

Role of Strategic Procurement Practices on Organizational Performance; A Case Study of Kenya National Audit Office

Horace Odhiambo Oyuke

Dr. Noor Shale

Jomo Kenyatta University of Agriculture
and Technology

Jomo Kenyatta University of Agriculture
and Technology

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ABSTRACT

Procurement strategy, as conceptualized and defined in the introduction does not represent a radical departure from the traditional concept of purchasing strategy; the only difference is that Internet-based technologies are used as tools to carry out the firm's purchasing and corresponding corporate strategies. Despite the explosion in its use, procurement is a relatively old phenomenon; therefore a sound definition for procurement strategy does exist. The construct, "procurement strategy" examined in this research represents a theoretical fusion of definitions of procurement and traditional purchasing strategy, which currently exist in the literature. Perhaps more fitting descriptions of strategic procurement are those inferred from discussions that strategic procurement relates to those senior executive decisions which determine the 'make/buy' option. The purpose of this research is to investigate the Role of Strategic Procurement Practices on Organizational Performance; Case Study of Kenya National Audit Office. Given the current and projected expenditures in procurement as well as the increasing importance of the purchasing function in contributing to firm profitability, it is important for firms to employ a systematic means of deciding which procurement practices will contribute most to the attainment of corporate goals. A descriptive research design will be used in this study. The researcher will collect both primary and secondary data during the researcher. Primary data was collected using a questionnaire covering the strategic role of procurement in organizational performance. Quantitative data will be analyzed by employing descriptive statistics and inferential analysis using statistical package for social science (SPSS).

Keywords: *Role of Strategic Procurement Practices on Organizational Performance*

Introduction

Procurement is an ever-growing means of conducting business in many industries around the world and is projected to reach \$3 trillion in transactions this year, up from \$75 billion in 2012 (Verespej, 2002). In their discussion of competitive purchasing strategies required for the twenty-first century, Monczka and Morgan (2000) stated that firms must maximize the use of strategic based decisions (including e-procurement) in every aspect of the business, linking across all members of the supply chain, increasing the speed of information transfer, and reducing non-value adding tasks. Clearly, the use of strategic based procurement has the potential to significantly impact national economies as well as the competitive position of individual firms.

Despite the explosion in its use, procurement is a relatively old phenomenon; therefore a sound definition for procurement strategy does exist. The construct, “procurement strategy” examined in this research represents a theoretical fusion of definitions of procurement and traditional purchasing strategy, which currently exist in the literature.

Watts, et al. (1992, p.5) defined purchasing strategy as “the pattern of decisions related to acquiring required materials and services to support operations activities that are consistent with the overall corporate strategy”. Carr and Smeltzer (1997, p. 200) stated, “Purchasing strategy relates to the specific actions the purchasing function may take to achieve its objectives”.

According to Giunipero and Sawchuck (2000), procurement “comprises the actions taken by the purchasing organization to integrate supply chain in order to reduce costs and time and increase productivity”.

Others have concluded that there is confusion as to what exactly is meant by strategic purchasing and there is still a long way yet to go before Procurement, as a function, becomes truly strategic (Steele and Court, 2006, p13; Marshall and Lamming, 2007). This paper is not concerned with the Procurement function per se, but instead the strategic procurement process. As such, the definitions previously proffered from the perspective of the ‘function’ provide little guidance (for example, Ellram and Carr, 2004; Carr and Smeltzer, 2007). It is interesting to note however that evidence (Erridge and Murray, 1998; SOPO, 2009; Birch, 2001, para. 2.2.1) indicates that, within government entities, a considerable amount of the organization’s expenditure is carried out without the involvement of the Procurement function. Of paramount importance though is the need to recognize the strategic role of the procurement process. It is board members who represent the views and needs of strategic procurement decisions; those decisions affect the way services are delivered and will have an impact on citizens’ daily lives.

Perhaps more fitting descriptions of strategic procurement are those implied by Cox and Lamming (2007) and Ramsay (2001); it could be inferred from those discussions that strategic procurement relates to those senior executive decisions which determine the ‘make/buy’ option. Although that description provides meaningful positioning it has a narrow focus within the scope of hotel e-procurement. Byatt (2001,): ‘...considered the whole process of acquisition of goods, services and works from the initial assessment of a business need through to the end of the useful

life of an asset or end of service contract ...both acquisition from third parties and from in-house providers’.

Problem Statement

Research on the topic of corporate and purchasing strategies has become increasingly prevalent as the function shifted away from a primarily clerical role to a more strategic one (e.g., Carr and Smeltzer 2007, Ellram and Carr 2004, Monczka and Trent 2001). The adoption and use of business-to-business commerce is also widely researched (e.g., Osmonbekov, et al. 2002; Min and Galle 2009; Gupta 2007). However, most of what has been written about the *relationship* between firm strategy and procurement appears in the popular press and remains virtually unexplored in the academic literature. Corporate purchasing strategies contribute to over 15% of global purchasing accounting for about 5% of the contribution to a country GDP.

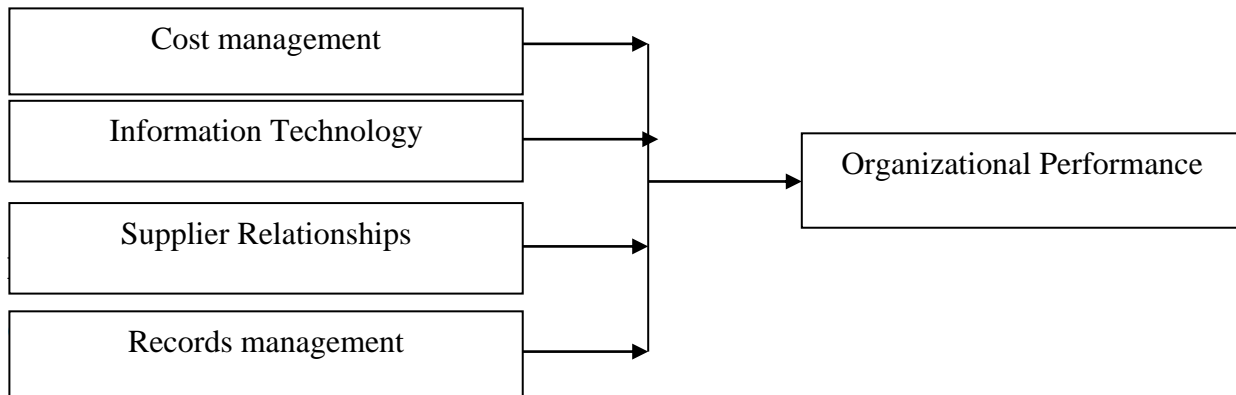
The purpose of this research is to investigate the Role of Strategic Procurement Practices on Organizational Performance; Case Study of Kenya National Audit Office. Given the current and projected expenditures of 70% in procurement as well as the increasing importance of the purchasing function in contributing to firm profitability by over 25%, it is important for firms to employ a systematic means of deciding which procurement practices will contribute most to the attainment of corporate goals. According to Porter (2000), if a firm uses an procurement tool solely to keep pace with its competitors, and without regard to how it fits into its corporate strategy, the outcome may be less than optimal (Anne Porter (2000)). Purchasing professionals must recognize that these tools represent a means for the function to achieve its goals; they are not a replacement for well-developed and implemented strategies. Purchasing/supply management professionals who fail to recognize this fact, may ultimately waste valuable financial and human resources and fail to contribute fully to the overall goals and objectives of the firm. The attainment of Kenya vision 2030 is highly dependent on prudent strategic purchasing and as such Kenya National Audit Office should be on high alert to curb the massive wastages experienced by government agencies which are likely to retard economic growth and achievement of vision 2030. It's against this that this study is being undertaken to investigate the Role of Strategic Procurement Practices on Organizational Performance; Case Study of Kenya National Audit Office.

Literature Review

Conceptual Framework

Independent Variable

Dependent Variable



Research shows that many large companies in the US and Europe use reverse e-sourcing to reduce costs and that supply managers expect continued cost reduction in the future (Kaufmann and Carter, 2004). In reverse e-sourcing, suppliers compete dynamically, in real-time, for a buyer's business and typically bid down the price of an item to be purchased. Using the internet, suppliers submit multiple electronic bids during a fixed time period, often 30 minutes or less. E-sourcing can reduce purchase prices, save time, streamline the bidding process, and enable suppliers from anywhere in the world to compete for a buyer's business thus enhancing organizational performance (Smart & Harrison, 2003). Risks of high costs include damaging supplier relationships, switching to suppliers who are not capable, underestimating the total costs associated with using suppliers with lower purchase prices, and negatively impacting the supply market in the long run by driving out qualified suppliers (Smeltzer & Carr, 2003). To attain the greatest benefits, purchasing processes should be evaluated and improved before implementation to take care of the cost function (Presutti, 2003).

Information Technology

At the public sector level, technology enhances infinite and non-restricted access to government information and increases market transparency and economic incorporation based on complementarities (Carayannis and Popescu, 2005). Procurement technologies grasp a virtual market, open to capable suppliers (and goods) according to not mainly restrictive selection criteria, in which public administrations can choose goods and services offered by several suppliers (Petrie, 2001). The whole process is digital, using digital signature in order to guarantee transactions lawfully. Among the main advantages that a public administration can get through a system like this there are: costs and process cutting, possible broadening of suppliers base, easy access to preferred goods (pre-defined quality standards), information intelligibility and ease of comparison among goods and purchases logging and ensuing expenditure monitoring.

The road to executing successful ICT in developing countries public procurement management is paved with difficulties, such as resistance from the bureaucracies involved; lack of decision-making from the top; lack of motivation; weak human capital; corruption and fraud; and, in the case of conflict-ridden countries, the instability and violence that damage any efficient long-term work (Dobler, 2002). Moreover, ICT systems are knotty, expensive, and difficult to manage and maintain.

Supplier Relationship

Supplier relationship has been defined as “two or more chain members working together to create a competitive advantage through sharing information making joint decisions and sharing benefits which result from greater profitability of satisfying customer needs than acting alone (Togar and sridharan,2002) Supplier relationship is departure from the anchor point of discreteness that underlies business transactions to a relational exchange as the roles of supplier and buyer are no longer narrowly defined in terms of simple transfer of ownership of products (Mac Neil 2004)

By focusing on relational exchange entails the activities that are undertaken faintly rather than unilaterally (Heide 2003) Zahear and Zenkatraman 2004 Simatupang and Sridharan (2003)suggest that the requirements for effective collaboration are mutual objectives ,integrated policies joint decision making information sharing of benefits and losses.

Buyer/supplier commitment is the belief that trading partners are willing to devote energy to sustaining the relationship (Dion et al.2004) whereas according to Moorman ,Zaltman and Deshpande (2002) buyer\supplier commitment is an enduring desire to maintain a valued relationship . Through commitment partners dedicate resources to sustain and further the goals of the collaboration. (Heide and John 2009) and (Krause 2006) propose that the expectation of relationship is important for motivating collaboration in inter-organizational relationships (Simatupang and Sridharan 2005) noted that information sharing joint decision making and incentive alignment are factors that facilitate collaborative action through information exchange between the buyer and supplier.

Records management

Increasingly, electronic records are becoming the primary mode of record of transactions Davilaet al (2003), Many hard copy records are being digitized so that they may be managed in digital form. There are some clear advantages to digital records; they are easier to duplicate, to share, and do not require the expensive “real estate” which hard copy records do,Gattiker et al (2007). Further, the ease with which such records may be searched, accessed, and edited allows large entities to manage information in a much more efficient way than in the past Croom, (2005). However, the ability to preserve electronic records has not matched the ability to create such records. They can be fragile, easily lost, destroyed, or altered, and run the risk of obsolescence as software and hardware age and are replaced Aberdeen Group (2001). Almost all employees create records, in multiple formats, every day. Some keep these records on hard drives, some on departmental servers, and still others print to paper. In most cases this is not standardized, and electronic records are often not managed in a systematic way, Freeman,

(2006). Unlike hardcopy records which have file folders and cabinets to help in their organization and management, the tools for electronic records are either not widely followed or are poorly developed Agaba, (2007)

The relatively low cost of digital records storage has led to units retaining almost all digital material created, whether it is valuable or not Ellram (2002). This results in massive amounts of records being retained unnecessarily and is particularly noteworthy when retention decisions are made. This excessive amount of records becomes problematic for a number of reasons, most notably because there is often a difficulty ensuring that the correct version of a record can be located or identified, and also because drafts, in addition to the primary record, may be retained, and must be included in any FOI/POP request Cagliano et al (2005).

Organizational Performance

Organizational Performance, as conceptualized and defined in the introduction does not represent a radical departure from the traditional concept of purchasing strategy; the only difference is that Internet-based technologies are used as tools to carry out the firm's purchasing and corresponding corporate strategies. Burt and Doyle (2003) identified a number of strategic objectives of the e-purchasing function. These objectives were continuous quality improvement, total cost management, time-based competition, technology access and control, and risk reduction.

A Purchasing Magazine survey of consultants revealed a number of objectives that firms pursue when employing procurement strategy. They included driving the lowest possible purchase price, identifying sources of high-quality products/services, simplifying the purchasing and supply management processes, and reducing transaction costs ("Beyond the auction hype" 2000). In addition, a leading consulting firm reported that companies use strategies to reduce transaction costs, purchase price, purchase order processing cycle times, and to speed up the time-to-market cycles (www.aberdeen.com 2003). Clearly, overlap exists in the objectives identified in (traditional) purchasing processes and in real procurement function. This suggests that the concept of consistency between corporate and traditional purchasing strategies is applicable in the realm of procurement.

Empirical Review

The potentials of procurement strategy in enhancing organizational performance have already been proven in a number of studies (Aberdeen Group, 2011). According to these studies, procurement strategy enables companies to decentralize operational procurement processes and centralize strategic procurement processes as a result of the higher supply chain transparency provided by procurement systems. A company's procurement function is subdivided into strategic and operational processes since activities and priorities in these two areas are entirely different (Kaufmann, 2009). Supplier management, the pooling of purchase requisitions and procurement-oriented product development are tasks that are typically assigned to strategic procurement. Strategic procurement often had to deal with administrative routine work as well, such as individual transactions, converting purchase requests into purchase orders or ensuring the correct allocation of invoices received. Strategic aspects are frequently neglected in the process,

with the buyer having little influence over the choice of suppliers and the purchased products, (*Industrial Distribution*, 2011).

Johnston (2005) argues that costs have to be managed well to achieve the firm's performance goals. There are several key success factors, related to both the competency of the service provided by an online auction intermediary and to the organizations own internal capabilities. One key success factor relating to cost management is technical capability of the system (Johnston, 2005). Johnston (2005) specified technical service quality in terms of system cost (security, reliability, easy to use, accessibility) and service quality (e.g. responsiveness of service). In addition, trust in the service provider is another major success factor for strategic procurement adoption (Rotchanakitumnuai & Speece, 2009).

Organizational record management systems also have a major influence on the organizational performance (Croom & Brandon-Jones, 2007). Organizational record management is an important driver for increasing internal process improvement, enhancing learning and innovation including the knowledge of purchasing personnel, their computer skill and resources. Record Management support is key influence organizational performance (Rotchanakitumnuai & Speece, 2004). Positive management support for e-procurement can ensure system adoption success. Training is the best support to enable personnel to use the records more efficiently. Croom & Brandon-Jones (2007) found that record management is one key success factor of strategic procurement implementation. Record management makes the procurement process more transparent and helps organizations achieve good governance impacts (Huiet *al.*, 2011).

Research Methodology

A descriptive research design was used in this study. Descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals Orodho (2003). The target population of this study comprised the Procurement staff at KENAO comprising of a total of 84 respondents. Thus strategy procurement and its application are relevant at this level prompting the choice of the departments. A list that contains the number of all employees was sourced from the procurement department.

The researcher collected both primary and secondary data during the researcher. Primary data was collected using a questionnaire covering the strategic role of procurement in organizational performance. The questionnaire contained both structured and unstructured questions. Once the questionnaires are received they will be coded and edited for completeness and consistency. Quantitative data was analyzed by employing descriptive statistics and inferential analysis using statistical package for social science (SPSS).

Data Analysis and Interpretation

Regression Analysis

In addition, the researcher conducted a linear multiple regression analysis so as to test the relationship among variables (independent) on the organizational performance. The researcher

applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study.

Table 4. 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.897 ^a	.880	.133	.3195

Source: Research, 2012

The adjusted R^2 is the coefficient of determination. This value explains how total quality management varied with Records management; cost reduction, supplier relationship and information technology. The four independent variables that were studied, explain 90% of the total quality management as represented by the R^2 . This therefore means that other factors not studied in this research contribute 10% of the total quality management giving room for further research to investigate the other factors (10%) that affect organizational.

Table 4. 2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.534	5	2.878	52.400	.0073
	Residual	186.555	27	2.129		
	Total	198.089	32			

According to Mugenda & Mugenda, 2003, ANOVA is a data analysis procedure that is used to determine whether there are significant differences between two or more groups or samples at a selected probability level. An independent variable is said to be a significant predictor of the dependent variable if the absolute t-value of the regression coefficient associated with that independent variable is greater than the absolute critical t-value. The regression analysis also yields an F-statistic where if the calculated F-value is greater than the critical or tabled F-value, the prediction will be rejected. In this study, the significance value is .0073 which is less than 0.05 thus the model is statistically significant in predicting Records management; cost reduction, supplier relationship and information technology. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 52.400), this shows that the overall model was significant.

Table 4. 3: Coefficient of determination

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	3.657	1.033		0.787	0.050
Records management	0.454	0.107	0.159	1.091	0.002
Cost management	0.988	0.139	0.085	0.687	0.005
supplier relationship	0.568	0.097	0.145	0.97	0.013
Information Technology	0.644	0.069	0.210	0.349	0.032

Source: Research, 2012

The researcher conducted a multiple regression analysis so as to determine the relationship between organizational performance and the four variables. As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$) becomes:

As per the SPSS generated the established regression equation was:

$Y = 3.657 + 1.654 X_1 + 0.988 X_2 + 0.568 X_3 + 0.444 X_4 + \varepsilon$ where:

Y = Organizational performance

X1 = Records management

X2 = Cost management

X3= supplier relationship

X4= Information Technology

ε = the error

According to the regression equation established, taking all factors into account (Records management, cost reduction, supplier relationship and information technology.) constant at zero, organizational performance will be 3.657. The data findings analyzed also show that taking all other independent variables at zero, a unit increase in Records management will lead to a 0.654 increase in organizational performance; a unit increase in Cost management will lead to a 0.988 increase in procurement performance, a unit increase in supplier relationship will lead to a 0.568 increase in organizational performance and a unit increase in information technology infrastructure will lead to a 0.444 increase in organizational performance. This infers that cost management contributes more to the organizational performance followed by the Information Technology.

At 5% level of significance and 95% level of confidence, Records management had a 0.002 level of significance; Cost management showed a 0.005 level of significant, supplier relationship showed a 0.013 level of significant, IT had a 0.032 level of significant, and hence the most significant factor is Records management.

Summary of the Findings

The study aimed at investigating the Role of Strategic Procurement Practices on Organizational Performance; Case Study of Kenya National Audit Office.

Records management

The study found out that majority of the employees were not well trained on Records management, that they had other working knowledge of other than procurement, that Records management affects organizational performance process and that that training of employee on record management affects procurement performance to a moderate extent.

Cost management

The study found out that the organization had a Cost management development programme in place; that costs are involved in organizational performance at the initial stage to a moderate extent; that costs affects organizational performance; that costs affects procurement performance to a great extent; that Cost management meet their requirements in terms of several performance criteria as shown by a mean of 4.4; that costs affect product price, quality, and delivery as shown by a mean of 4.3; and that costs affect organizational performance as shown by a mean of 3.7

Supplier Relationship

The study found out that Management is committed to supplier relationship as shown by a mean of 4.7; that Management encourage collaborative relationships with supplier for innovative procurement as shown by a mean of 4.1; that Management make efforts to standardize the procurement processes with suppliers as shown by a mean of 4.0, respectively. The study also found out that Management make efforts to encourage adherence to legislative procurement procedures and requisition development with suppliers as shown by a mean of 3.6 and that Management make efforts to streamline record management systems for suppliers as shown by a mean of 3.5. The study also found out that performance reporting is required by management sometimes; that all solicitations processes involving organizational performance were approved by management before commencing the process and that there is a budget provision for research and development (R&D) for the same.

Information Technology

The study found out that Information Technology affects procurement performance to a very great extent; that Information Technology investment makes contribution to procurement performance as shown by a mean of 3.9; that new technologies are promising to save costs, to improve customer and supplier relationships, business processes and performance, and to open new business opportunities as shown by a mean of 3.9; and that technologies allow organizations

to respond better to existing challenges and improve the anticipation of future developments as shown by a mean of 3.6. Respondents indicated neutrality on whether technology (IT) may contribute to challenges in system specification as shown by a mean of 3.3; and on whether VMI as an approach for managing materials and information flows between one or more customers and their immediate suppliers as shown by a mean of 2.5. They disagreed that technology provides tools to enable organization operations to consistently procure the best-value materials and services, using unified internet-based sourcing tools and streamlined support for complex negotiations as shown by a mean of 2.2.

Conclusions

The study concludes that majority of the employees were not well trained on Records management, that they had other working knowledge of other than procurement, that Records management affects organizational performance process and that that training of employee on record management affects procurement performance to a moderate extent.

The study concludes that the firm had a cost management programme in place; that costs are involved in organizational performance to a moderate extent; that cost affects organizational performance to a great extent; that costs meet their requirements in terms of several performance criteria; that costs affect product price, shipment quality, and delivery compliance; and that cost management affect organizational performance hence procurement performance.

The study concluded that Management is committed to supplier relationship, that Management encourages collaborative relationships with supplier for innovative procurement; that Management make efforts to standardize the procurement processes with suppliers respectively. The study also found out that Management make efforts to encourage adherence to legislative procurement procedures and requisition development with suppliers and that Management make efforts to streamline record management systems for suppliers. The study also found out that performance reporting is required by management sometimes; that all solicitations processes involving organizational performance were approved by management before commencing the process and that there is a budget provision for research and development (R&D) for the same.

The study concludes that information technology affects implementation organizational performance to a very great extent; that information technology investment makes contribution to procurement performance; that new technologies are promising to save costs, to improve customer and supplier relationships, procurement performance, and to open new business opportunities; and that technologies allow organizations to respond better to existing challenges and improve the anticipation of future developments. Technology was found to contribute to challenges in system specification; and VMI was an approach for managing materials and information flows between one or more customers and their immediate suppliers. Technology tools were found to make organization operations able to consistently procure the best-value materials and services, using unified internet-based sourcing tools and streamlined support for complex negotiations.

Recommendations for policy and practice

Policy and practice for procurement should be carefully evaluated and the results of that evaluation fed back into improved approaches. It is important that the evaluation considers the

full range of costs and benefits. The organisation should have sufficient special techno-economic knowledge and openness to new, effective methods when assessing tenders for organizational performance. Employees should be equipped with the specific skills and competencies needed to design and manage contracts (including the associated training, after-sales service and Employ human resources with specific training and equipment for performing functional and environmental tests in order to be able to accept the end product and verify contract performance.

Procurement initiatives appear to be instrumental for improving procurement performance, by harmonizing purchases, launching co-ordination initiatives, setting standards and building skills. As such, the management of the KENAO Kenya should adopt e-procurement initiatives. However, the main focus of e-procurement is to produce cost savings. It targets “commodity” goods and services, and therefore does not stimulate the organizational performance.

The firm should create supporting structures of expertise with the help of public authorities that have R&D-review as core business and Introduce clear incentives to procuring private authorities (the procuring entity) by stating that one percent of the total volume of procurements should be allocated to organizational performance. In this manner, organizational performance can become a strategic issue for the KENAO.

On information technology investment, the KENAO should adopt new technologies are to save costs, to improve customer and supplier relationships, business processes and performance, and to open new business opportunities. It might also help the organization to respond better to existing challenges and improve the anticipation of future developments.

References

- Aberdeen Group (2001), Best Practices in E-procurement: The Abridged Report, Aberdeen Group, Boston, MA.
- Adams, D., Nelson, R. and Todd, P. (2002), "Perceived usefulness, ease of use, and usage of information technology: a replication", *MIS Quarterly*, Vol. 16 No. 2, pp. 227-47.
- Davila, A., Gupta, M. and Palmer, R. (2003), "Moving procurement systems to the internet: the adoption and use of e-procurement technology models", *European Management Journal*, Vol. 21 No. 1, pp. 11-23.
- Davis, F.D. (2009), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, Vol. 13, pp. 319-40.
- Electronic Commerce News (2002), "Health care firms move to broader e-commerce deployment", *Electronic Commerce News*, Vol. 7 No. 10, pp. 1-6.
- Ellram, L. and Zsidisin, G. (2002), "Factors that drive purchasing and supply management's use of information technology", *IEEE Transactions on Engineering Management*, Vol. 49 No. 3, pp. 269-81.
- Emerson, R.M. (2002), "Power-dependence relations", *American Sociological Review*, Vol. 27, pp. 31-41.
- Hanley C, (2002) "Avoiding the issue: The Commission and Human Rights Conditionality in Public Procurement", *European Law Review*, vol. 27, n° 6, pp.714-735.
- Kothari, C.R. (2005) *Research Methodology. Methods and Techniques* (Second Revised edition)
- Lai, V. and Li, H. (2005), "Technology acceptance model for internet banking: an invariance analysis", *Information Management*, Vol. 42 No. 2, pp. 373-86.
- Min, H. and Galle, W. (2001), "Electronic commerce-based purchasing: a survey on the perceptual differences between large and small organisations", *International Journal of Logistics: Research and Applications*, Vol. 4 No. 1, pp. 79-95.
- Mugenda, O., & Mugenda, A. (1999) *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: Africa Centre for Technology Studies
- Nagle, T., Finnegan, P. and Hayes, J. (2006), "The effects of business-to-business relationships on electronic procurement systems: an exploratory study", *Proceedings of the European Conference on Information System (ECIS 2007)*, 7-9 June, St. Gallen.
- Puschmann, T. and Alt, R. (2005), "Successful use of e-procurement in supply chains", *Supply Chain Management: An International Journal*, Vol. 10 No. 2, pp. 122-33.

- Saunders, C.S. and Clark, S. (1992), "EDI adoption and implementation: a focus on organizational linkages", *Information Resources Management*, Vol. 5, pp. 9-19.
- Stockdale, R. and Standing, C. (2002), "A framework for the selection of electronic marketplaces: a content analysis approach", *Internet Research-Electronic Networking Applications and Policy*, Vol. 12, pp. 221-34.
- Subramaniam, C. and Shaw, M.J. (2002) "A Study of the Value and Impact of B2B E-commerce: The Case of Web-Based Procurement", *International Journal of Electronic Commerce* 6(4): 19-40.
- Tatsis, V., Mena, C., Van Wassenhove, L.N. and Whicker, L. (2006), "E-procurement in the Greek food and drink industry: drivers and impediments", *Journal of Purchasing & Supply Management*, Vol. 12, pp. 63-74.
- Taylor, S. and Todd, P.A. (1995), "Understanding information technology usage: a test of competing models", *Information System Research*, Vol. 6 No. 2, pp. 144-74.
- Venkatesh, V. (2000), "Determinants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model", *Information Systems Research*, Vol. 11 No. 4, pp. 342-65.
- Wang, Y.C., Chang, C. and Heng, M. (2004), "The levels of information technology adoption, business network, and strategic position model for evaluating supply chain integration", *Journal of Electronic Commerce Research*, Vol. 5 No. 2, pp. 85-98.
- Wood, B. (2000), "Financing for Women-owned Businesses: The Canadian Case", 2nd OECD Conference on Women Entrepreneurs in SMEs: Realising the Benefits of Globalisation and the Knowledge-based Economy, 29-30 November, Paris, OECD.
- Yi, M. and Hwang, Y. (2003), "Systems: self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model", *International Journal of Human-Computer Studies*, Vol. 59, pp. 431-49.
- Zhang, Q., Vonderembse, M.A., Lim, J.S., (2002). Value chain flexibility: a dichotomy of competence and capability. *International Journal of Production Research* 40(3), 561-583.
- Zhu, K. (2002), "Information transparency in electronic marketplaces: why data transparency may hinder the adoption of B2B exchanges", *Electronic Markets*, Vol. 12 No. 2, pp. 92-9.