The Impact of Outsourcing on Lead-Time and Customer Service in Supermarkets in Nairobi-Kenya

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Abstract
This study explored the impact of Outsourcing on Lead-Time and Customer Service in Supermarkets in the City of Nairobi-Kenya. The study used a descriptive survey design to obtain information on the extent to which supermarkets outsourced services and the impact of outsourcing on lead-time. The population of the study mainly constituted of procurement officers, marketing managers, operation managers or their equivalents in supermarket headquarters within Nairobi city. The population of this study consisted of one hundred and two (102) Supermarkets while the sample consisted of fifty (50) supermarkets within Nairobi. The data collected was analyzed by use of frequency, percentage and correlation analysis. The study findings indicate that supermarkets outsourced advertising and marketing to a very large extent. Consultancy and training, administration of information and systems maintenance, security, facilities maintenance, general maintenance and repair were also outsourced to a large extent. Besides, payroll processing, recruitment/staffing and general accounting were outsourced to no extent. The analysis also revealed that outsourcing and lead time were positively correlated (r =0.66). The study contribute to the outsourcing research area by identifying how the existing processes and methods in the Organization must be adapted to fit the specific conditions of outsourcing. Contributions to the outsourcing research area are made by showing that to ensure effective Customer service, the whole outsourcing process has to be in focus i.e., from before physical transfer decisions to outsource are made until a steady state is reached with a continuous supply from the new source.

Key words: Outsourcing, Outsourcing process, Lead-Time, Customer service, Supermarket

1.0 Introduction
In modern business environments, manufacturers and retailers face an increasing pressure of customers’ requirements in product customization, quality improvement, and demand responsiveness. In order to sustain the business under these pressures, most enterprises are striving to develop long-term strategic partnerships with a few competent suppliers and collaborate with them in product development, inventory control and non-core process outsourcing (Chan et al., 2003). The business environment in which organizations are operating in currently is highly competitive, rapidly changing courtesy of Information Technology thus organizations have been forced to consider, and adopt or implement, a wide variety of innovative management programs and techniques (Nyaoga et al, 2013).

Companies all over the world are experiencing stiff competition from their competitor(s). To gain a competitive edge, they need to be flexible and innovative in their modes of operations. Lyson and Farrington (2006) perceived competitive advantage as a special edge that enables an organization to deal with market dynamics and environmental forces better than its competitors do. Intense competition and market saturation are forcing supermarkets to access new revenue streams worldwide. Supermarkets are expanding their array of products through services and increasing focus on customer loyalty programs (Agnese, 2003; Blisard et al., 2002). All these trends create new challenges for logistic system operations. Major supermarkets chains such as Tesco (Tesco-company information, 2000) and Sainsburys in Europe, Fleming, Kroger, Supervalu and Safeway in the USA and Jusco in Japan are striving for increased efficiencies through greater use of technology in all areas of logistics which will be key to growth and improvement in the supermarket industry (Kumar, 2007).
Outsourcing goes beyond the mere common purchasing and consulting contracts because not only are the activities transferred, but also resources that make the activities occur. The resources include people, facilities, equipment, technology, and other assets. An entire function may be outsourced or some elements of an activity may be outsourced, with the rest of the activities being kept in-house. Identifying a function as a potential outsourcing target, and then breaking that function into its components, allows decision makers to determine which activities are strategic or critical and should remain in-house and which can be outsourced. Reasons why companies decide to outsource vary greatly. Outsourcing may be used to gain competitive advantage and has been adopted widely. Companies are increasingly seeking outside firms to perform activities previously conducted in-house in order to achieve time, progress and cost advantage. The act of outsourcing makes sense for firms that lack the necessary economies of scale, skills or technology to perform certain functions quickly and efficiently (Jacobs, 2009).

Though outsourcing has been reported as a success story, the way in which it has been implemented seems to be of key importance. Organizations are focusing on outsourcing as a management strategy to delegate major non-core functions to specialized service providers. Outsourcing represents a significant shift in the way organizations manage and delegate their business support activities (Lutta, 2003). Peters and Waterman (1982) agreed with Jacobs (2009) that excellent companies remain close to the knitting by focusing on their core businesses while outsourcing what is regarded non-core. Whilst the concept of outsourcing is new, it has been and is still important precursor to some of the new structures that have been developed. The root of competitive advantage lies in the core competencies, which allow businesses to adapt to the marketplace opportunities. Stevenson (2007), however, noted that there were risks associated with outsourcing. For instance, for manufactured goods the risks include high shipping costs and long lead times caused not only by long transportation distances but also by time needed to pass through security checkpoints at borders. These risks impacts negatively on the quality of services rendered to customers.

Meredith and Shafer (2003) defined lead time as simply the time between order placement and receipt of shipment, whilst Waters (2002) gave a more detailed explanation that lead time involves the time taken to prepare an order, send it to the supplier, allow the suppliers to make or assemble materials and prepare them for shipment, ship the goods back to the customer, allow the customer to receive and check the materials and put them in stock. Depending on circumstances, this can vary between a few minutes and months or even years. Meredith and Shafer (2003) further observed that lead times are often fixed by suppliers, and can be quite long. Long lead times reduce flexibility and encourage high stocks to cover uncertainty before another order can arrive. Just-In-Time technique looks for ways of avoiding this by moving to small, frequent deliveries with short lead times. Flexibility reduces lead time and ensures that specific customer requirements are met (Waters, 2002).

Cook (2002) was of the idea that customer service might involve after-sale activities such as delivery, setup, warranty work and technical support. Besides, it might involve extra attention while work is in progress such as courtesy, keeping the customer informed and attention to details. Service quality can be a key differentiator and helps to retain customers. Moreover, businesses rated highly by their customers for service quality tend to be more profitable and grow faster than businesses that are not rated highly. Quick response to customers’ needs can be a competitive advantage to many firms. It involves quickly bringing a new product or service to the market, quick delivery of existing products or service to a customer after they have ordered and quickly handling customer complaints (Stevenson, 2007). Besides, Cook (2002) emphasized that the ability to provide an excellent service is a pre-requisite to both attracting and retaining customers.

Hasty (1983) observed that there was no universally accepted definition of the term ‘supermarket’, but it is generally used to describe a self-service departmentalized food store with a minimum sale value of one million United States dollars (US $ 1,000,000) per year. Hasty (1983) and Barker et al (1956) argued that supermarkets are basically grocery stores but usually have departments of non-food items, and at least the grocery department is operated on self service basis. Besides, Kotler (2003) defined a supermarket as a relatively large, low-cost, low-margin, high-volume, self-service operation designed to serve total needs for food, laundry and household maintenance products. Supermarkets earn an operating profit of only one percent of sales and ten percent on net worth.

Supermarket industry in Kenya dates back to the mid seventies when Uchumi Supermarkets opened shop in Nairobi. However the industry witnessed most changes in the nineties. The growth of the supermarket sector in Kenya has been driven by three factors: first, there has been rapid urbanization. Second, supermarket growth in Kenya really took off in 1995 after the 1993 policy changes were starting to have an effect. Policy changes included liberalization and stabilization which had several important effects for supermarkets among them included import licensing
removal and market liberalization. Again, there was a mild and short-lived recovery of the economy in 1995/6 which gave consumers the buying power to try all these new products that supermarkets were marketing to them. While Kenya’s supermarket revolution is unlike that of most developing countries outside Africa that had massive inflows of retail Foreign Direct Investment (FDI) after investment liberation in the mid and late 1990s, Kenya’s supermarket sector growth has been almost completely indigenous and endogenous. Before 1993, the main chains stuck to their headquarter cities. However, Uchumi broke this pattern in 1993 by building its first store outside Nairobi, in Nakuru, starting a national level competition that has build-in crescendo (Neven and Reardon, 2005). Evidence shows that the practice of Outsourcing has been taking place in various Organizations and Companies. However, the impact of Outsourcing on Lead-Time in Supermarkets in Kenya has received little research attention from most researchers. This study therefore sought to assess the impact of outsourcing on lead-time and customer service in Supermarkets in Nairobi.

2.0 Literature Review

2.1 The outsourcing process

Various models have been put forward to explain the concept of outsourcing. Deloitte and Touche (2002) in their model makes it possible for mid-size companies to enjoy strategic outsourcing solutions that large enterprises enjoy. Besides, Bendor-Samuel (1999) in his model emphasizes the importance of leveraging a provider’s economies of scale in outsourcing. The two models appear to emphasize common elements crucial to the outsourcing process. Further examination of these models suggests that there are five stages that would ensure fair outsourcing deal.

Firstly is the investigation stage where existing process and systems are received and compared to the best breed. The opportunities for improvement are identified and assist to know whether outsourcing has potential advantages or not. This provides a baseline of current costs and service levels. Secondly is tendering stage where knowledge gained from benchmarking is incorporated to set optimum performance targets for the organization. This helps identify the serious contenders for the business and spells out world-class performance expected and how it will be measured.

Thirdly is negotiation stage. Before negotiation, it is crucial to set right expectations for cost, performance and service levels. The negotiation position is reinforced by external validation of the organization’s requirements. Benchmarking is done to facilitate fast tracking or sole source considerations. This level the playing field, serving as a surrogate for the competitive process to ensure a firm receives a fair deal. Fourthly is implementation or contract refinement stage. Service level agreements are put in place detailing process maps, responsibilities and implementation of key performance indicators. Structures and reporting lines are defined and implemented. Besides, in an outsourcing agreement, regulatory controls such as legal documents policies, form systems, standards and procedures may establish the relationship between the two parties and specify boundaries yet they represent only incomplete contracting (Grossman and Helpman, 2005) and hence cannot be exhaustive.

Finally is the relationship management stage. Benchmarking is most commonly employed in relationship management. Several organizations have to renegotiate contracts within two years of being signed. Usually dissatisfaction over pricing and service levels are the main drivers for renegotiations. Benchmarking plays a key role in renegotiations, since clients need access to industry performance parameters in order to make a case with outsourcing vendor (Bendor-Samuel, 1999). However, McCutcheon (1995) agree with Lutta (2003) and warns that if not well implemented, outsourcing could lead to an abdication situation instead of desired delegation of non-core activities to supplier-partner. McCutcheon (1995) further argued that the greatest danger in outsourcing is the attitude of getting rid of what a company does not like by subcontracting them out as opposed to the company outsourcing its non-core activities so as to enable it focus on its core activities. The result of the abdication process is a lack of process ownership, lack of accountability, and blame culture and eventually lose-lose situation for both parties.

2.2 What is outsourced and reasons for outsourcing

The Outsourcing Institute (1998) conducted a study on activities being outsourced or being considered for outsourcing. Lyson and Farrington (2006), observed that the services most easily outsourced are those that are resource-intensive, relatively discrete, require specialist competencies, characterized by fluctuating work patterns in loading and throughput, subject to quickly changing markets (for which it is costly to recruit and retain staff), and subject to rapidly changing technology requiring expensive investment. Janitorial and security services are commonly outsourced in most firms in Kenya.

2.3 Common outsourcing mistakes

Bozarth (2008) warns that outsourcing has its risks. Suppliers might misstate their capabilities, their process technology might be obsolete or performance might not meet the buyers’ expectations. In other cases the supplier
might not have the capability to produce the product to a single supplier and exposure to unforeseen problems due to unexpected natural disasters might worsen the situation. Companies who outsource also risk losing key skills and technologies that are part of their core competencies. To counteract such threats, many companies oversee key design, operations and supply chain activities and keep current on what customers want and how their products or services meet those demands. He added that control and coordination are critical issues in outsourcing. Buying firms may need to create costly safeguards to regulate the quality, availability, confidentiality, or performance of outsourced goods or services. Coordinating the flow of materials across separate organizations can be a major challenge especially when time zone differences, language barriers and even differences in information systems come into play.

According to Bendor-Samuel (1999), suppliers make mistakes during outsourcing which include ignoring the customer’s unique needs, ignoring the importance of leverage and the tendency of avoiding accountability. He further observed that buyers too make various mistakes which include relying too much on executive, letting a supplier lead outsourcing process, problem resolution, interfering with outsourcing process, signing a contract with too long a term, improper governance and lack of accountability among buyers. Outsourcing mistakes that arise from either supplier or buyer can be minimized if supplier-buyer relations are mutually beneficial.

2.4 Requirement for successful outsourcing

According to Randall (1993), successful outsourcing requires identification of a strong need for outsourcing. Organizations undergoing rapid change due to changing internal and external environments are likely to benefit if they embrace outsourcing as an operational strategy to reduce operation costs. He adds that companies facing significant capital and headcount constraints are also likely to benefit by outsourcing expensive assets and personnel services. Before committing to outsourcing, companies need strong evidence that tangible benefits will be achieved. To quantify the benefits, a comprehensive feasibility study needs to be carried out to benchmark existing practices and identify the opportunities for improvement.

Elmuti (2003), argued that a good partner is important ingredient for success. Essentially in outsourcing agreements, the relationship between the companies and their partners are based on trust and on contracts. So it is essential that the right partners are selected based on criteria like credibility, expertise, and reliability. Barthelemy (2003), observed that right partners will eventually lead to closer ties and relationships. Elmuti (2003), further emphasized the importance of getting the right people involved in managing outsourcing efforts and add that adequate training, infrastructure and facilities are essential.

2.5 Customer Service Management

Customer Service Management (CSM) refers to how well the enterprise manages its customer services in terms of effectiveness, productivity and quality (Khong and Richard, 2003). Besides, the two are of the opinion that appropriate Customer Service Management can lead to customer satisfaction, customer retention hence expedite and enhance re-buy. Customers are the driving force of companies striving for success. Survival of those companies evidently depends on their customers (Lewis, 2000; Kotler, 2000). According to Cook (2002), organizations have placed increasing emphasis on quality customer service as a means of gaining competitive advantage. As competition become more global and more intense, many organizations have realized that they cannot compete on price alone. Consequently, companies have developed a strategy of providing superior customer care to differentiate their products and services. Customers are often more interested in how well they are treated than the technical details of the product(s).

Khong and Richardson (2003) argued that as competition intensifies, customers find themselves relishing the options and alternatives various companies can offer them. If they are not satisfied with the current products or services, they can easily switch to others. Besides, Khong and Nair (2004) advised that market research into consumer behavior and expectations, customer databases and records, complaint and suggestion systems, management of service quality to meet customer expectations, product or service improvements, efficient customer handling, and lost customer analysis will enhance Customer Service Management.

2.6 Lead-time and lead-time compression

Meredith and Shafer (2003) defined lead-time as simply the time between order placement and receipt of the shipment. Lead-times are often fixed by suppliers, and can be quite long, while Waters (2002) gave more detailed explanation that lead-time involves preparing an order, sending it to the supplier, allow the suppliers to make or assemble materials and prepare them for shipment, ship the goods back to the customer, allows the customer to receive and check the materials and put them in stock. He further observed that long lead times reduces flexibility.
and encourage high stocks to cover uncertainty before another order can arrive. Just-In-Time (JIT) technique looks for ways of avoiding this by moving to small, frequent deliveries with short lead times. Flexibility reduces lead time and ensures specific customer requirements are met.

Bozarth (2008) perceived flexibility as how quickly operations and supply chains can respond to the unique needs of different customers. Slack (1987) and Bozarth (2008) identified four types of flexibility: product, mix, volume and delivery. Product flexibility describes the ability to introduce new products or changes to existing products. Mix flexibility is the ability to produce a wide range of products and services. Volume flexibility refers to the ability to produce whatever volume the customer needs and delivery flexibility is the ability to alter agreed delivery agreements.

According to Bower and Hout, (1988), Time-based competition increases the need to be responsive, because the firm or supplier is given less time to respond to new orders or changes in existing ones. Mather (1988) provided an explanation why lead-time compression requires additional responsiveness. Using the P:D ratio, a concept dating back to the work of Shingo (1989), Shingo explains that the forecasting horizon becomes longer if the customer lead-time ‘D’ decreases in relation to the production lead-time ‘P’. The longer the time horizon that needs to be forecasted, the less reliable the forecast becomes which in turn increases demand uncertainty (Mather, 1988; Randall and Ulrich, 2001).

Detailed models have been developed to cope with requirements of business process re-engineering. Aggregate models of time allow the relationships among the lead time of different phases to be better understood. However, they are inadequate to explain the making of the total lead time in depth. The line model (with six components) can effectively represent the lead time of any stockless processes, while the buffer model (with seven components) is suitable for the processes which hold decoupling inventory buffers. As a consequence, the choice of a line model versus a buffer model strictly depends on the degree of interchangeability of the objectives passing through the process, regardless of the degree of process steadiness (Bartezzaghi et al, 1994). The components of lead time include: First, Run Time (R), which is the sum of the net lapses during which the single object is actually processed. It depends on the capacity of the resources and their specialization degree. Second, Set-up Time (SU), which relates to the on-line set-up activities that cannot be anticipated simultaneously to the execution. Set-up time is therefore defined as the periods during which the object waits before being processed at any resources. Third, Queue Time (Q); which is simply computed as the sum of the run times and the set-up times of the preceding objects that a single object might encounter when sent on to a resource ahead. Fourth, Wait-to-Move Time (WTM) that accounts for the time an object waits for the completion of either the transfer batch with which it is forwarded to the next resource or the load batch which is necessary to start the processing. This component refers to both the elapsed time before moving to the next activity and the one from the last activity; the wait-to-move time facilitates the appraisal of the lot-sizing impact on the total lead time. Fifty, Synchro-Time (SY) that relates to the waits for synchronization between parallel phases of the process; it depends on three causes: waits for external inputs, waits for scheduled start time and waits for control and co-coordinating mismatches. No queuing or batch effect – which has already been computed in the queue time and in the wait-to-move time respectively – should be included. Sixth, Problem-solving Time (PS), which accounts for the waits for non-routine decisions, while the repetitive ones can be easily taken into consideration through the run time component. The following summarizes the computation of lead time (LT), order lead time (OLT), and primary lead time (PLT) through time components according to the degree of object interchangeability.

**High degree of object interchangeability**

\[
\text{LT} = Q + SU + PS + R + WTM + SY + NB \\
\text{PLT} < \text{OLT} < \text{LT} \\
\text{DTO} \leq \text{LT}
\]

**Low degree of object interchangeability**

\[
\text{LT} = Q + SU + PS + R + WTM + SY \\
\text{PLT} = \text{OLT} = \text{LT} \\
\text{DTO} \leq \text{LT}
\]

Where

- \(Q\) = queue time
- \(SU\) = set up time
- \(PS\) = Problem Solving time
3.0 Findings

3.1 Services outsourced by supermarkets
The analysis of the findings indicated that supermarkets outsourced services. Marketing and advertising were outsourced by supermarkets to a very large extent. Consultancy and training, Administration of information and systems maintenance, Security, Facilities maintenance and General maintenance & repair were outsourced by supermarkets to a large extent. Fleet operations and Freight brokering and Audit were outsourced by supermarkets to a small extent. Payroll processing, Recruitment/Staffing and General Accounting were outsourced to no extent. Outsourcing was considered to impact on lead time. Due to this, a research was carried out to assess the impact of outsourcing on lead time.

3.1.1 Outsourcing mistakes
According to the research findings 90.6% of the supermarkets committed mistakes while 9.4% did not. The study further revealed that commonly committed mistakes included: Outsourcing from inefficient firms, underpayment or overpayment, avoiding accountability, ignoring the customers’ unique needs and not involving other stakeholders in outsourcing.

3.2 The impact of outsourcing on lead time
From the research findings, outsourcing influenced Queue time to a very large extent whilst Set-up time, Problem solving time, Run time, Waiting time and Sychron-time were influenced to a large extent.

3.3 Relationship between Outsourced services and the Lead-Time components
The researcher established that the outsourced services were positively correlated to lead time components. On average, the correlation co-efficient (r) was 0.66.

3.4 Variables manifesting Customer Service Management
From the research findings market research, record of customers’ requests, complaints and transactions for future reference, customers’ feedback on items and services, and customers’ relationship management were implemented to a very large extent whilst monitoring changes in customers’ expectations, record of customers’ complaints and transactions for future references, and post-mortem when a customer is lost were implemented to a large extent.

3.5 Challenges facing supermarkets
From the research findings, all supermarkets faced challenges which included very high competition among supermarkets, inadequate backing space, price fluctuations, transportation and logistical challenges, physical challenges in terms of location and working for long hours hence need for shift system to maintain service levels.

3.6 Limitation of the study
The supermarket industry in Kenya currently is characterized by a large number of competitors. This made it very difficult to collect data from some supermarkets. Some could hold back some information for fear that it might be used against them by their competitors. The supermarket industry is a very busy industry and this made it challenging collecting data from some units across the day. It required that the data be collected very early in the morning before the day gets busy. Due to time limit this was not practical.
3.7 Suggestions for further research

The study conducted a survey in supermarkets in Nairobi, Kenya and recommended that a study should be carried to determine the effect of outsourcing on profitability. Further research is necessary to describe what other sourcing strategies are employed and their implications on Lead-Time and Customer Service satisfaction in order to create a competitive advantage in the business environment where the various organizations are operating in. The research carried out here has been from the outsourcing company’s view and most of the respondents were from the outsourcing company, this limits the research presented in this study to only present results usable for the outsourcing company, therefore, further research should be carried out to expand the research to also cover other parts of the supply network’s point of view.

3.8 Conclusions

Supplier and customer markets become more and more global and make companies consider restructuring their supply chains to take advantage of opportunities in terms of costs, competence, etc. at different locations. Supermarkets management should consider outsourcing as it reduces lead time and make them flexible in meeting varied needs of the customers. They should also implement variables that manifest Customer Service Management (CSM) to retain their customers, remain competitive and increase their market share. When outsourcing, supermarkets should consult other stakeholders to minimize mistakes committed. The results of this study contribute to the Supply Chain research area by identifying how existing processes and methods within the materials supply area have to be adapted to fit with the specific conditions of outsourcing and to the outsourcing research area by showing that; to ensure materials supply the whole outsourcing process (before physical transfer, during production transfer and start-up, and during steady state with continuous supply) has to be in focus in order to meet the customers’ needs and expectations and hence create competitive advantage.

4.0 References

Neven, D and Reardon, T (2005), Kenya supermarket research project available at: www.nationbusinessdirectory
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