



**DETERMINANTS OF IMPLEMENTATION OF OUTSOURCING PRACTICES AMONG MANUFACTURING FIRMS IN  
NAIROBI CITY COUNTY, KENYA**

**LILIAN GESARE ONTWEKA, DR. MAKORI MORONGE**

---

**DETERMINANTS OF IMPLEMENTATION OF OUTSOURCING PRACTICES AMONG MANUFACTURING FIRMS IN  
NAIROBI CITY COUNTY, KENYA**

**Lilian Gesare Ontweka<sup>1</sup>, Dr. Moronge Makori<sup>2</sup>**

<sup>1</sup>Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

<sup>2</sup>Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

**Accepted: June 2, 2017**

---

**ABSTRACT**

*The purpose of the study is to establish the determinants of implementation of outsourcing practices among manufacturing firms in Kenya. The study sought to be guided by the following specific objectives: To examine how procurement planning influence implementation of outsourcing practices among manufacturing firms in Kenya and to establish how supplier partnership influence implementation of outsourcing practices among manufacturing firms in Kenya. A pilot study was conducted to pretest the validity and reliability of instruments for data collection. Before analyzing the data, responses were edited, coded, entered to SPSS (Version 22) and data cleaned. Quantitative data was analyzed using descriptive statistics and presented through percentages, means, standard deviations and frequencies. The qualitative data was analyzed by use thematic analysis. It was notable that there existed a strong positive relationship between the independent variables and dependent variable. The variables were very significant therefore need to be considered in any effort to improve implementation of outsourcing practices in manufacturing firms in the study area. The study contributes the body of knowledge by examining the determinants of implementation of outsourcing practices in manufacturing firms in Kenya. The implementation of outsourcing practices in manufacturing firms was greatly affected by procurement planning and supplier partnership. The study contributed to the existing literature in the field of procurement by elaborating existing theories, models and empirical studies on implementation of outsourcing practices in manufacturing firms. The current study should therefore be expanded further in future in order to determine the effect of legal framework, supplier payment, supplier training on procurement performance in manufacturing firms. Existing literature indicated that as a future avenue of research, there was need to undertake similar research in other manufacturing firms in Kenya and other countries in order to establish whether the explored factors can be generalized to affect implementation of outsourcing practices in manufacturing firms.*

**Key Words:** Procurement Planning, Supplier Partnering, Outsourcing, Manufacturing Industries

## INTRODUCTION

Focusing on Strategic Issues Market forces are somehow driving firms and governments to outsource everything but the core business, MClvor(2010), outsourcing makes it easier for these manufacturing firms to focus on their basic competences (Hayes, Hunton and Reck, 2010). Outsourcing liberates line manufacturing firms managers who do not have to coordinate with a large outsourced activity department, thus simplifying the implementation of manufacturing firms activities. Increasing flexibility outsourcing additionally provides a large degree of flexibility in the utilization of resources and makes it easier to face manufacturing firms level volatility, as the provider is left to deal with fluctuations in outsourced activity workloads in the manufacturing firms (Jurison, 2015).

Outsourcing practices in the manufacturing firms can enhance the provider to access more advanced technologies and count on more motivated manufacturing firms staff and better management systems in order to be able to achieve a better service coordination or control, or, simply, is more strongly committed than the internal staff to make the alliance with the client work properly (Clark, Zmud and Mc Cray, 2005). to get rid of routine tasks, outsourcing very often serves to provide routine tasks which are very time-consuming in management of the firms (Lacity & Hirschheim, 2013). Also, if the outsourced function is seen as something difficult to manage, often regarded by the top management as a „headache, outsourcing can remove or minimize a function that is considered clearly problematic (Jurison, 2015).

For the successful implementation of the outsourcing practices in manufacturing firms and facilitate access to technology, outsourcing brings client firms advantages related to technology

(Jurison, 2015), as these manufacturing firms can have access to specialized, state of- the-art technology which is supposedly supplied to them by the provider. On the other hand, the efficient use of outsourcing would most probably reduce the need to make investments in mature technology, simultaneously increasing the availability of resources related to new technologies for the manufacturing firms implementation (Clark et al., 2015).

Outsourcing can enhance manufacturing firms' description since outsourcing represents a long term relationship with another firm, it is critical to define not only the desired results but also the type of relationship that can best serve the needs of the client and assist the provider in meeting those needs (Glagola, 2001). Defining requirements in clear, complete and measureable terms is one of the most difficult and most important parts of outsourcing process. For large manufacturing firms Request for Proposal (RFP) outlines the requirements; for smaller less formal manufacturing firms case studies or request for information (RFI) are typically used. a wide array of products and services is now a common and accepted practice. Elmuti and Kathawala (2010) add that as public organizations and institutions search for ways to grow and maintain their competitive edge, outsourcing has emerged as a dominant organizational strategy for achieving those manufacturing firms' goals.

Price Water Coopers (2000) conducted a survey in the United States among America`s fastest growing companies, the conclusion arrived at was that businesses that outsource were growing faster, were larger and made more profits than those that did not. The survey further revealed that, of the companies that outsourced, 70 percent claimed to save money and 25 percent had improved focus on core business. The goals of outsourcing often

include reducing labor and overhead costs, maximizing profits, dominating a market, and gaining a competitive advantage. While this strategy looks quite promising, it is surprising to find that “more than one-fourth of outsourcing deals fail in the first year. According to Lacity and Wouldcocks (1998), success rate of IT outsourcing is only 56 per cent. Aron and Sing (2005) state that half of the organizations that shifted processes to external providers failed to generate the financial benefits they expected. Pricewater HouseCoopers (2005), noted that companies are outsourcing more and more while enjoying the benefits less and less and this was attributed to firms overestimating the profitability of the their outsourcing ventures by not taking into account very influential transaction costs which decrease or even outweigh the benefits.

The public sector in many African countries are operating in an environment characterized by countless economic and political disruptions to their sources of supplies and services. In order to survive in this turbulent marketplace, these organizations must continually monitor their competitive position as well as their internally controllable processes, especially the procurement process (Burt, Dobler & Starling 2013). The manufacturing firms in African countries are no exception. They annually procure billions of shillings worth of systems, supplies, and services in support of the their operations. As a result, modernization of procurement practices and processes presents government with a clear opportunity to leverage significantly improved value for money from its total spend on goods and services.

### **Statement of the Problem**

According to the statistics derived from the Kenya National Bureau of Statistics’ (2013), it is adept to reiterate that the manufacturing firms in Kenya contributes to 7% of the country’s gross domestic product (GDP). The challenge of demand for quality

service and upcoming reforms for most of the manufacturing firms has realized the need for quality service delivery and efficiency through outsourcing practices (World Bank, 2014). According to Ahmed et al., (2012), manufacturing firms are bound to fail due to lack of implementation of outsourcing practices. This according to UNCHS, (2006), can result to losses of over 19.82%. However, in Kenya, poor performance of manufacturing firms are a common problem in the industry not only with an immeasurable cost to society but also with debilitating effects on the contracting parties due to poor implementation of outsourcing practices.

While several studies (Musa, 2010; Karimi, 2012; Tulakhaba 2008, Mwandali, 2006) have been done focusing on different aspects of manufacturing firms and further appreciating the crisis in every manufacturing firms in terms of performance and competitive advantage empirical evidences are in short of the role of the outsourcing practices on the in manufacturing firms. It is on this premise the study seeks to establish the determinants of implementation of outsourcing practices among manufacturing firms in Kenya.

### **Objectives of the Study**

The general purpose of the study was to establish the determinants of implementation of outsourcing practices among manufacturing firms in Kenya. The specific objectives were:-

- To examine how procurement planning influence implementation of outsourcing practices among manufacturing firms in Kenya.
- To establish how supplier partnership influence implementation of outsourcing practices among manufacturing firms in Kenya.

## LITERATURE REVIEW

### Theoretical Review

#### Planning Theory

This theory would guide the study in establishing the relationship between procurement planning and implementation of outsourcing practices among manufacturing firms in Nairobi City County, Kenya. Hume is generally attributed with drawing attention to the ought distinction: what is does not necessarily lead to what should be (Wenz, 2013). Although what is may place restrictions on what can be, our human capacity to reflect on possibilities and make choices means that what is and what should be are connected by values. This connection exists whether it is recognized or not. Where applications of values are not made explicit, they are implicit in underlying cultural conditioning. The fundamental need for a position and a meaning for our lives and for our species dominates whatever system of thought we espouse. We cannot exist conceptually without such cosmologies, yet many people are unaware of the values upon which they have founded their structure of meaning (Palmer, 2012).

Recognizing this evaluative connection is crucial for planning. Due to its future orientation, planning influences what would/can be. In a just society, it must consequently raise the question of what should be by acknowledging the role of values. What is corresponds to knowledge that is held - what ought to be corresponds to actions prior to their taking place. In consequence, planning relates to the linkage: value. It therefore has a normative aspect. This normative consideration must be integrated into planning on both theoretical and practical levels. In addition, recognizing planning as an "intervening variable" suggests a need to recognize the importance of multiple values. In consequence it is necessary to consider how these

values can be determined and how they can be acted upon. In a sense, then, planning is paradoxical: it is concerned with understanding the activity and process itself, and is therefore descriptive. Yet simultaneously, it is concerned, in a pro-active way, with the formation of future states, and is therefore prescriptive (Wachs, 2013).

#### Systems Theory

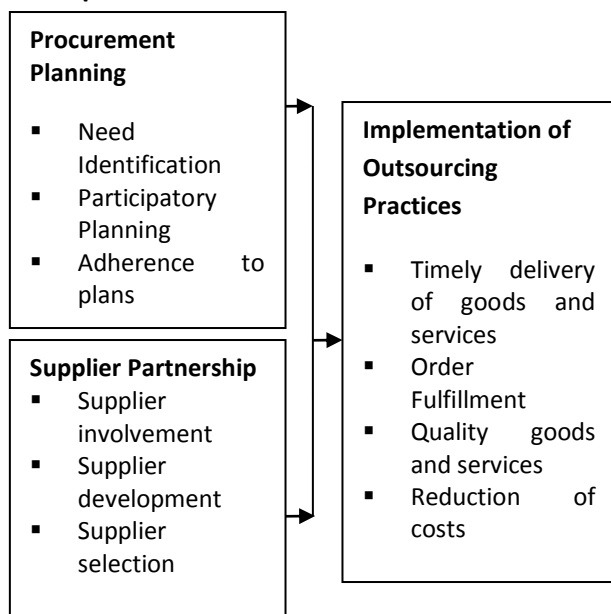
This theory would guide the study in establishing the relationship between supplier partnership and implementation of outsourcing practices among manufacturing firms in Nairobi City County, Kenya. Systems theory views the organization as a system of interconnected parts which interact together to produce products and services (Bertalanffy, 1951). From a systems perspective of sourcing, the assumption is that one or more parts of the system is being externalized, and has an effect on the interconnected parts of the system. The nature and strength of this effect is primarily determined by the nature of interdependence between firm work processes. There are three types of interdependence; pooled interdependence occurs when each part of the system makes a distinct contribution to and is supported by the whole; sequential interdependence exists when one part of a system has to complete its contribution before the next can take action from start to finish in the production process; and reciprocal interdependence occurs when outputs of one system serve as inputs to the other, and vice versa (Thompson, 1967).

The type of interdependence offers insights into the associated costs of coordination and communication in sourcing relationships. Increases in interdependence, complexity, task variety, or specialization in production processes increase the coordination and communication costs between firm and sourcing partners (Combs & Crook, 2007). Further, coordination and communication costs are

lower for outsourced process beginnings (inputs) and endings (outputs) than for dually interconnected outsourced system parts.

Beyond the implications on the coordination and control costs associated with the type of interdependence, systems theory also provides insights on the desirability of multiple and plural sourcing relationships in turbulent environments. Ashby (2016) work on requisite variety implies that as firms face and operate in increasing turbulent and complex external environments, that firms must maintain increasingly complex structural connections and mechanisms to survive and prosper in the environment. Thus, one interpretation of requisite variety is that manufacturing firms maintaining multiple and plural sourcing relationships with external partners have stronger dyadic and network relationships than firms eschewing outsourcing. In such cases, manufacturing firms in sourcing partnerships and networks have greater requisite variety and an increased ability to navigate complex environments successful.

**Conceptual Framework**



**Independent Variables      Dependent Variable**

**Figure 1: Conceptual Framework**

**Procurement Planning**

Procurement plans aim to ensure that entities work within the budgets and money allocated for various purposes fulfill their intended purpose. One way is through strict legislation that would dwell on waste reduction of which would be aligned to the national waste management policy and working frameworks that ensure transparency and plans that ensure the selected tenders are the most economically advantageous ones (Rotich, 2011).

The Kenyan Government has moved to implement the enacted laws. All public entities must use the Procurement Manual 2009 and provides a way for the user to apply the Public Procurement and Disposal Act, 2005 and the Public Procurement and Disposal Regulations 2006. It serves as a reference tool for guiding the practice of the public procurement in Kenya and ensuring full compliance with the requirements of the Public Procurement Law and Regulations. No public procurement should be carried out without first ensuring compliance with the requirements set out in this manual (PPOA, 2015).

The Public Procurement and Disposal Act (PPDA) 2005 and Regulation 2006 which is an act of Parliament to establish procedures for efficient public procurement and for the disposal of unserviceable, obsolete or surplus stores, assets and equipment by public entities and to provide for other related matters. The Public Private Partners (PPP) 2013 is an Act of Parliament to provide for the participation of the private sector in the financing, construction, development, operation, or maintenance of infrastructure or development proposals of the Government through concession or other contractual arrangements (KLR, 2015).

The establishment of the institutions to regulate monitor and supervise the implementation of proposal agreements on infrastructure or

development proposals and for connected purposes. The Preference and Reservations Regulations 2011 amended 2013 that gives priority and 30% of all government procurement to the Youth, women and persons with disability. The stated are the foundation towards an effective procurement plan (KLR, 2015).

### **Supplier Partnership**

The choice of suppliers and how businesses are effectively integrated to obtaining proper complementary skills are important issues. Strategic sourcing consists of strategic outsourcing and supplier capability analysis. In addition, the construct strategic supplier partnership is an integral element to the second order construct of SCM (Li et al., 2006). The defining elements of strategic sourcing have been identified to be: the status of supply management within the organizational hierarchy, internal coordination of supply management with other functions in a firm, active information sharing with suppliers, and comprehensive supplier development activities (Kocabasoglu and Suresh, 2006).

In the retail category management context, strategic sourcing has also been found to influence knowledge creation and sharing among suppliers and retailers (Dewsnap and Hart, 2004). Since suppliers and retailers have knowledge in different domains, the combination can create unique knowledge that can be applied to improve business knowledge. Better relationships between retailers and their suppliers also improve prospects of new product acceptance (Kaufman, 2002). Retailers take risks in placing untried products on the shelves. The risks take several forms. The retailer's reputation is at stake if the product does not perform well, and consumers may hold the retailer responsible for selling substandard products.

Supplier involvement in product development allows firm to make better use of their suppliers

capabilities and technology to deliver competitive products. Coordinating operational activities through joint planning also results to inventory reduction, smoothing production, improve product quality, and lead time reduction ( Ansari, 2009) Browne (2004) contends that supplier relationship management is a comprehensive approach to managing an enterprise's interactions with the manufacturing firmss that supply the goods and services it uses. The goal of supplier relationship management (SRM) is to streamline and make more effective the processes between an enterprise and its suppliers just as customer relationship management (CRM) is intended to streamline and make more effective the processes between manufacturing firms and its stakeholders

### **RESEARCH METHODOLOGY**

This study was a descriptive survey design. The target population was all the 400 manufacturing firmss in the county. The study collected primary data during the research, using a questionnaire. The study targeted manufacturing foremen, procurement officers, Lab technicians and quality assurance officers, who had sections to fill respective to their areas of specialization.

### **DATA ANALYSIS, PRESENTATION AND DISCUSSIONS**

The study targeted a total population of 80 respondents from which 60 filled in and returned the questionnaires making a response rate of 70.58%. The study sought to establish the gender distribution of the respondents. From the results, both male and female respondents participated in the study and results show that 60.00% were male, 40.0014% were female. The results indicated that the two genders were adequately represented in the study since there was none which was more than the two-thirds. 53.85% of the respondents were aged between 18 to 35 years, 32.76% were

more than 35 years old while 13.39% did not indicate their age. The findings were in agreement with those of Price & Banham (2011) who established that there are two natural age peaks of the late 20s and mid 40s which are correlated management of manufacturing firms. The respondents were requested to state their level of education and from the study findings, 16% had diploma, 32% had bachelors and 29% had reached secondary school certificates, 10% cited to have acquired primary level of education and 15% had no formal education but hands on skills.

### Procurement Planning

This section presented findings to survey questions asked with a view to establish the influence of procurement planning on implementation of outsourcing practices among manufacturing firms in Nairobi City County, Kenya. Responses were given on a five-point likert scale (where 5 = Strongly Agree; 4 = Agree; 3 = Neutral; 2 = Disagree; 1= Strongly Disagree). The scores of 'strongly disagree' and 'disagree' were taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of 'Neutral' was taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.4. Table 1 presented the findings. As tabulated, a majority of respondents were found to highly agree that organization procurement plan has description of the requirement (4.009);

Awarding of all tenders is guided by the evaluation criteria (3.923); organization procurement plan details the procurement method (3.897); the organization does annual prequalification of bidders (3.883); and that organization adheres to the Procurement plans (3.995). A majority however only moderately agrees that organization involves the user department in formulating annual procurement plans (3.568); organization procurement plan has the estimated value of the requirement (3.777); organization prepares an annual Procurement plan (3.662); and that organization procurement plan details the expected award date (3.321).

This finding supported Ambe (2012) who argues that conducting a stakeholder analysis early in the planning process is a useful technique to identify the likely key issues in relation to the planned procurement. Consider the internal and external stakeholders who may need to be involved in the procurement planning. Rotich (2011) holds that the main factors influencing the level of detail in a significant procurement plan relate to the size, scope and risk of the procurement and uncertainty about its requirements, together with the complexity of the supply market and the timeframe needed to achieve a successful outcome. Bedey (2008) adds that in determining the level of detail required for specific significant procurement plans, agencies must take into consideration the nature of their procurement environment and the capability of their procurement function.

**Table 1: Procurement Planning**

Procurement Planning	Mean	Std
Organization prepares an annual Procurement plan	4.009	0.8317
Organization procurement plan has description of the requirement	3.897	0.6315
Organization procurement plan has the estimated value of the requirement	3.883	1.0092



Organization procurement plan details the procurement method	3.995	1.3718
Organization procurement plan details the expected award date	3.880	0.6347
Organization involves the User Department in formulating annual procurement plans	3.568	0.5645
Organization adheres to the Procurement plans	3.777	0.4762
The organization does annual prequalification of bidders	3.662	0.5765
Awarding of all tenders is guided by the evaluation criteria	3.321	0.4812

### Supplier Partnership

This section presented findings to survey questions asked with a view to establish the influence of supplier partnership on implementation of outsourcing practices among manufacturing firms in Nairobi City County, Kenya. Responses were given on a five-point likert scale (where 5 = Strongly Agree; 4 = Agree; 3 = Neutral; 2 = Disagree; 1= Strongly Disagree). The scores of 'strongly disagree' and 'disagree' have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of 'Neutral' has been taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.4. Table 2 presented the findings. The study findings in Table 2 with a grand mean of 3.112, a majority of respondents indicated to a great extent that they do use of a supplier rating system as a benchmark to enhance timely delivery of goods and services (3.222); the use of a supplier audit system in the county reduces the procurement costs (3.124); Check for a training program frequently has

empowered the suppliers thus reduced costs (3.765); The payment terms defines the dispute rules and regulations to ensure there is timely delivery of goods and services (3.543); The involvement of the affected departments defines the contract period to ensure that there is timely delivery of goods and services (3.781); The type of contract is based on the rules and regulations so as to reduce procurement costs ( 3.205).

The study findings were in agreement with literature review by Pearson and Ellram( 2008) who established that supplier contracting plays a critical role on the procurement performance in an organization The type of contract either Fixed Price Contracts, Variations of fixed price contracts, Cost Reimbursement Contracts, Time and Material Contracts, Letter Contracts, Indefinite Delivery Contracts, Agreements, Purchase Orders and lastly Government Commercial Purchase Card (Credit Card) have the long-term benefits: quality products with lower cost information flow improved between the two parties. The implicit or explicit promise is to continue the relationship and improve in the performance (Somogyi & Gyau, 2010).

**Table 2: Supplier Partnership**

Supplier Partnership	Mean	Std
We do use of a supplier rating system as a benchmark to enhance timely delivery of goods and services	3.222	.222

Use of a supplier audit system in the county reduces the procurement costs	3.124	.124
Check for a training program frequently has empowered the suppliers thus reduced costs	3.765	.765
The payment terms defines the dispute rules and regulations to ensure there is timely delivery of goods and services	3.543	.718
The involvement of the affected departments defines the contract period to ensure that there is timely delivery of goods and services	3.205	.347

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The study established that a majority of respondents were found to highly agree that organization procurement plan had description of the requirement. The awarding of all tenders was guided by the evaluation criteria, organization procurement plan details the procurement method. The organization did annual prequalification of bidders and that organization adhered to the Procurement plans. A majority however only moderately agreed that organization involved the user department in formulating annual procurement plans. The organization procurement plan had the estimated value of the requirement, prepares an annual Procurement plan procurement plan details the expected award date.

The study findings indicated to a great extent that the majority of respondents indicated the contract period was based on the contract review process to enhance timely delivery of goods and services. The type of contract ensures there was reduction of procurement costs and dispute resolution influence timely delivery of goods and services. The payment terms defines the dispute rules and regulations to ensure there is timely delivery of goods and services. The involvement of the affected departments defines the contract period to ensure that there is timely delivery of goods and services.

The type of contract is based on the rules and regulations so as to reduce procurement costs.

The study sought to examine the determinants of implementation of outsourcing practices among manufacturing firms in Kenya. The level of timely delivery of products, reduction of costs, level of transparency and accounting of funds and level of quality of products and services offered recorded low positive achievements. From inferential statistics, a positive correlation is seen between each determinant variable and implementation of outsourcing practices. All the independent variables were found to have a statistically significant association with the dependent variable at ninety-five level of confidence. Analysis of variance was further done and it was established that there was a significant mean. This is since the p-values of their coefficients were all less than five level of significance.

### **Conclusions of the Study**

Based on the study findings, the study concluded that implementation of outsourcing practices in manufacturing firms was affected by supplier partnership and procurement planning, as the major factors that mostly affected implementation of outsourcing practices in manufacturing firms in Kenya.

The study concluded that a procurement planning was the first important factor that affected

implementation of outsourcing practices in manufacturing firms. The regression coefficients of the study showed that procurement planning had a significant influence on implementation of outsourcing practices in manufacturing firms. This showed that procurement planning had a positive influence on implementation of outsourcing practices in manufacturing firms.

The study concluded that supplier partnership was the second important factor that affects implementation of outsourcing practices in manufacturing firms. The regression coefficients of the study showed that supplier partnership had a significant influence on implementation of outsourcing practices in manufacturing firms. This showed that supplier partnership had a positive influence on implementation of outsourcing practices in manufacturing firms.

#### **Recommendations of the Study**

The study recommended for establishment of long term supplier relationship management in the county governments. This could be achieved by appraising the suppliers annually; they ensure the suppliers were paid in time to motivate them. This could reduce the suppliers who did fail to honor the orders issued and resolve immediate problems that would disrupt the work. It was important also to do recognize contributions. The management should consult with suppliers on challenges affecting them and keep suppliers informed about management actions to enhance implementation of outsourcing practices in manufacturing firms.

Significant procurement planning and development of sound procurement strategies led to consistently better value for money; higher quality project and service delivery; improved opportunities for

sustainable procurement; and reduced risks to the organization. Time invested in preparation before developing the significant procurement plan will increase the chances of it being completed within the required timeframe and budget. Planning for significant procurement can be a complex activity which may require specialist advice or assistance. Supply Chain Management officers should consider, at the preparation stage, whether specialist expertise should be sought internally within the organization, or externally.

#### **Recommendations for Further Studies**

The study contributes the body of knowledge by examining the determinants of implementation of outsourcing practices in manufacturing firms in Kenya. The implementation of outsourcing practices in manufacturing firms is greatly affected by procurement planning and supplier partnership. The study contributes to the existing literature in the field of procurement by elaborating exiting theories, models and empirical studies on implementation of outsourcing practices in manufacturing firms. The current study should therefore be expanded further in future in order to determine the effect of legal framework, supplier payment, supplier training on procurement performance in manufacturing firms. Existing literature indicated that as a future avenue of research, there is need to undertake similar research in other manufacturing firms in Kenya and other countries in order to establish whether the explored factors can be generalized to affect implementation of outsourcing practices in manufacturing firms.

## REFERENCES

- Adan, I. H. (2012). *Influence of stakeholders role on performance of constituencies development fund manufacturing firmss a case of Isiolo North Constituency, Kenya*. Available at: <http://researchkenya.or.ke/node/18866>
- Ahmed S, Azher S, Castillo M, Kappagantula, P. (2012) Construction Delays in Florida; An Empirical Study, Florida.
- Aiyetan, O.A., Smallwood, J.J. & Shakantu, W. (2008). Influences on construction manufacturing firms delivery time performance. *In the proceeding of Third Built Environment conference*, Cape Town, South Africa
- Al-Kharashi, A. & Skitmore, M. (2009). Causes of delays in Saudi Arabian public sector construction manufacturing firmss. *Construction Management and Economics*, 27(1), 3-23.
- Ardity, D., Akan, T., & Gurdamar, S. (2009). Adherence to cost estimates in public manufacturing firmss: *International Journal of Manufacturing firms Management*.
- Babbie, E. (2009). *Survey research methods* (2nd ed.). Belmont: Wodsworth.
- Barney, J. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32, 1231-1241.
- Battaineh R.K (2006) 'Causes of Delay in Large Building Construction Manufacturing firmss', *Journal of Management in Engineering*, Vol. 11, No. 2.
- Binder, (2008). User Satisfaction and Sustainability of Drinking Water Schemes in Rural Communities of Nepal.
- Bridget, S., and Lewin, C. (2005). *Research Methods in the Social Sciences*. London: Sage publications
- Bordens, K. S., and Abbott, B.B. (2008). *Research design methods: A process approaches* (7<sup>th</sup> ed.). New York, NY: McGraw-Hill.
- Burke, R. (2004). *Manufacturing firms Management Planning and Control Techniques*. 4th edition, New Delhi India: Pearson Education.
- Callahan, M. T., D. G. Quackenbush, and J. E. Rowings, (2006). "*Construction Manufacturing firms scheduling*". USA: McGraw-Hill.
- Chandran C. (2004). *Research Methods: A qualitative Approach with Illustrations from Christian Ministries*. Nairobi: Daystar University.
- Chan, M., & Kumaraswamy, M. (2007). A comparative study of causes of time overruns in Hong Kong construction manufacturing firmss. *International Journal of Manufacturing firms Management* 15(1), pp. 55-63.
- Chan, M., Scott, D. & Chan, L. (2004). Factors affecting the success of a construction manufacturing firms: *Journal of Construction Engineering and Management* 130 pp. 153.

Conner, K.R. (1991). A historical comparison of resource-based theory and five schools of thought within the industrial organization economics: Do we have a new theory of the firm? *Journal of Management*, 17, 121-154.

Cooper D R, Schindler PS (2005). *Business Research Methods*. (8th ed.). Mc Graw-Hill, New Delhi, India.

Creswell, J. W. (2003). *Research design: Quantitative, qualitative, and mixed methods approaches* (2nd Ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research*. New Jersey: Merrill/Pearson Education.

Cronbach, L. J. (1971). *Test validation*. In R. L. Thorndike (Ed.). *Educational Measurement* (2nd Ed.). Washington, D. C.: American Council on Education

Damodaran, L. (2011). User involvement in the systems design process: a practical guide for users, *Behaviour & Information Technology*, 15(6), 363-377

Ektewan, M. & Ogunlana, S.O. (2006). Public hearings in Thailand's infrastructure manufacturing firms: effective participations?, *Engineering, Construction and Architectural Management*, 13(4), 343 – 363

Flyvbjerg, B. (2005), Policy and Planning of Large Infrastructure Manufacturing firms Problems, Causes, Cures. *World Bank Policy Research Working Paper 3781*, Cambridge University Press, Cambridge.

Flyvbjerg, B., Holm, S., & Buhl, L. (2004). What Causes Cost Overrun in Transport Infrastructure Manufacturing firms?: *Transport Reviews*, 24 (1), 3-18.

Fudge, N. & Wolfe, C.D.A. (2008). Assessing the promise of user involvement in health service development: ethnographic study. *BMJ*, 336, 313

Ghazala, M. & Vijayendra R. (2011) Evaluating Community Based and Community Driven Development: A critical review of the Evidence. *Working Paper, Development research Group, World Bank*.

Goldratt, Eli M.. (1984). *Essays on the Theory of Constraints*. [Great Barrington, MA]: North River Press. ISBN 0-88427-159-5.

Hamel, G., & Prahalad, C.K. (1996). *Competing for the Future*. Boston: Harvard Business School Press.

Kvaye, M., & Anderson, R. (2000). Continuous improvement: The ten essential criteria. *The International Journal of Quality & Reliability Management*, 16(5), 485.

Kagiri, D., & Wainaina, G. (2009). Time and Cost Overruns in Power Manufacturing firms in Kenya: *A Case Study of Kenya Electricity Generating Company Limited*, Nairobi. (2004). *Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities*. Berrett-Koehler Publishers.

Kaliba, C. Muya, M. & Mumba, K. (2009), Cost Escalation and Schedule Delaying Building Construction Manufacturing firms in Zambia, *International Journal of Manufacturing firms Management*, Vol. 27, Issue 5, pp 522-531.

Karimi, R.B.(2008), "Factors which are Critical in Manufacturing firms Cost Overruns: A Case Study of Ministry of Water Resources Manufacturing firmss", Unpublished MBA Thesis, University of Nairobi.

Kog, C., & Loh, K. (2012). Critical Success Factors for Different Components of Construction Manufacturing firmss. *Journal of Construction Engineering and Management* 138(4), pp. 520-528.

Koskela, Howell ., & Ballard, G. (2002). Should manufacturing firms management be based on theories of economics or production?: *Building Research and Information*, Vol. 34, No. 2

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Delhi: New Age International (P) Limited Publishers.

Kuen, C.W., Zailani, S., & Fernando, Y. (2009). Critical factors influencing the manufacturing firms success amongst manufacturing companies in Malaysia. *African Journal of Business management*, 3(1), 16-27.

Kumar, C. (2000). *Research Methods*.(2<sup>nd</sup> edn.). New York: Harper and Row.

Lin-lin, X., Yang, Y. Hu, Y. & Chan, A.P.C. (2014). Understanding manufacturing firms stakeholders' perceptions of public participation in China's infrastructure and construction manufacturing firmss: Social effects, benefits, forms, and barriers", *Engineering, Construction and Architectural Management*, 21(2), 224 – 240

Maina, B. M. (2013). *Influence of stakeholders' participation on the success of the economic stimulus programme: a case of education manufacturing firmss in Nakuru County, Kenya*. Retrieved from

Maltz, A.C., Shenhar, A.J. & Reilly, R.R. (2003). Beyond the balanced scorecard: Refining the search for organizational success measures, *Long Range Planning*, Vol. 36, No. 2, pp.187-204.

Malkat, M & Byung-Gyoo, K. (2012). *An Investigation on the Stakeholders of Construction Manufacturing firmss in Dubai and Adjacent Regions*. Available at: [www.ipedr.com/vol45/016-ICMTS2012-M00008.pdf](http://www.ipedr.com/vol45/016-ICMTS2012-M00008.pdf)

Marchewka, J.T. (2006). *Information Technology Manufacturing firms Management: Providing Measurable Organizational Value*, 2nd ed., Wiley, New York, NY.

McGrew, J.F., Bilotta, J.G. (2007) The effectiveness of risk management: measuring what did not happen, *Manage Decision*, 38(4) 293-300.

Mono, O.R. (2013). Determinants of successful delivery of housing construction Manufacturing firmss in the Ministry of Housing in Nairobi, Kenya. Retrieved from: <http://ir-library.ku.ac.ke/handle/123456789/6213>

Morris, G., & Hough, H. (2008). *The Anatomy of Major Manufacturing firmss: A Study of the Reality of Manufacturing firms Management*. Chichester; New York: Wiley, pp. 502-511.

Mugenda, O.M and Mugenda, A.G (2003) *Research Methods, Quantitative & Qualitative Approaches*. Acts Press: Nairobi

Müller, R., & Jugdev, K. (2012). Critical success factors in manufacturing firms Pinto, Slevin, and Prescott – the elucidation of manufacturing firms success. *International Journal of Managing Manufacturing firms In Business*, 5(4), 757-775.

Musa, G. H., (2009)“Determination of Factors Influencing Manufacturing firms Delays in Water Manufacturing firms in Kenya: The Case of Government Funded Manufacturing firms”, Unpublished MBA Thesis University Of Nairobi.

Mwandali, D., (2006) “Analysis of Major Factors that Affect Manufacturing firms Management: A Case of Kenya Railways Manufacturing firms”, Unpublished MBA Thesis, University of Nairobi.

Nana Agyeman (2010), Delays in building construction manufacturing firms in Ghana.

Nyandika Fred(2014); *Influence of stakeholders' participation on performance of road manufacturing firms at Kenya National Highways Authority* ; A Research Manufacturing firms Submitted in Partial fulfillment for the award of degree of master of science in manufacturing firms management of Jomo Kenyatta University of Agriculture and Technology

National Tax Payers Association (2010), *Utilization of Government Revenue*: Government Printers, Nairobi

Neuman, W.L. 2006. *Social Research Methods: Qualitative and Quantitative Approaches*. Pearsons Education Inc. Boston. USA

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

O’Brien, S., & Ibbs, C. (2005). The Paradox of using Tacit and Explicit Knowledge Strategies to face Dilemmas: *Management Decision*, Vol. 43 No. 1, pp. 102-112.

Olawale, A., & Sun, M. (2010). Cost and Time Control of Construction Manufacturing firms: Inhibiting Factors and Mitigating Measures in Practice. *Construction Management and Economics* 28(5), pp. 509-526.

Olima, H.A. (2011). *The Dynamics and Implications of Sustaining Urban Spatial Segregation in Kenya: Experiences from Nairobi Metropolis*. Paper presented at the International Seminar on Segregation in the City Held at Lincoln Institute of Land Policy in Cambridge, MA, USA, July 25-28, 2001.

Onchoke, N. K. (2013). *Factors influencing performance of community development manufacturing firms in Kenya: a case of Kisii Central District*. Available at: <http://ir-library.ku.ac.ke/handle/123456789/6205>

Ondieki, W. M. (2011). *Factors influencing stakeholders' participation in monitoring and evaluation of Local Authority transfer fund manufacturing firms in Kisii municipality, Kenya*. Available at <http://erepository.uonbi.ac.ke:8080/handle/123456789/3906>

Onions, W. (2007). *A Knowledge Based Theory of Manufacturing firms Management*: McGraw-Hill, pp 61-72.

Ophiyandri, T., Amaratunga, D., Pathirage, C. & Keraminiyage, K. (2013). Critical success factors for community-based post-disaster housing reconstruction manufacturing firms in the pre-construction stage in Indonesia, *International Journal of Disaster Resilience in the Built Environment*, 4(2), 236 – 24

Republic of Kenya.(2014). Kenya National Bureau of Statistics.*Economic Survey 2014*. Nairobi: Government Printer.

Rundquist, J. (2008) World Class or Good Enough: the Choice of partner when Outsourcing New Product Development in medium sized firms. *International Journal of Innovation and Technology Management* 5: 429-451.

Sambasivan M. and Yau W.S., (2007). Causes and effects of delays in Malaysian construction industry. *International Journal of Manufacturing firms Management* 25: pp. 517 -526.

Sauer, C. & Reich, H. (2007). What do we want from a Theory of Manufacturing firms Management?: *International Journal of Manufacturing firms Management*, A response to Rodney Turner”, Guest editorial, Vol.25, pp 1-2.

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students*. (4<sup>th</sup> edn.). Harlow: Financial Times Prentice Hall.

Schumpeter, J.A. (1950). *American Institutions and Economic Progress*. New York: Harper & Brothers.

Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*. (4<sup>th</sup> edn.). USA: John Wiley & Sons Publishers.

Seboru, M. A. (2006). An investigation into factors causing delays in road construction manufacturing firms in Kenya, unpublished MA Manufacturing firms, Faculty of Architecture, design and Development, University of Nairobi

Serdar S. Durmusoglu, (2009). The role of top management team's information technology (IT) infrastructure view on new product development: Conceptualizing IT infrastructure capability as a mediator. *European Journal of Innovation Management*, 12(3), 364 – 385

Tabish, S., & Jha, K. (2012). Success Traits for a Construction Manufacturing firms. *Journal of Construction Engineering & Management*, 138(10), 1131-1138.

Talukhaba, A.A, (2008). “Time and Cost Performance of Construction Manufacturing firms”, Unpublished M.A. Thesis, University of Nairobi.

Turner, R. ( ). Towards a Theory of Manufacturing firms Management: The Nature of the Manufacturing firms: *International Journal of Manufacturing firms Management*, Vol 24, p.1-3.

Wouldiams, T. (2008), "A review of inventory management research in major logistics journals: themes and future directions", *International Journal of Logistics Management*, Vol. 19 No.2, pp.212-32.

Yin, R. K., (2003), *Case Study Research: Design and Methods*, (3<sup>rd</sup> edition). Sage Publications, London

Young, N. (2009). Understanding the Research Process and Methods. An Introduction to Research Methods. Las Vegas: Acts Press.



Zhang, Z.H. (2000). *Implementation of Total Quality Management: An Empirical Study of Chinese Manufacturing Firms*. Unpublished doctoral dissertation, University of Groningen, Groningen, Netherlands.

Zou, P. X.W., Zhang, G., and Wang, J. (2006). *Identifying key risks in construction manufacturing firms: life cycle and stakeholder perspectives*. [www.ppress.net/papers/Zou\\_risks-constru](http://www.ppress.net/papers/Zou_risks-constru) Accessed 4/9/2012