Factors Influencing Outsourcing Of Logistics Services By Manufacturing Firms Listed In The Nairobi Securities Exchange (NSE)

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Abstract
Outsourcing has emerged as one of the popular and widely used business strategy of this globalized era. After exhausting the traditional modes of cost cutting, outsourcing has become the most favoured avenue for cost cutting. This study examined the factors which influence logistics outsourcing decision for large manufacturing firms in Kenya. A survey research design was adopted. The population was all manufacturing firms listed in the NSE. The sample consisted of 90 respondents to get primary data. Quantitative data analysis was used. The study found that logistics outsourcing decision was greatly influenced by the need to reduce operational costs and need to gain access to quality service.

Keywords: logistics, outsourcing and manufacturing firms

1. Introduction
1.1 Background of the study
The outsourcing of logistics services to partners, known as "third-party logistics providers" has increasingly become a powerful alternative to achieving competitive advantage. The outsourcing phenomenon has been increasingly receiving attention both from academic and practitioners. From the strategic perspective, this has created an opportunity to outsource part or the entire manufacturing operations. Since the 1980s there has been a trend of outsourcing among organizations across various industries starting with basic information systems to advanced strategic and transformational outsourcing, which involves outsourcing of core and strategic business functions (Schniederjans, M., Schniederjans, A., & Schniederjans, D., 2007)

1.1.1 Logistics Outsourcing
According to Bradley (1994a) there is no difference between outsourcing logistical functions and any other procurement process. He asserts that like a reliable supplier of materials and parts, logistics outsourcing should also provide a high level of customer satisfaction so that their clients can become a tougher competitor. The outsourcing decision is a variant of the classical make/buy decision (Maltz & Ellram, 1997). Moreover, companies can either invest in building a logistics organization, or they can contract this function out (Sheffi, 1990). Outsourcing has become an alternative, which all major corporations must consider in order to remain competitive. The presumed conclusion would be that outsourcing does indeed contribute to the competitiveness of a firm.

Outsourcing is primarily driven not only by the need to reduce costs but also overall by the need to improve a firm's competitiveness (Sharpe, 1997). It helps to increase efficiency, improve service quality, accountability, value, decrease lead counts and cash infusion and gain access to world class capability and sharing. By
outsourcing logistics activities, firms can save on capital investments, and thus reduce financial risks. Investment on logistics assets, such as physical distribution centers or information networks, usually needs large and lump sum costs, which involves financial risks. Furthermore, the 3PL providers can spread these risks by outsourcing to sub-contractors. As quoted by Aktas and Ulengin (2005), Bendor-Samuel (1998) asserts that outsourcing provides a certain power that is not available within an organization’s internal departments. This power can have many dimensions: economies of scale, process expertise, access to capital, access to expensive technology, etc.

1.1.2 Manufacturing Sector
The manufacturing sector has a great potential on promoting economic growth in Kenya. It is the third leading sectors contributing to the GDP in Kenya. The sector has experienced fluctuations over the years under different financial conditions. According to the Vision 2030, the economic pillar is guided by six major sectors targeted to provide nearly half of the country’s total formal employment by the year 2030. The six sectors are manufacturing, tourism, agriculture, wholesale and retail, financial services and IT enabled services. From the Nairobi Securities Exchange website as at November 2013, there were nine manufacturing and allied firms that were listed in the NSE. These were; A.Baumann Ltd., B.O.C Kenya Ltd., British American Tobacco Kenya Ltd., Carbacid Investments Ltd., East African Breweries Ltd., Eveready East Africa Ltd, Kenya Orchards Ltd., Mumias Sugar Co. Ltd and Unga Group Ltd

1.2 Statement of the problem
Outsourcing is a common practice among both private and public organizations and has become a major element in business strategy. After exhausting the traditional modes of cost cutting such as staff rationalization and overheads reduction, outsourcing has become the most favoured avenue for cost cutting with the idea being to outsource non-core business functions leaving the company to concentrate on its core objectives (Gicheni, 2009). In relation to logistics outsourcing as a competitive operations strategy, there are many research works that have been undertaken. Lai, Lau and Cheng (2004) studied a Hong Kong logistics service provider and found that a successful implementation of a quality management system is the key to survival and long-term prosperity for a logistics company. Brah and Lim (2006) proved that the implementation of TQM in Singaporean logistics companies enabled them to achieve superior operational performance than their competitors.

In Kenya Gichuru (2012) did a study on critical success factors in business process outsourcing of logistics companies in Kenya. She established the factors to include investment of international companies in the local economy; internet connectivity; top management support; creation/expansion of a potential niche and
necessary expertise. Mulama (2012) also did a study on logistics outsourcing but was comparing logistics outsourcing practices and performance of large manufacturing firms in Nairobi. He established that logistics outsourcing practices being adopted by the large manufacturing firms resulted to increased productivity, organizational effectiveness, increased profits, continuous improvement and improved quality. Moreover, Kariko (2012) did a study on logistics outsourcing and supply chain performance of universities in Nairobi county where he established that logistics outsourcing improved supply chain performance. Therefore, it was evident through previous research that there exists a research gap in identifying the factors that influence outsourcing of logistics services by manufacturing firms listed in the NSE.

1.3 General objective of the study
The overall objective of this study was to establish factors influencing outsourcing of logistics services by manufacturing firms listed in the NSE.

1.3.1 Specific objectives of the study
The specific objectives were;

i. To establish the importance of cost reduction on the decision to outsource logistics services by manufacturing firms listed in the NSE.

ii. To establish the importance of improved quality service on the decision to outsource logistics services by manufacturing firms listed in the NSE.

iii. To establish the importance of risk control on the decision to outsource logistics services by manufacturing firms listed in the NSE.

1.4 Research Questions

i. What is the importance of cost reduction on outsourcing decision of logistics services by manufacturing firms listed in the NSE?

ii. What is the importance of improved quality service on outsourcing decision of logistics services by manufacturing firms listed in the NSE?

iii. What is the importance of risk control on outsourcing decision of logistics services by manufacturing firms listed in the NSE?

1.5 Significance of the Study
To the academicians and researchers, the research findings from this study will be a source of reference. Besides, the study will be a basis for further research and enhance the understanding of the current
outsourcing decision in large manufacturing firms in Kenya. The findings will also provide inputs to the policy makers in regulating and structuring the incentives for logistics outsourcing activities.

1.6 Scope of the Study

The study covered manufacturing firms listed in the Nairobi Securities Exchange. This is because the manufacturing sector in Kenya has been growing continuously thus requiring the manufacturing organizations to look out for new business practices in order to improve and sustain their competitive positions. The main objective of the study was to establish factors influencing outsourcing of logistics services by manufacturing firms listed in the NSE that was addressed under each specific objective. The researcher undertook the research activities within the scope of the issues that were addressed by the research objectives to ensure that all the study findings contribute towards the achievement of the main objective of the study.

1.7 Limitations of the Study

This study was successfully undertaken but not without a few limitations. One such limitation was that some of the respondents declined to respond to the questionnaires. The time period covered by the study and the resources available to the researcher were also limited.

1.8 Definition of terms

Logistics- According to the Institute of Logistics and Transport, logistics is said to be the process of ensuring that right products reach at the right place in their right condition to satisfy customer demand. Stock and Lambert (2001) assert that effective and efficient logistics organizations are vital elements of supply chain management. It is a network of various related activities. According to Bowersox (1974) a system of logistics functions can be divided into five broad areas; facility location, transportation, inventory, communication and material movement.

Outsourcing- Outsourcing is a means to partner with service providers so that they can handle specific business process better, faster and at a lower operating cost (Krishna, 2001). It is defined as the transferring of one or more internal functions of an organization to an external service provider.

Manufacturing firms- These are companies that are involved in converting raw materials, components, or parts into finished goods that meet a customer's expectations or specifications. Manufacturing firms commonly employ a man-machine setup with division of labor in a large scale production. From the strategic perspective, manufacturing firms have a wide variety of logistics activities that can be outsourced.
2. Literature Review

2.1 Introduction
This chapter introduces the review of the research study; it focused on the past studies that had earlier been undertaken on the factors influencing logistics outsourcing. The information covered in the literature review was obtained from past reference materials like magazines, newspapers articles and other published materials. This contributed towards broadening the scope of the research study and drawing comparison on what factors were previously investigated.

2.2 Theoretical Literature Review
Outsourcing is one of the responsibilities of purchasing departments and plays a critical role in an organization’s survival and growth. Despite the ongoing debate over the benefits and risks of outsourcing for businesses, outsourcing has become a common approach that purchasing managers cannot ignore. According to Boer, Labro and Morlacchi (2001), the purchasing function and purchasing decisions are becoming increasingly important.

According to the Outsourcing Institute Executive Survey (2006), the top ten reasons why companies would outsource are as follow; reduce and control operating cost, improve company focus, gain access to world class capability, free resources for other purposes, resources are not available internally, accelerate re-engineering benefits, non-core function that is too complex to manage, make capital funds available, share risks, and cash infusion.

2.2.1 Cost reduction and logistics outsourcing
In today’s world of ever increasing competition, organizations are forced to look for new ways to generate value. The key driver for many outsourcing decisions is the reduction in the cost of labor, materials, and parts (Lindskog, 2005). The function is outsourced when the in-house costs are higher than the anticipated costs for outsourcing the function. Therefore, the higher the internal cost to perform the function relative to the anticipated cost of outsourcing, the greater the probability of outsourcing (Kremic, Tukel, & Rom, 2006).

2.2.2 Quality Service and logistics outsourcing
When an organization is currently recognized for high quality, there may be concern by decision makers that outsourcing might affect the quality of services (Kremic et al., 2006). Organizations need to react rapidly to user requirements, and so outsourcing is seen as a means to accomplish high competitive advantage. The availability of contractors encourages organizations to outsource their non-core activities. As a result, the quality service is improved at a lower cost (Quinn, 2000; Campbell, 1995). Lai et al. (2004) studied a Hong
Kong logistics service provider and found that a successful implementation of a quality management system is the key to survival and long-term prosperity for a logistics company.

2.2.3 Risk Control and logistics outsourcing
The decision to outsource comes with high risks and hidden costs. Das and Teng (2001) indicate that risk can be considered separately as relational risk and performance risk. The distinction between relational and performance risk is important because it has effects on the strategic decisions (Das and Teng, 1996). Relational risk is, in essence, the risk of a vendor or client not co-operating in good faith; it embraces the probability and consequences of not having satisfactory co-operation in an outsourcing relationship. Performance risk is concerned with the range of factors that may affect the vendor’s ability to perform to the outsourcing agreement, such as the availability of capital, technology and skills of the vendor staff (Das & Teng, 2001). When organizations outsource some of the services to share risk, benefits are made by service provider who is better able to estimate alternatives (Corbett, 1998). The service provider undertakes investments and shares the risks among many clients (Quinn, 1999).

2.3 Conceptual Framework
The conceptual framework adopted for this study presupposes those factors that influence logistics outsourcing to include cost reduction, quality service and risk control.

![Conceptual Framework](image)

Figure 1: Conceptual Framework

3. Research Methodology
3.1 Introduction
This chapter discussed how the researcher carried out the research work, the different activities that were involved, the research design, target population, sample and sampling technique, data collection instruments and data analysis.
3.2 Research Design

This study adopted a survey research design. Kothari (1985) defines survey research as the process of collecting representative sample data from a larger population and using the sample to infer attributes of the population. This research design was considered appropriate as it deals with many members in the population spread all over the country where it is not possible to study all of them and hence calling to study a few to come up with generalizations about the whole population.

3.3 Target Population

The population for this study comprised of all the nine manufacturing and allied firms listed in the Nairobi Securities Exchange. Manufacturing sector was chosen since manufacturing firms have a wide variety of activities logistics being one of them. Due to the wide range of these activities most manufacturing entities are forced to outsource some of these activities and concentrate on their core competencies.

3.4 Sampling Design

The sampling frame for the study comprised of personnel working in logistics, procurement, supply chain, operations or their equivalents. The sample consisted of 90 respondents selected from the manufacturing and allied manufacturing firms listed in the Nairobi Securities Exchange. Random sampling technique was used in selecting the respondents.

3.5 Data Collection

In order to determine the factors that affect logistics outsourcing decision, semi-structured questionnaires were used to collect primary data. These questionnaires had both open-ended questions that aimed to elicit qualitative responses from the respondents and close ended questions that aimed to elicit quantitative data for statistical analysis. The questionnaire had two parts: part one targeted general organization data while part two sought to identify the factors that influence logistics outsourcing decisions. This made it easier to get adequate and accurate information necessary for the study.

3.6 Pilot Study

The developed questionnaire was pilot-tested through conducting interviews with personnel working in logistics department in East Africa Breweries. The pilot-testing of the questionnaire helped to clarify the identified factor statements, pointing out locations of ambiguities, incorporating additional possible factors and knowing the estimated time needed for filling out the questionnaire.
3.7 Data analysis
Data analysis was done by checking the questionnaires for correct completion and entries checked for consistency and accuracy. Any incomplete questionnaire was discarded. Quantitative data analysis was used. Descriptive statistics was used by way of percentages, proportions and frequency distributions to analyze the data. This informed the researcher as to the perceived importance of the identifiable factors that influenced decisions to outsource logistics.

4. Data Findings And Discussion

4.1 Introduction
This chapter covered data analysis, discussions and findings of the research. The data was summarized by means of statistical averages and presented in the form of tables and figure.

4.1.1 Response Rate

![Response Rate Chart]

*Figure 2: Response Rate*

Out of the 90 questionnaires which were administered by the researcher to the respondents, only 62 were fully completed and returned to the researcher. 28 of the questionnaires were either not returned by the respondents or were found to be incomplete upon return and were therefore discarded from the study.

This represented a response rate of 68.89% which was considered satisfactory for subsequent analysis. The response rate is represented in figure 2 above.
4.2 General Information

4.2.1 Manufacturing firms that outsource logistics services

According to the research findings as shown in figure 3 above, 92.22% of the respondents said that their organizations have outsourced logistics services. This could be attributed to the fact that for manufacturing firms, logistics is not a core activity. Their core activity is manufacturing.

4.3 Study Variables

There were various factors influencing logistics outsourcing. The key factors which were investigated by the research study were cost reduction, improved quality service and risk control. These factors were addressed by the study objectives where data collected under each variable stated were analyzed and presented through the use of tables to clearly depict how each category in the target population was being affected by the investigated factors.

4.3.1 Importance of Cost Reduction

Table 1: Importance of the Need to Reduce Costs

<table>
<thead>
<tr>
<th>Type of cost</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>To reduce operational costs</td>
<td>62</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To reduce labour costs</td>
<td>54</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To reduce overheads i.e. indirect expenses</td>
<td>50</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

According to the findings from table 1 above, all respondents strongly agreed that logistics outsourcing was meant to reduce operational costs. The rationale behind this mode of thinking being that the logistics outsourcing would ensure efficient operations for the manufacturing firms. 54 respondents strongly agreed...
that logistics outsourcing was due to the aim of reducing labour costs while 50 respondents strongly agreed that the aim of logistics outsourcing was to reduce overheads. The specific costs indicated in their order were: reducing operational costs, reducing labour costs and reducing overheads.

4.3.2 Importance on Improved Quality Service

Table 2: Importance on Quality Service

<table>
<thead>
<tr>
<th>Quality Aspect</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>To achieve high quality</td>
<td>58</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To gain access to high quality</td>
<td>62</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To manage our quality standards</td>
<td>41</td>
<td>15</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

According to the findings from table 2 above, all respondents strongly agreed that logistics outsourcing was meant to gain access to high quality. The rationale behind this mode of thinking being that the logistics outsourcing would only be applicable where the external providers have more expertise in the provision of the outsourced logistics activity as compared to the buying organization. 58 respondents strongly agreed that logistics outsourcing aimed at achieving high quality while 41 respondents said that logistics outsourcing aimed at managing the firm’s quality. The specific quality aspects indicated in their order were: need to gain access to high quality, need to achieve high quality and need to manage their quality.

4.3.3 Importance of Risk Control

Table 3: Importance of Risk Control

<table>
<thead>
<tr>
<th>Risk Control</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>To share risks</td>
<td>50</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To transfer risks</td>
<td>60</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To avoid risks</td>
<td>57</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

According to the findings from table 3 above, 60 respondents strongly agreed that logistics outsourcing was meant to transfer risks. The rationale behind this mode of thinking being that the logistics outsourcing was meant to delegate provision of a non-core activity to another company. 57 respondents strongly agreed that logistics outsourcing aimed at avoiding risks while 50 respondents said that logistics outsourcing aimed at sharing risks. The specific ways of risk control indicated in their order were: to transfer risks, to avoid risks and to share risks.
5. Summary, Conclusions and Recommendations

The chapter discussed the summary of findings, conclusions and recommendations of the research. The answers to the research questions were discussed from the study findings and as an effort to provide a solution to the factors influencing logistics outsourcing. Recommendations and suggestions for further studies were made.

5.2 Summary of Findings

5.2.1 Cost reduction

Majority of the respondents strongly agreed that cost reduction had influenced logistics outsourcing decision by manufacturing firms listed in the NSE. All respondents strongly agreed that logistics outsourcing was meant to reduce operational costs. The specific costs reduced through logistics outsourcing as indicated by the respondents in their order were; reducing operational costs, reducing labour costs and reducing overheads.

5.2.2 Improved Quality Service

Majority of the respondents strongly agreed that improved quality service had influenced logistics outsourcing decision by manufacturing firms listed in the NSE. All respondents strongly agreed that logistics outsourcing was meant to gain access to high quality. The specific quality aspects enjoyed through logistics outsourcing as indicated by respondents in their order were; need to gain access to high quality, need to achieve high quality and need to manage our quality.

5.2.3 Risk Control

Majority of the respondents strongly agreed that risk control had influenced logistics outsourcing decision by manufacturing firms listed in the NSE. 60 respondents strongly agreed that logistics outsourcing was meant to transfer risks. The specific ways through which logistics outsourcing controlled risks as indicated by respondents in their order were; to transfer risks, to avoid risks and to share risks.

5.3 Conclusion

Based on the findings the researcher drew the following conclusions on factors influencing logistics outsourcing by manufacturing firms listed in the Nairobi Securities Exchange. Cost Reduction; the research found that logistics services were outsourced because they mainly led to reduced operational costs for the manufacturing firms. Quality Service; the research found that logistics services were outsourced because of the need to gain access to high quality. Risk Control; the research found out that logistics services were outsourced because of the need to transfer risks to competent external providers.
5.4 Recommendations

The following recommendations were made in line with the findings of this study:

i. In deciding to outsource logistics function, manufacturing firms should consider whether the operational costs are excessively high and in need of reduction. If costs are within an acceptable range and no significant savings are likely to be realized, then logistics outsourcing should not be undertaken.

ii. Logistics outsourcing should also seek to establish whether manufacturing firms really get improved quality services which they cannot be able to provide themselves and therefore need to in-source some logistics activities where they perform better.

iii. Finally, logistics outsourcing should be geared towards transferring risks to competent service providers. Manufacturing firms should therefore outsource logistics activities whose risks are transferrable.

5.5 Suggestions for Further Research

There were many factors influencing outsourcing, this therefore makes it difficult to identify all the factors influencing logistics outsourcing by manufacturing firms listed in the Nairobi Securities Exchange. The study findings were narrowed into the three factors which were addressed by the research objectives. These factors cannot be fully relied upon to address future factors influencing outsourcing. Suggestion for further studies was therefore advisable to contribute towards identification of more other factors influencing outsourcing of logistics services by manufacturing firms listed in the NSE.

6. References


Gicheni, E. (2009). Factors that influence the adoption of business process outsourcing; A case study of East African Breweries, unpublished master’s research project, Jomo Kenyatta University of Agriculture and Technology


**Appendix**

*Questionnaire*

Please provide the information requested below regarding your organization.

**PART A: General Information**

1. Company name…………………………………… (Optional)

2. Does your company outsource logistics?
   a) Yes [   ]                  b) No [   ]

**PART B: Factors Influencing Logistics Outsourcing Decision**

**Section 1: Effect of Cost Reduction on Logistics Outsourcing Decision**

Using the preceding likert scale, state the extent to which you agree with the cost factors as an influence on logistics outsourcing in your organization (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)

<table>
<thead>
<tr>
<th>Cost Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>To reduce operational costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To reduce labour costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To reduce overheads i.e. indirect expenses</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Section 2: Effect of Quality on Logistics Outsourcing Decision**

Using the preceding likert scale, state the extent to which you agree with the competence factors as an influence on logistics outsourcing in your organization (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)
To achieve high quality
To gain access to high quality
To manage our quality standards

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>To achieve high quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To gain access to high quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To manage our quality standards</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Section 3: Effect of Risk control on Logistics Outsourcing Decision

Using the preceding likert scale, state the extent to which you agree with the risk control factors as an influence on logistics outsourcing in your organization (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>To share risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To transfer risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To avoid risks</td>
<td></td>
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</table>