMPANIES, A SURVEY OF LOGISTIC COMPANIES IN KISII COUNTY, KENYA**

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Abstract

Strategies are central to the achievement of sustainable development. These are the driving force of practically every organization that are motivated to grow fast ahead of the competitors, grow in line with the industry or to simply catch-up and defend an existing status. The general objective of this study was to establish factors influencing performance of logistics management companies, a survey of logistic companies in Kisii County. This study adopted a descriptive case study design which would help the researcher to obtain pertinent and precise information on current status of phenomena, situations and groups under study. The study is of significance to all logistics management. This is because they may use the findings of the study to identify those critical factors (management expertise, employee involvement and customer focus) available to help in successful competitive advantage. The Government of Kenya, specifically, the Ministry of transport may find this study very useful in understanding the factors influencing performance of logistics management companies. The study found out; information technology enhances reliability hence performance of logistics companies, on the other hand the study found out that information technology brings about flexibility operations in the organization, enhances integration of logistics companies, it influences timely delivery of goods and services and effective information technology gives orders and clarifies procedures. Logistic management companies' staff competence affects competitive advantage of the organization, similarly; the study established that staff competence and knowledge enhances continuous exercise of the company, high turnover of staff at the company influences continuous training and skills development thus hampers implementation of strategy, lack of

highly skilled labor affects the company when implementing strategy and staff competence enhances skill development and implementation of strategy.

I. BACKGROUND OF THE STUDY

In order to be successful, organizations must be strategically aware. They must constantly be appreciative of the changing market dynamics and competitive situations around them. The businesses or entities must also be willing to clutch quickly on opportunities and exploit all their strategic capabilities, adapting to the inherent changes to ensure strategy is harnessed and enhanced. Organizations must be able to act quickly in response to opportunities and barriers in a bid to maintain competitive advantage and consequently overall competitiveness (Ehmke, 2009; Papulova & Papulova, 2010). Strategies are central to the achievement of sustainable development (Amit & Zolt, 2001). These are the driving force of practically every organization that are motivated to grow fast ahead of the competitors, grow in line with the industry or to simply catch-up and defend an existing status. The orientation of these organizations is to expand, to reach and to penetrate into new market segments despite of all the hindrances that the market environment imposes. Organizations are also initiated by efforts to maximize profit and minimize risks through strategizing. Such initiatives were undertaken to drive sustainable competitive advantage of the company. As such, sustainable competitive advantage should be the basis of above average performance (Betz, 2002).

One important strategy that has been touted as an important component in improving competitive advantage in any organization, is Logistic management (Logistic management) (Ehmke, 2009; Papulova & Papulova, 2010). Logistic management is attractive whenever customers' needs and preferences are too diverse to be fully satisfied by a standardized product or by sellers with identical capabilities. Logistic management is a firm-wide management philosophy of continuously improving the quality of the products/services/processes by focusing on the customers' needs and expectations to enhance customer satisfaction and firm performance.

Logistic management is managed and controlled through all processes within the firm. For organizations to establish and maintain quality they are forced to adopt quality management system in the organization strategy. According to Hoyle (2007) importance of Logistic management is regarded as the backbone of organization, globalization has influenced the development of quality in major ways that include quality control, quality planning, quality assurance and quality improvement. All these activities are essential pillars of excellence administration.

Motwani (2001) a Kenyan scholar visualizes Logistic management as constructing a house. First, putting top management commitment to Logistic management as the base or foundation. Without a strong foundation, the house will never stand. as soon as the foundation is set, staff training and empowerment, benchmarking, quality assessment, customer satisfaction and operational efficiency must be attended to. The laying of these pillars on top of the foundation consequently leads to effective competitive advantage, organizational performance and logistics management. These are the final elements to achieving Logistic management. However, there is lack of empirical studies on Logistic management and competitive advantage in the transport sector; hence the need for the present study.

II. STATEMENT OF THE PROBLEM

There is heightened competition among logistics companies players operating in Kisii County, Kenya. As a result of this competition, many transport players are forced to become more innovative in order to post better returns and performances. The innovative ways which the transport players have come up with include amongst others the use of logistic management and other technologically improved means and better competitive advantage strategies (Ehmke, 2009; Papulova & Papulova, 2010). However, many transport players are seemingly not using the available logistic management practices at their disposal and those who use it seemingly do not do so effectively. Issues like lack of staff training, poor leadership, lack of logistic management enabling resources have created a skewed competitive advantage process.

In a KNBS (2011) report done in Kisii, a town that has been touted as booming in transport activity, it was shown that customers had a hard time selecting a transport company that had an edge over its rivals to provide transport services. Moreover, some had a reputation of delaying logistics services and doing unsatisfactory work. Many Commercial banks logistics companies in Kenya have reported losses at some level. The use of logistic management in the form often prescribed has not been investigated. There is need to therefore determine the effect of Logistic management practices on competitive advantage of transport firms, a survey of transport companies in Kisii County.

III. OBJECTIVES OF THE STUDY

- i) To determine the influence of information technology on performance of logistics management companies in Kisii County.
- ii) To establish the influence of staff competence on performance of logistics management

companies in Kisii County.

iii) To examine to the effects management expertises on performance of logistics management companies in Kisii County.

IV. RESEARCH METHODOLOGY

This study adopted a descriptive case study design which would help the researcher to obtain pertinent and precise information on current status of phenomena, situations and groups under study. The study utilized the descriptive case study design to find out the effect of Logistic management practices on competitive advantage of logistics management companies. Target population is a group of individual from which a sample is taken, every individual who work in the case study of interest should be included in the target population whether they are going to participate in the study or not. The sample consisted of 75 respondents selected from the target population of 250 participants. The sample was 30% of the total population and was suitable for this study. The researcher used questionnaires as a tool for collecting data. In order to ensure validity and reliability, the questionnaires were composed of carefully constructed questions to avoid ambiguity and to facilitate collection of relevant answers to all the research questions. The questionnaires were pre-tested in a pilot study through a sample of 30% of selected sample to avoid respondent contamination, after which corrections and adjustments was done; this ensured reliability. The instruments were presented to the supervisors to ascertain its validity before it is taken to the field to collect data. Data was processed and analyzed using descriptive statistics such as percentages, frequencies and cumulative percent. Analyzed data was tabulated and presented using frequency tables, percentages and explanations for easy understanding.

V. RESEARCH FINDING AND DISCUSSION

Influence of Information Technology on Performance of Logistics Companies

The study sought to find out the influence of information technology on performance of logistics companies, table 1 shows the results.

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Table 1: Influence of Information Technology on Performance of Logistics Companies

Table 1: Influence of Information Technology on Performance of Logistics Companies

Influence of Information Technology on Performance of Logistics Companies		Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Total
Information technology enhances reliability,	F	26	36	5	3	1	71
	%	37	51	7	6	4	100
Information technology brings about flexibility operations in the organization ,	F	25	35	4	6	1	71
	%	35	49	6	8	2	100
Information technology enhances integration,	F	44	26	1	0	0	71
	%	61	37	2	0	0	100
Information technology influences timely delivery of goods and services	F	27	38	4	2	0	71
	%	38	54	6	3	0	100
Effective information technology gives orders and clarifies procedures	F	27	37	4	3	0	71
	%	38	52	6	4	0	100

The study established that Information technology enhances reliability hence performance of logistics companies, 37% total number of the respondents strongly agreed to this, 51% just

agreed, 7% were undecided 6% disagreed while 4% total number of the respondents strongly disagreed.

The study found out that information technology brings about flexibility operations in the organization , 35% total number of the respondents strongly agreed to this, 49% just agreed, 6% were undecided 8% disagreed while 2% total number of the respondents strongly disagreed. The study revealed that information technology enhances integration of logistics companies, 61% total number of the respondents strongly agreed to this, 35% just agreed, 2% were undecided 0% disagreed while 0% total number of the respondents strongly disagreed. The study established that information technology influences timely delivery of goods and services, 38% total number of the respondents strongly agreed to this, 54% just agreed, 6% were undecided 3% disagreed while 0% total number of the respondents strongly disagreed. The study found out that effective information technology gives orders and clarifies procedures,

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38% total number of the respondents strongly agreed to this, 52% just agreed, 6% were undecided 4% disagreed while 0% total number of the respondents strongly disagreed. The majority of the respondents support that information technology influence performance of logistics companies, Frazelle, (2002) confirms that information is the motor that drives the logistics cycle. Without information, the logistics system would not be able to run smoothly. Managers gather information about each activity in the system and analyze that information to coordinate future actions. For example, information about inventory levels and consumption must be gathered to ensure that a manager knows how much more of a product to procure. Logistics is not just a set of operations to move products from one place to another, but rather a key element on helping the people to meet their needs and to achieve the goals of various activities. Logistics refers to activities concerned with selecting, financing, delivering, and distributing supplies.

Influence of Staff Competence on Performance of Logistics Companies

The study sought to establish the influence of staff competence on performance of logistics companies. The response rate from the field was recorded as shown in table 2.

Table 2 Influence of Staff Competence on Performance of Logistics Companies

Influence of Staff Competence on Performance of Logistics Companies	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Total
Logistic management F	35	25	5	6	2	71
companies' competence affects competitive advantage %	49	35	7	8	3	100
Staff competence and knowledge enhances continuous exercise of the company F	31	37	2	1	0	71
%	44	52	3	2	0	100
The high turnover of staff at the company influences continuous training and skills development thus hampers implementation of strategy F	32	33	3	2	1	71
%	45	46	4	3	2	100
lack of highly skilled labor affects the company when implementing strategy F	35	34	5	6	1	71
%	49	48	7	8	2	100
Staff competence enhances skill development and implementation of strategy F	31	33	3	3	1	71
%	44	47	4	4	2	100

The study found out that logistic management companies' staff competence affects competitive advantage of the organization, 49% total number of the respondents strongly agreed to this,

35% just agreed, 7% were undecided 8% disagreed while 3% total number of the respondents strongly disagreed.

The study established that staff competence and knowledge enhances continuous exercise of the company, 44% total number of the respondents strongly agreed to this, 52% just agreed, 3% were undecided 2% disagreed while 3% total number of the respondents strongly disagreed. The study established that the high turnover of staff at the company influences continuous training and skills development thus hampers implementation of strategy, 45% total number of the respondents strongly agreed to this, 46% just agreed, 4% were undecided 3% disagreed while 2% total number of the respondents strongly disagreed.

The study found out that lack of highly skilled labor affects the company when implementing strategy, 49% total number of the respondents strongly agreed to this, 48% just agreed, 7% were undecided 8% disagreed while 2% total number of the respondents strongly disagreed.

The study revealed that staff competence enhances skill development and implementation of strategy, 44% total number of the respondents strongly agreed to this, 47% just agreed, 4% were undecided 4% disagreed while 2% total number of the respondents strongly disagreed. The majority of the respondents supported that staff competence on performance of logistics companies, Amadi, (2014) in a descriptive survey study on training and growth of staff and how it related to employees' performance observed certain elements that are important. In the regressed results, the author found that training development is very important in the enhancement of organizational goals and overall performance. The discussed training methodology and argued that a training method that was encompassing and all-inclusive worked better in organizations. However, how such training development affect performance was not covered by this study and hence a gap exists that the present study will help to cover.

Influence of Supply Chain Management on Performance of Logistics Management Companies

The study sought to find out the influence of supply chain management on performance of logistics management companies, table 3 shows the results.

Table 3 Influence of Information Technology on Performance of Logistics Companies

Influence of Supply Chain Management on Performance of Logistics Companies		Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Total
The company has adopted the use of supply chain management practices effectively	F	25	35	4	6	1	71
	%	35	49	6	8	2	100
There is sufficient financial resources that has enabled it to compete effectively	F	27	38	4	2	0	71
	%	38	54	6	3	0	100
There are sufficient physical resources	F	47	18	4	2	0	71
	%	66	25	6	3	0	100

The study found out that; logistic companies in Kisii has adopted the use of supply chain management practices effectively, 35% total number of the respondents strongly agreed to this, 49% just agreed, 6% were undecided 8% disagreed while 2% total number of the respondents strongly disagreed.

The study revealed that, logistic companies in Kisii has sufficient human resources that has enabled it to compete effectively, 61% total number of the respondents strongly agreed to this, 37% just agreed, 2% were undecided 2% disagreed while 0% total number of the respondents strongly disagreed.

The study established that, logistic companies in Kisii sufficient financial resources has enabled it to compete effectively, 38% total number of the respondents strongly agreed to this, 54% just agreed, 6% were undecided 3% disagreed while 0% total number of the respondents strongly disagreed.

The study found out that there are sufficient physical resources that has enabled it to compete effectively, 38% total number of the respondents strongly agreed to this, 66% just agreed, 25% were undecided 6% disagreed while 3% total number of the respondents strongly disagreed. The majority of the respondents support that supply chain management influences performance of logistics management companies, Hugo, (2003) confirms that every business fits into one or more supply chains and has a role to play in each of them.

VI. RESEARCH FINDINGS AND DISCUSSION

The majority of the respondents support that information technology influence performance of logistics companies, Frazelle, (2002) sanctions the idea that information is the engine that strengthens the logistics cycle. Without information, the logistics system would not be able to run smoothly. Managers gather information about each activity in the system and analyze that information to coordinate future actions. For example, information about inventory levels and consumption must be gathered to ensure that a manager knows how much more of a product to procure. Logistics is not just a set of operations to move products from one place to another, but rather a key element on helping the people to meet their needs and to achieve the goals of various activities. Logistics refers to activities concerned with selecting, financing, delivering, and distributing supplies.

The majority of the respondents supported that staff competence on performance of logistics companies, Amadi, (2014) in a descriptive survey study on training and growth of staff and how it related to employees' performance observed certain elements that are important. In the regressed results, the author found that training development is very important in the enhancement of organizational goals and overall performance. The discussed training methodology and argued that a training method that was encompassing and all-inclusive worked better in organizations. However, how such training development affect performance was not covered by this study and hence a gap exists that the present study will help to cover.

The majority of the respondents support that supply chain management influences performance of logistics management companies, Hugo, (2003) confirms that every business fits into one or more supply chains and has a role to play in each of them. The pace of change and the uncertainty about how markets evolve has made it increasingly important for companies to be aware of the supply chains they participate in and to understand the roles that they play. Customer service at its most basic level means consistently high order fill rates, high on time delivery rates, and a very low rate of products returned by customers for whatever reason.

VII. REGRESSION ANALYSIS

The multiple regression models used are as under:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \dots \dots \dots (1)$$

Where Y is performance of logistic companies (dependent variable)

α is constant

X is other factors influencing performance of logistics companies

β is the regression coefficient which may be positively or negatively affecting dependent and independent variables.

$$EP = \alpha + \beta_1 IT + \beta_2 SC + \beta_3 ME + \beta_4 R\&R + \epsilon \dots \dots \dots (2)$$

Where PLC = Performance of Logistic Companies (Dependent Variable) β_1 IT = Information

Technology (I.V) β_2 ME = Staff Competence (I.V), β_3 IT= Management Expertise (I.V).

Table 4 Performance of Logistic Companies, information technology, staff competence, management expertise

ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	367.840	6	84.578	320.250	.000a
Residual	304.560	285	.647		
Total	552.730	388			

Predictors, information technology, staff competence, management expertise

The table above shows that The F value is 320.250 and is significant because the significance level is = .000 which is less than $P \leq 0.05$. This implies that over all regression models is

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statistically significant, valid and fit. The valid regression model indicates that all independent variables are explaining that there is a positive and significant relationship with dependent variable.

Table 5 Summary

Model	R	R Square	Adjusted R square	std. Error of the Estimate
1	.966a	.911	.705	.93264

Predictors:information technology, staff competence, management expertise

From the table above, the regression coefficient „R = .966 or 94.4% relationship exist between (I.V's) and (D.V). The coefficient of determination, $R^2 = 0.911$ which show that 91.1% of variation in performance of logistics companies is explained by information technology, staff competence, management expertise.

Table 6 Table information technology, staff competence, management expertise and performance of logistics companies

Coefficient^a

Model	Unstandardized coefficient		Standardized coefficient	t	sig.
	B	Std Error	Beta		
1 (Predator)	-.173	.401		-.976	.486
information technology	.715	.059	.644	12.504	.000
staff competence	.273	.049	.266	1.458	.000
management expertise	.248	.048	.433	2.086	.001

The above table the regression coefficient for information technology on the performance of logistics companies (β_1) = .644 which shows that one percent increase in information technology increases 64.0 percent in performance of logistics companies level if other variables are kept controlled. The T value is 12.504 which is significant at .000 because significance level is less than $P \leq .05$. It shows that the alternate hypothesis should be accepted that is: information technology has significant positive on performance of logistics

companies. The study shows that the regression coefficient (β_2) = .266 or 26.2 % which indicates that one percent increase in staff competence brings on the average 26.2% increase in performance of logistics companies level if other variables are kept controlled. The T value is 1.458 which is significant at .000 level which is less than the $P \leq .05$. It implies that the alternate hypothesis should be accepted that is staff competence has positive significant effect on performance of logistics companies. It was established that the regression coefficient for management expertise on performance of logistics

companies (β_3) = .433 or 43.1 % which means that oncepercent increase in information technology increase 43.1% on supply chain performance if other variables are kept constant. The T value is 2.086 which is significant at .001. Therefore the study accepted the alternative hypothesis that is management expertise has significant positive effect on performance of logistics companies.

VIII. SUMMARY OF THE FINDINGS

Influence of Information Technology on Performance of Logistics Companies

The study established that information technology enhances reliability hence performance of logistics companies, on the other hand the study found out that information technology brings about flexibility operations in the organization, enhances integration of logistics companies, it influences timely delivery of goods and services and effective information technology gives orders and clarifies procedures. The majority of the respondents support that information technology influence performance of logistics companies, Frazelle, (2002) confirms that information is the motor that drives the logistics cycle. Without information, the logistics system would not be able to run smoothly. Managers gather information about each activity in the system and analyze that information to coordinate future actions. For example, information about inventory levels and consumption must be gathered to ensure that a manager knows how much more of a product to procure. Logistics is not just a set of operations to move products from one place to another, but rather a key element on helping the people to meet their needs and to achieve the goals of various activities. Logistics refers to activities concerned with selecting, financing, delivering, and distributing supplies.

Influence of Staff Competence on Performance of Logistics Companies

The study found out that logistic management companies' staff competence affects competitive advantage of the organization, similarly; the study established that staff competence and knowledge enhances continuous exercise of the company, high turnover of staff at the company influences continuous training and skills development thus hampers implementation of strategy, lack of highly skilled labor affects the company when implementing strategy and staff competence enhances skill development and implementation of strategy. The majority of the

respondents supported that staff competence on performance of logistics companies, Amadi, (2014) in a descriptive survey study on training and growth of staff and how it related to employees' performance observed certain elements that are important. In the regressed results, the author found that training development is very important in the enhancement of organizational goals and overall performance. The discussed training methodology and argued that a training method that was encompassing and all-inclusive worked better in organizations. However, how such training development affect performance was not covered by this study and hence a gap exists that the present study will help to cover.

Influence of Supply Chain Management on Performance of Logistics Management Companies

The study found out that; logistic companies in Kisii has adopted the use of supply chain management practices effectively, on the other hand; the study revealed that, logistic companies in Kisii has sufficient human resources that has enabled it to compete effectively, sufficient financial resources has enabled it to compete effectively, and there are sufficient physical resources that has enabled it to compete effectively. The majority of the respondents support that supply chain management influences performance of logistics management companies, Hugo, (2003) confirms that every business fits into one or more supply chains and has a role to play in each of them. The pace of change and the uncertainty about how markets evolve has made it increasingly important for companies to be aware of the supply chains they participate in and to understand the roles that they play. Effective supply chain requires simultaneous improvements in both customer service levels and the internal operating efficiencies of the companies in the supply chain. Customer service at its most basic level means consistently high order fill rates, high on time delivery rates, and a very low rate of products returned by customers for whatever reason. Internal efficiency for organizations in a supply chain means that these organizations get an attractive rate of return on their investments in inventory and other assets they find ways to lower their operating and sales expenses.

IX. CONCLUSION

The study concluded that; information technology enhances reliability hence performance of logistics companies, on the other hand the study found out that information technology brings about flexibility operations in the organization, enhances integration of logistics companies, it influences timely delivery of goods and services and effective information technology gives orders and clarifies procedures. Logistic management companies' staff competence affects

competitive advantage of the organization, similarly; the study established that staff competence and knowledge enhances continuous exercise of the company, high turnover of

staff at the company influences continuous training and skills development thus hampers implementation of strategy, lack of highly skilled labor affects the company when implementing strategy and staff competence enhances skill development and implementation of strategy. Logistic companies in Kisii has adopted the use of supply chain management practices effectively, on the other hand; the study revealed that, logistic companies in Kisii has sufficient human resources that has enabled it to compete effectively, sufficient financial resources has enabled it to compete effectively, and there are sufficient physical resources that has enabled it to compete effectively.

X. RECOMMENDATION TO THE STUDY

The study recommended the following;

Based on the results of the study many may not be aware that factors influencing performance of logistics management companies is not only as a result by information system factors as concluded by Deleon and Mclean (2003) that there are six distinct aspects of information systems namely; staff competence, information technology, Service quality, Usage, user satisfaction, and Net benefit that show information effectiveness. Other corresponding factors, that is, inbound logistics, performance management, logistics cost and inventory control also influence its effectiveness thus a further research should be recommended to enhance more studies on information system effectiveness.

XI. SUGGESTION FOR FURTHER STUDY

The study suggests that future researchers should do the same using other factors not only the information technology, staff competence and supply chain factors but from other corresponding factors that influence the effectiveness of the logistics companies in Kenya.

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