

The Role of Organizational Culture as a Moderating Factor in The Relationship Between E-Procurement Adoption, Procurement Performance, and Value for Money

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Abstract

The study assesses the role of organizational culture in the relationship between e-procurement adoption, procurement performance, and value for money. A single cross-sectional survey approach was used in collecting data from the respondents and relied on quantitative approach. convenience sampling was used to obtain a sample size of 136. The findings of the study concluded that electronic procurement has a positive and significant effect on procurement performance. Procurement performance has a positive and significant effect on value for money. Organizational culture does not significantly moderate the relationship between electronic procurement and procurement performance. Organizational culture positively and significantly moderates the relationship between procurement performance and value for money. The study contributes to academic knowledge by exploring the moderating role of organizational culture in the relationship between electronic procurement adoption, procurement performance, and value for money.

Keywords: Organizational Culture, E-Procurement Adoption, Procurement Performance, Value for Money

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1.0 INTRODUCTION

Electronic procurement (e-procurement) has gained significant attention in recent years as organizations seek to enhance their procurement processes, improve efficiency, and achieve cost savings. E-procurement refers to the use of electronic platforms and technologies to streamline and automate procurement activities, including sourcing, vendor selection, purchasing, and payment. The successful adoption and implementation of e-procurement systems can have a profound impact on procurement performance and ultimately contribute to achieving value for money. However, the influence of organizational culture on the relationship between e-procurement adoption, procurement performance, and value for money remains underexplored (Prajogo and McDermott, 2017).

E-procurement adoption has been widely recognized as a strategic initiative for organizations to transform their procurement practices. According to (Damuri et al., 2019), e-procurement

adoption offers various benefits, including reduced transaction costs, improved transparency, enhanced supplier collaboration, and increased process efficiency. Successful adoption requires addressing technical, organizational, and cultural factors (Ribeiro and Bolfarini, 2020). However, the impact of organizational culture on e-procurement adoption and its subsequent effects on procurement performance and value for money has received limited scholarly attention.

Procurement performance encompasses multiple dimensions, such as cost reduction, quality improvement, lead time reduction, and supplier relationship management. Previous studies have found a positive relationship between e-procurement adoption and procurement performance. For instance, (Kelepouris et al., 2018) found that e-procurement adoption positively affects cost reduction and operational efficiency. However, the role of organizational culture in influencing this relationship remains unclear. Value for money is a critical outcome of procurement activities, indicating the optimal allocation of resources to achieve the desired outcomes. E-procurement adoption can contribute to value for money by reducing costs, improving supplier performance, and enhancing process efficiency. The influence of organizational culture on the relationship between e-procurement adoption, procurement performance, and value for money has not been extensively examined (Prajogo and McDermott, 2017).

Organizational culture refers to the shared beliefs, values, norms, and behaviors that characterize an organization. It influences how employees perceive and approach various organizational processes and activities. Different cultural dimensions, such as innovation orientation, risk-taking propensity, and openness to change, can shape the adoption and effectiveness of e-procurement systems (Prajogo and McDermott, 2017). However, the role of organizational culture as a moderating factor in the relationship between e-procurement adoption, procurement performance, and value for money requires further investigation. Hence this study seeks to examine the role of organizational culture as a moderating factor in the relationship between e-procurement adoption, procurement performance, and value for money.

The adoption of electronic procurement (e-procurement) has been shown to have a number of benefits for organizations, including improved procurement performance, increased value for money, and reduced costs (Damuri et al., 2019). However, the extent to which these benefits are realized is likely to be moderated by organizational culture. There is a scarcity of empirical studies that specifically examine the moderating role of organizational culture in the relationship between e-procurement adoption, procurement performance, and value for money (Prajogo and McDermott, 2017). Existing research tends to focus on the direct effects of e-procurement adoption on procurement performance, without considering the influence of organizational culture (Monczka et al., 2015). Therefore, empirical evidence exploring this moderating role is needed to provide a comprehensive understanding of the phenomenon. For instance, Ribeiro and Bolfarini (2020) highlight the need for further empirical research to investigate the moderating role of organizational culture in the context of e-procurement adoption and its impact on procurement performance and value for money.

2.0 MATERIALS AND METHODS

2.1 Electronic-Procurement

Electronic Procurement (E-Procurement) has emerged as a transformative strategy for organizations to modernize and enhance efficiency in their procurement processes through the adoption of digital technologies. E-Procurement involves the use of information and communication technologies (ICTs) to automate and streamline various procurement activities (Monczka et al., 2015). The digitalization of processes, from requisition to payment, distinguishes E-Procurement from traditional, paper-based procurement methods.

E-Procurement encompasses various components, each contributing to the overall efficiency of the procurement process. E-Sourcing platforms enable organizations to identify and evaluate suppliers digitally, while E-Tendering facilitates the electronic submission and evaluation of bids. E-Catalogs serve as centralized digital repositories for products and services, and automated workflow systems streamline the entire procurement cycle (Monczka et al., 2015). Scholars highlight several advantages associated with E-Procurement. Operational efficiency is a prominent benefit, as automation reduces manual errors and accelerates the procurement cycle (Monczka et al., 2015). Cost savings are realized through reduced paperwork, lower transaction costs, and improved negotiation with suppliers. The transparency offered by E-Procurement systems enhances accountability and tracking. Despite its benefits, E-Procurement implementation is not without challenges. High initial implementation costs are often cited as a barrier, and organizations must carefully manage the associated change in work processes (Monczka et al., 2015). Effective change management strategies are crucial to overcoming resistance to digital transformation.

E-Procurement adoption has witnessed global trends, driven by the increasing digitalization of business processes and the need for organizations to stay competitive. Governments and large enterprises are at the forefront of this adoption, leveraging E-Procurement to enhance efficiency, reduce corruption, and promote fair competition in procurement processes. Emerging technologies are expected to shape the future of E-Procurement. Artificial intelligence (AI) and blockchain, in particular, hold promise for enhancing security, transparency, and efficiency in procurement processes (Monczka et al., 2015). These technologies may address current limitations and provide new avenues for innovation in E-Procurement systems. Recent literature emphasizes the intersection of E-Procurement with sustainability goals. E-Procurement is seen as a tool for promoting environmentally friendly practices by reducing paper usage, minimizing transportation-related emissions through optimized supply chains, and encouraging the selection of eco-friendly suppliers (Caniato et al., 2012).

Effective use of digital platforms can lead to improved collaboration, communication, and negotiation with suppliers, fostering stronger and more strategic supplier relationships (Giunipero et al., 2019). E-Procurement highlights its evolution from a technological innovation to a critical strategic initiative for organizations seeking to optimize their procurement functions. Despite challenges, the benefits, adoption trends, and the integration of emerging technologies position E-Procurement as a cornerstone in the ongoing digital transformation of supply chain and procurement practices.

2.1 The role of E-Procurement

In response to the growing trend of sourcing materials externally, many companies are incorporating electronic procurement (e-procurement) as a crucial element in their e-business strategies (Deloitte Consulting, 2001). E-procurement is increasingly seen as an essential component of baseline procurement capabilities, becoming a standard practice in today's business environment. Companies are recognizing the importance of integrating Internet-based technologies into their ordering processes due to the advantages of reducing transaction costs, expanding competitive sourcing options, and improving inter-organizational coordination. The implementation of E-Procurement not only contributes to cost savings but also has broader implications for internal customer satisfaction, playing a role in shaping a company's competitive position. (Van Weele, 2005) highlights additional ways in which E-Procurement can benefit

companies, including the reduction of quality costs through rigorous quality control and the prevention of complaints from user departments or end customers. E-Procurement can also enhance internal customer satisfaction by promoting product standardization, reducing the variety of components and suppliers through set product standards.

Moreover, E-Procurement contributes to product design and innovation by fostering interactions between suppliers and user departments. This collaboration encourages fast and continuous innovation, leading to improvements in products and overall user satisfaction. The electronic nature of transactions facilitated by E-Procurement also aids in stock reduction, ensuring that capital is efficiently employed in other areas of the business. E-Procurement brings about increased flexibility, demanding flexibility from both service providers and suppliers. This flexibility is crucial for companies aiming to offer enhanced flexibility to their customers. The use of E-Procurement systems enables efficient communication with suppliers, facilitating the timely sharing of changes in demand and fostering purchasing synergy. Additionally, E-Procurement supports coordination between business units in organizations with autonomous structures, leading to significant cost savings through coordinated purchasing efforts.

Comprising multiple functionalities, web-based procurement systems facilitate the execution of purchasing transactions in an efficient manner. They facilitate the transmission of data in a timely and precise manner, offer a wealth of information, and entail communication and coordination expenses that are comparatively minimal. Searching, purchasing, monitoring and control, coordinating, and control are the primary B2B functions that are influenced by these systems (Subramaniam and Shaw, 2002). Inter-organizational supplier collaboration is a component of e-procurement that transcends internal operations. The former concentrates on connectivity with suppliers for electronic catalogs, transaction management, and ongoing relationship management, whereas the latter emphasizes paperless, automated internal processes. It is imperative to comprehend the effects that influence value formation in order to fully benefit from web-based e-procurement. This knowledge enables the creation of solutions that streamline the integration of such systems (Subramaniam and Shaw, 2002).

In the realm of procurement management, several theories contribute to understanding the development of business procurement functions and their impact on effective management and financial performance. Strategic procurement policies, influenced by various theories, play a significant role in enhancing internal customer satisfaction levels at different organizational levels. (Chen, Paulraj, and Lado, 2004) emphasize the strategic importance of purchasing in a functioning supply chain, citing its potential to foster close relationships with a limited number of suppliers, promote open communication, and develop long-term strategic relationships. This strategic approach, according to (Chen et al., 2004), leads to improved communication, a focus on a limited number of suppliers, and a long-term orientation, all of which contribute significantly to internal user department satisfaction and overall financial results. Axelsson and Leijonhufvud (1991) propose that governing purchasing can be effectively achieved through target setting and measurement using key performance indicators, aligning with the theory that strategic purchasing arrangements play a crucial role in the supply chain, ultimately contributing to internal user department satisfaction and overall financial outcomes.

2.1.2 Procurement performance

Procurement performance is a critical aspect of organizational success, encompassing the efficiency and effectiveness of activities related to sourcing, acquiring goods, and managing

supplier relationships. Procurement performance is broadly defined as the ability of an organization to achieve desired outcomes in its procurement activities. It extends beyond cost considerations and includes various dimensions such as supplier relationship management, timely delivery, and overall supply chain efficiency (Monczka et al., 2015; Handfield et al., 2019). Procurement performance is the successful achievement of desired outcomes in the acquisition of goods and services, encompassing aspects beyond cost savings. Procurement has evolved from a transactional function to a strategic one, playing a pivotal role in organizational success. Strategic procurement involves aligning procurement activities with overall organizational goals and leveraging supplier capabilities to contribute to competitive advantage (Wagner et al., 2011; Handfield et al., 2019). Strategic procurement involves aligning procurement activities with organizational goals, transforming it into a key contributor to competitive advantage.

Effective Supplier Relationship Management is emphasized as a critical factor in enhancing procurement performance. Collaborative relationships with suppliers, characterized by joint problem-solving and knowledge sharing, contribute to overall performance outcomes (Cousins et al., 2008; Handfield et al., 2019). Supplier Relationship Management (SRM) is integral to procurement performance, fostering collaborative relationships and contributing to positive performance outcomes. The advent of digital technologies, including e-procurement systems, has reshaped procurement processes. While technology offers the potential for enhanced efficiency and data-driven decision-making, careful integration and change management are crucial for realizing these benefits (Monczka et al., 2015). Technology integration, including e-procurement systems, presents opportunities for efficiency but requires careful implementation and change management for optimal impact on procurement performance.

Contemporary literature highlights the integration of sustainability considerations into procurement performance. Sustainable procurement practices, addressing environmental and social aspects, contribute to organizational reputation and risk mitigation (Carter and Rogers, 2008; Handfield et al., 2019). Sustainable procurement practices are increasingly recognized as integral to procurement performance, addressing environmental and social considerations for long-term success. Procurement performance is a multifaceted concept that extends beyond traditional cost metrics. It encompasses strategic alignment, effective supplier relationships, technology utilization, and sustainability considerations. A nuanced understanding of these dimensions is crucial for organizations aiming to optimize their procurement functions and contribute to overall business success.

2.1.3 Value for Money

Value for Money (VFM) is a fundamental concept in procurement and management, emphasizing the optimal balance between cost and the quality or benefits derived from a product, service, or investment. It is a principle that underlines the importance of obtaining the best possible return on investment while considering both financial and non-financial factors. This concept is widely applied in public procurement, private sector decision-making, and overall organizational management (Cousins et al., 2018).

Value for Money is commonly defined as the optimal combination of cost, quality, and performance to meet the intended objectives (National Audit Office, 2021). It involves assessing whether the resources expended are justified by the outcomes achieved. The components of VFM include economy (minimizing costs), efficiency (maximizing output for a given input), and effectiveness (achieving desired outcomes). Value for Money is the optimal combination of cost,

quality, and performance, ensuring that resources are efficiently utilized to achieve desired outcomes."

In the context of public procurement, VFM is a critical consideration. Government agencies are tasked with using public funds responsibly, and VFM assessments help ensure transparency and accountability in the procurement process. It involves not only selecting the lowest-cost option but also considering the long-term benefits and quality of goods or services (Treasury, 2019). Public procurement emphasizes Value for Money to ensure responsible use of public funds, encompassing considerations beyond immediate costs. VFM assessments must navigate uncertainties and risks associated with procurement decisions. While cost is a crucial factor, the potential for future risks, such as maintenance costs or supplier reliability, must be considered to truly evaluate the long-term value (Potts, 2011). Value for Money assessments must account for uncertainties and risks, including potential future costs and supplier reliability.

VFM extends beyond financial metrics. Qualitative aspects, such as innovation, environmental sustainability, and social impact, are increasingly recognized as integral to achieving comprehensive value. Organizations are encouraged to consider these non-financial factors in their decision-making processes (OECD, 2015). Non-financial considerations, including innovation and social impact, are essential components of Value for Money assessments. Despite its importance, the concept of VFM is not without challenges. Determining the appropriate balance between cost and quality can be subjective, and VFM assessments may vary based on individual perspectives. Additionally, the emphasis on immediate cost savings may lead to overlooking long-term value (Greco, Locatelli, & Turrin, 2018). Challenges in balancing cost and quality in VFM assessments may arise, with potential biases and a tendency to prioritize immediate cost savings. Value for Money is a multifaceted concept that goes beyond a narrow focus on costs. It is a strategic approach that considers the efficiency, effectiveness, and economy of investments, emphasizing the optimal allocation of resources to achieve desired outcomes.

2.1.4 Organizational Culture

An organization's behaviors, values, and norms are profoundly impacted by its organizational culture, which is a pervasive and intricate concept. Cultural norms and values influence the way in which members of an organization perceive, interpret, and react to their professional surroundings (Schein, 2010). The actions and behaviours of individuals within an organisation are determined by the set of shared assumptions, values, and beliefs that constitute its culture (Schein, 2010). It impacts the total organizational climate and symbolizes the "established procedures and practices." As stated by Schein (2010), "Organisational culture comprises the shared assumptions, values, and beliefs that influence the conduct and interactions of all members of an organisation."

Cultural elements within an organization include the following: Symbols, rituals, and language are examples of tangible artifacts. Asserted Values: convictions and principles that are overtly declared. Underlying, frequently dormant convictions that influence conduct constitute fundamental assumptions (Schein, 2010). Collectively forming the identity of an organization, organizational culture consists of tangible manifestations, professed values, and fundamental presumptions. In addition to lending social cohesion, facilitating the interpretation of internal affairs, and establishing a sense of identity, organizational culture serves multiple purposes (Denison, 1990). Organizational performance is substantially impacted by it, as are employee conduct and decision-making procedures. "As stated by Denison (1990), organizational culture

significantly influences employee conduct and business outcomes by fostering a sense of identity, social integration, and a conceptual framework for explaining occurrences."

Multiple typologies of organizational culture have been identified by scholars. The Competing Values Framework, pioneered by Quinn and Rohrbaugh in 1983, is a widely recognized model that categorizes cultures into four distinct quadrants: Clan, Adhocracy, Market, and Hierarchy. Different sets of values and priorities are represented in each quadrant. Consisting of four quadrants, each representing a unique set of values and priorities, the Competing Values Framework categorizes organizational cultures. Culture within an organization undergoes continuous change and evolution. Leadership is instrumental in nurturing a culture that is aligned with strategic objectives (Cameron and Quinn, 2006). Cultural change management is an essential component of organizational development. Dynamic and susceptible to modification is the organizational culture. Cameron and Quinn (2006) state, "Effective leaders are of the utmost importance when it comes to coordinating cultural evolution with strategic goals."

Organizational culture can be evaluated and quantified using a variety of models and instruments, including the Organizational Culture Assessment Instrument (OCAI). According to Cameron and Quinn (2011), these evaluations aid organizations in comprehending their present cultural condition and pinpointing potential areas that require enhancement. "Organisations are able to evaluate and quantify their culture with the assistance of instruments such as the Organisational Culture Assessment Instrument, which provides valuable insights for enhancement" (Cameron and Quinn, 2011). A force that shapes an organization's identity, influences behaviors, and has a significant effect on overall performance, organizational culture is pervasive and influential. It is imperative for leaders who wish to cultivate a favorable work atmosphere and synchronize the organization with its strategic goals to possess a comprehensive comprehension of organizational culture.

2.1.5 Organizational Culture Effectiveness

The extant scholarly literature on organizational culture provides insightful viewpoints on how business managers can enhance productivity and performance by strategically implementing an efficient culture (Reilly et al., 2014; Flamholtz and Randle, 2012). The perception of business managers regarding the organization's potential for success is impacted by the perception that an ineffective organizational culture is a liability rather than an asset (Flamholtz and Randle, 2011). Eaton and Kilby (2015) assert that managers employ organizational culture as a means to regulate the overall working environment of the organization.

According to Hartnell et al. (2011), business managers employ an efficient organizational culture to (a) impact employee attitudes, (b) enhance operational efficiency, and (c) bolster financial performance. Operational effectiveness is achieved through the application of organizational culture in order to implement innovations, enhance processes, and improve services. Financial performance and expansion are intrinsically linked to the achievement of profitability.

Effectiveness can be defined by an organizational culture that is both positive and robust. When an organization has a strong culture, its members behave in a manner consistent with its established values (Flamholtz and Randle, 2011). A constructive culture is cultivated within an organization when all of its members enthusiastically adopt and uphold its goals and fundamental principles (Flamholtz and Randle, 2012). Managers have the obligation to foster an organizational culture that encourages innovation and exceptional customer service so as to maximize performance and productivity (Givens and Ballaro, 2014; Inabinett and Ballaro, 2014).

In this specific cultural context, managers exhibit leadership that is centered around employees, establish and maintain mature interpersonal relationships, and adhere to ethical decision-making processes (Engelen et al., 2014).

(Pinho et al., 2014) Business managers who successfully implement an organizational culture prioritize the maintenance of a positive work environment. This culture is composed of sub-organizational cultures (Childress, 2013). These cultural groups prioritize management that is centered around employees, strong interpersonal connections, exceptional leadership, and ethical approaches to decision-making. Maintaining an effective organizational culture is of utmost importance in order to enhance employee motivation and performance (Berg & Wilderom, 2012; Shahzad et al., 2012). Effective organizational cultures are characterized by employees who share the organization's beliefs and values (Schein, 2010); this leads to improved performance and the achievement of goals (Denison, 1990). Effective organizational culture and a culture that values knowledge sharing foster teamwork (Wiewiora et al., 2014). Managers proactively promote collaboration as a means to enhance performance (Schein, 2010). An effective organizational culture fosters collaboration among administrators and employees with the ultimate goal of improving performance (Childress, 2013). Collaboration is critical in order to achieve shared organizational goals.

Effective organizational cultures are distinguished by a business manager emphasis on providing outstanding customer service (Berg and Wilderom, 2012). This emphasis is seen as a mechanism to establish and perpetuate a competitive advantage that is sustainable (Miguel, 2015). Staff members are motivated to provide thoughtful and enjoyable customer service within this specific cultural context due to the shared organizational values and beliefs (Childress, 2013). Customer service provision is an essential responsibility that business administrators have in an effective organizational culture (Berg and Wilderom, 2012).

Business managers employ transformational and employee-centric leadership styles within productive organizational cultures with the aim of maximizing performance and productivity (Veiseh et al., 2014). The positive correlation between transformational leadership and organizational culture promotes cooperation and collaboration (Wiewiora et al., 2014). An organization that possesses a supportive culture encourages cooperation and collaboration, which subsequently nurture pleasant working environments and shared experiences. As a result, employees are motivated to attain greater levels of productivity (Veiseh et al., 2014).

Strong interpersonal relationships and organizational culture are positively correlated, according to research (Veiseh et al., 2014). Engelen et al. (2014) posit that business administrators who cultivate productive organizational cultures encourage employee-centric interpersonal relationships. (2014) O'Reilly et al. Qualitative research underscores the significance of robust interpersonal relationships in augmenting the contentment of employees.

Successful organizations foster an environment that promotes open communication and constructive discourse among employees by acknowledging and resolving their concerns (Childress, 2013). Strong interpersonal relationships between employees and their managers promote effective communication and the exchange of ideas (Nongo and Ikyanyon, 2012). The cultivation of a sense of accountability and ownership among staff is facilitated by the establishment of trust in leadership and the practice of effective interpersonal communication (Busse, 2014). The cultivation of a sense of ownership and accountability among employees is

crucial for inspiring and involving them in the pursuit of improved performance (Denison, 1990); this, in turn, enhances the organization's productivity and overall performance (Nongo and Ikyanyon, 2012).

2.1.6 Types of Organizational Culture

Four distinct types of organizational culture have been identified: (a) market culture; (b) clan culture; (c) adhocracy culture; and (d) market culture (Fiordelisi, 2014; Sok et al., 2014; Wiewiora et al., 2014). A supportive or clan-oriented culture is distinguished by employee-centric leadership that emphasizes collaboration, engagement, and unity (Han, 2012). Adhocracy, which is another name for an entrepreneurial culture, is distinguished by qualities such as adaptability, innovation, and creativity (Veiseh et al., 2014). Sok et al. (2014) define hierarchy culture as an organizational framework in which the supervision of activities is achieved through the incorporation of regulations and standards. On the other hand, market culture is founded upon the principles of competition and the achievement of goals within an organization (Pinho et al., 2014).

Clan culture is predicated on the values and presumptions of human connection, support, allegiance, cooperation, and attachment (Fiordelisi, 2014). To foster a culture of excellence and inspire and motivate employees, it is critical that managers operating within a clan culture adopt a democratic approach (Miguel, 2015). An effective organizational culture is predicated on the cultivation of active interpersonal relationships, which are facilitated by member trust, loyalty, and ownership (Nongo and Ikyanyon, 2012). These attributes foster a culture of accountability and promote proper conduct among the constituents of the institution. By cultivating an atmosphere that places importance on employee engagement, participation, collaboration, and open communication, clan culture aims to enhance employee empowerment and performance (Han, 2012; Murphy et al., 2013).

The proposition that clan culture has a positive influence on organizational performance is substantiated by empirical evidence (Han, 2012; Man and Luvison, 2014; Murphy et al., 2013). Givens (2012), on the other hand, contends that clan culture may place a higher value on employee relations than on efficacy and efficiency. A compromise is achieved when Kotrba et al. (2012) acknowledge the direct and indirect impacts of clan culture on improvements in efficiency and efficacy, in addition to its indirect influence on performance enhancement. Organizational leaders within a clan culture promote and foster employee engagement and commitment, predicated on the notion that dedicated personnel will execute their responsibilities and obligations with optimal effectiveness (Nongo and Ikyanyon, 2012).

An adhocracy or entrepreneurial culture places emphasis on the communication of employment responsibilities to members, highlighting their significance and ability to impact the attainment of organizational goals (Veiseh et al., 2014). (2011) Hartnell et al. The values and assumptions that define Adhocracy culture are flexibility, risk-taking, innovation, diversity, autonomy, and expansion. Adhocracy culture administrators allocate additional resources towards research and development, thereby cultivating an atmosphere that encourages employees to participate actively in inventive and groundbreaking research pursuits (Sok et al., 2014).

Adhocracy cultures prioritize the significance of creativity and innovation in order to enhance service quality and productivity, thereby promoting innovation and change (Fiordelisi, 2014). Research evidence supports the correlation between adhocracy culture and innovative

entrepreneurial orientation (Engelen et al., 2014). Furthermore, Adhocracy culture has been found to be associated with long-term financial effectiveness (Hartnell et al., 2011).

Priority number one in a hierarchical culture is the implementation of effective control systems across the entire organization. The behavior of individuals within a hierarchy culture is governed by established protocols and regulations (Hartnell et al., 2011). Elements that constitute a hierarchical culture are consistent practices, unambiguous lines of communication, and reinforcement (Fiordelisi, 2014). Efficacy and effectiveness constitute the fundamental goals of a hierarchical culture. An inverse correlation has been observed between organizational culture and consumer integration and financial performance, according to research findings (Han, 2012; Cao et al., 2015).

Employees of a company that fosters a competitive environment are driven by clearly defined objectives to increase their remuneration through market success (Han, 2012). Competition culture comprises the following: task-oriented leadership, market aggression, the acquisition of germane data regarding customers and competitors, the establishment of strategic goals, the formulation of plans, and the making of decisions; and the successful completion of objectives. In a competitive environment, business managers prioritize external effectiveness through market control and competitiveness assurance through market success. Customer-centric leadership is essential for surviving in a competitive environment where business managers must comprehend the clients' and market's foremost concerns. A culture of competition seeks to attain substantial levels of market share, revenue, profit, growth, and productivity (Hartnell et al., 2011). An organization can achieve an effective organizational culture when its business administrators coordinate the organization's members' values, priorities, and conduct so as to steer the business successfully and competitively through its commercial endeavors (Eaton and Kilby, 2015). It is imperative for the effectiveness of an organization's culture to maintain a fair competition stance while simultaneously ensuring stakeholder satisfaction.

Empirical studies on organizational culture have identified geographical disparities in terms of cultural acceptability (Engelen et al., 2014). Shim and Steers (2012) observed that organizations in Southern Korea demonstrated a higher incidence of clan cultures and hierarchical structures, in contrast to the United States and Japan. Furthermore, an increased incidence of collaborative culture was noted among organizations situated in the southern region of Korea. According to Shim and Steers, business managers who exhibited proactivity, forward-thinking, risk-taking, and innovation were more prevalent in American organizations as opposed to Korean ones.

2.2 Empirical Review

Empirical studies on the intersection of Electronic Procurement (E-Procurement), Procurement Performance, Value for Money, and Organizational Culture provide valuable insights into how these elements are interconnected and influence organizational outcomes. While specific empirical reviews may vary, the following synthesized findings capture the trends and relationships observed in relevant studies.

Empirical studies consistently highlight a positive relationship between the adoption of E-Procurement and enhanced Procurement Performance. For instance, research by Chen and Paulraj (2004) found that organizations leveraging E-Procurement systems experienced improved efficiency in the procurement process, reduced transaction costs, and increased collaboration with suppliers. The automation of procurement activities, streamlined workflows, and real-time

data access contribute to quicker decision-making and overall performance improvements (Lai, Wong, and Cheng, 2010).

Empirical evidence supports the notion that E-Procurement contributes to achieving Value for Money in organizational procurement activities. Studies by Kannabiran and Suresh (2014) indicate that organizations implementing E-Procurement systems often achieve cost savings, improved supplier negotiations, and enhanced transparency. The ability to compare and analyze supplier offerings online, coupled with streamlined processes, contributes to optimal decision-making and resource utilization, aligning with the principles of Value for Money (Yang and Wu, 2008).

Organizational culture significantly influences the successful adoption and integration of E-Procurement systems. Empirical research by (Lu, Ramamurthy and Liu, 2011) suggests that a culture of innovation and openness positively correlates with the successful implementation of E-Procurement initiatives. Organizations with a culture that values technological innovation and collaboration among employees are more likely to embrace and adapt to electronic procurement technologies (Wu, Straub, and Liang, 2015). The alignment of organizational culture with the principles of E-Procurement is crucial for its successful adoption.

The empirical link between Organizational Culture and Procurement Performance is well-documented. Studies by (Zhao, and Wei, 2018) emphasize that a positive organizational culture, characterized by openness, collaboration, and a shared commitment to organizational goals, is associated with improved procurement outcomes. Organizations fostering a culture that values transparency, ethical behavior, and continuous improvement are likely to experience enhanced procurement performance, including better supplier relationships and strategic sourcing (Handfield et al., 2019). Empirical reviews suggest that the success of E-Procurement initiatives, procurement performance, and achieving value for money is contingent on how well these elements align with the overarching organizational culture. Organizations with a culture that embraces technological innovation, transparency, and efficiency are more likely to derive maximum benefits from their E-Procurement investments and realize superior procurement performance while ensuring value for money (Lai et al., 2010; Zeng et al., 2018).

2.3 Contingency Theory

Electronic Procurement and Procurement Performance: Contingency theory posits that the impact of electronic procurement (E-Procurement) on procurement performance is contingent on contextual factors. As organizations vary in their structures and environments, the effectiveness of E-Procurement may depend on how well it aligns with the specific needs and characteristics of each organization (Burns and Stalker, 1961). For instance, the degree of centralization, task interdependence, and technology readiness may influence how organizations benefit from E-Procurement in improving procurement performance (McFarlan, 1984). "The effectiveness of E-Procurement in enhancing procurement performance is contingent on contextual factors such as organizational structure and technology readiness (McFarlan, 1984)."

Procurement Performance on Value for Money: Contingency theory suggests that the relationship between procurement performance and achieving value for money is contingent on various organizational factors. The nature of the procurement environment, the complexity of transactions, and the strategic importance of procurement within the organization may influence the effectiveness of procurement performance in delivering value for money (Donaldson, 2001).

Organizations need to tailor their procurement performance strategies to fit their specific contextual circumstances to optimize the value-for-money proposition. "The effectiveness of procurement performance in achieving value for money is contingent on organizational factors such as the complexity of transactions and the strategic importance of procurement (Donaldson, 2001)."

Organizational Culture on the Relationship between Electronic Procurement and Procurement Performance: Contingency theory suggests that the impact of organizational culture on the relationship between E-Procurement and procurement performance is contingent on the alignment between cultural values and the technological innovation introduced by E-Procurement. Organizations with a culture that fosters innovation and openness are likely to experience a positive influence on procurement performance through the successful adoption of E-Procurement (Daft, 2007). The fit between organizational culture and the technological change introduced by E-Procurement is crucial for success. "The relationship between E-Procurement and procurement performance is contingent on the alignment between organizational culture, particularly values related to innovation and openness, and the technological change introduced (Daft, 2007)."

Organizational Culture on the Relationship between Procurement Performance and Value for Money: Contingency theory suggests that the relationship between organizational culture, procurement performance, and achieving value for money is contingent on the organization's cultural values that prioritize efficiency, transparency, and continuous improvement. Organizations with a culture supporting these values are more likely to leverage their procurement performance efforts to deliver optimal value for money (Cameron & Quinn, 2006). The congruence between organizational culture and procurement strategies influences the effectiveness of achieving value for money.

"The relationship between procurement performance and value for money is contingent on the alignment between organizational culture, particularly values related to efficiency and transparency, and the strategies implemented (Cameron & Quinn, 2006)." In summary, contingency theory provides a theoretical lens through which to understand the nuanced relationships between electronic procurement, procurement performance, organizational culture, and value for money. It underscores the importance of considering contextual factors and tailoring strategies to fit the unique circumstances of each organization.

2.5 Conceptual Framework

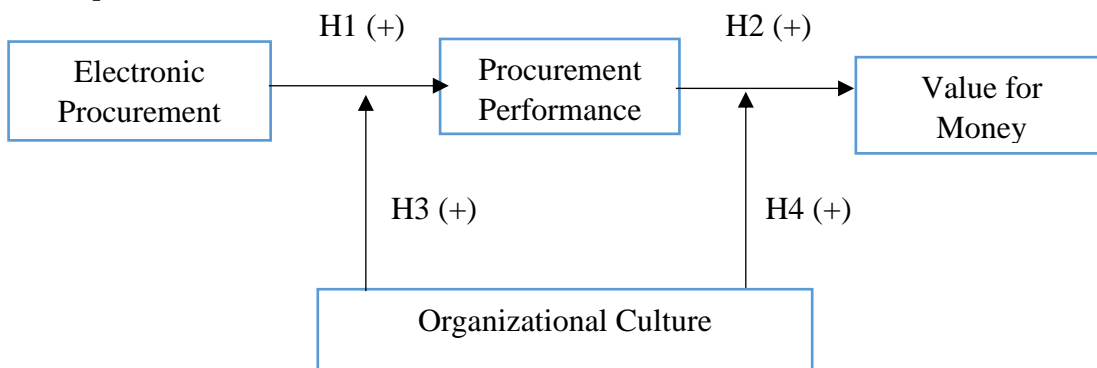


Figure 2.1 Conceptual Framework

2.5.1 Relationship between electronic procurement on procurement performance

Electronic Procurement (E-Procurement) has become a transformative force in modern supply chain management, reshaping traditional procurement processes. This literature review explores the extensive body of research that examines the influence of E-Procurement on procurement performance, shedding light on the mechanisms, benefits, and challenges associated with this digital transformation. The evolution of information technology has been a catalyst for the widespread adoption of E-Procurement systems. As highlighted by (Monczka et al., 2015), organizations have increasingly turned to electronic means for sourcing, purchasing, and managing supplier relationships.

The shift towards E-Procurement is driven by the potential to enhance efficiency, reduce costs, and improve overall procurement performance. One of the primary advantages of E-Procurement is the automation of procurement processes. Research by (Wu, Straub, and Liang, 2015) emphasizes how E-Procurement systems streamline tasks such as requisitioning, approvals, and order fulfillment. Automation not only accelerates the procurement cycle but also minimizes errors, contributing to increased operational efficiency and performance. E-Procurement systems facilitate real-time access to information, enabling organizations to make informed and timely decisions.

According to Subramaniam and Shaw (2002), the integration of web-based procurement systems significantly impacts search, purchase processing, monitoring, and coordination. Real-time data availability enhances procurement performance by providing a comprehensive view of the supply chain and enabling proactive decision-making. E-Procurement fosters improved collaboration between buyers and suppliers. (Chen and Paulraj, 2004) emphasize that electronic systems enable seamless communication, order tracking, and information sharing. Effective supplier collaboration, as highlighted by (Handfield et al., 2019), contributes to better supplier relationships, reduced lead times, and increased overall procurement performance. Based on the arguments raised, the study proposes that:

H1: there is a positive influence of electronic procurement on procurement performance

2.5.2 The relationship between procurement performance on value for money

The relationship between procurement performance and value for money is a critical aspect of effective procurement management. Numerous studies in the literature provide insights into how a high level of procurement performance contributes to achieving value for money in various organizational contexts. A fundamental aspect of procurement performance contributing to value for money is cost efficiency. As highlighted by (Monczka et al., 2015), effective procurement practices, such as strategic sourcing and negotiation, can lead to cost savings. Organizations that excel in procurement performance often achieve economies of scale and negotiate favorable terms with suppliers, directly impacting the overall cost-effectiveness of their procurement activities.

"Cost efficiency achieved through effective procurement performance contributes significantly to value for money (Monczka et al., 2015)." Procurement performance, particularly in the context of managing supplier relationships, is linked to value for money. Research by (Handfield et al., 2019) emphasizes that fostering positive and collaborative relationships with suppliers enhances the overall procurement process. This, in turn, contributes to better negotiation outcomes, reduced lead times, and increased efficiency, all of which impact the value derived from

procurement activities. "Effective supplier relationship management as part of procurement performance positively influences value for money (Handfield et al., 2019)." Procurement performance that prioritizes quality assurance and innovation can enhance the value proposition. According to studies such as (Krause, Scannell, and Calantone, 2000), a focus on procuring high-quality goods and services contributes to long-term value for money. Additionally, procurement performance that encourages supplier innovation can result in enhanced product or service offerings. "Procurement performance emphasizing quality assurance and innovation is linked to the long-term value derived from procurement activities (Krause et al., 2000)." The ability of procurement performance to effectively manage risks is crucial for ensuring value for money. As noted by (van Weele, 2014), organizations that integrate risk management into their procurement processes can mitigate potential disruptions, ensuring continuity and reliability in the supply chain. Based on the issues raised, this study proposes that:

H2: procurement performance has a positive relationship with value for money

2.5.3 moderating effect of organizational culture on the relationship between electronic procurement and procurement performance

The moderating effect of organizational culture on the relationship between electronic procurement (E-Procurement) and procurement performance has been a subject of interest in academic literature (Lu et al., 2011). Organizational culture is considered a contextual factor that can shape and influence how the implementation of E-Procurement systems translates into improved procurement performance. Studies recognize that organizational culture plays a crucial role in shaping the outcomes of technological interventions such as E-procurement (Lu et al., 2011). The work of (Schein, 2010) on organizational culture underscores how shared values and beliefs within an organization can moderate the impact of technological changes. In the context of E-Procurement, the organizational culture can either facilitate or hinder the successful integration and utilization of electronic systems.

Organizational culture, characterized by shared values and beliefs, is acknowledged to play a crucial moderating role in shaping the outcomes of technological interventions such as E-Procurement (Schein, 2010). Research by (Lu, Ramamurthy and Liu, 2011) suggests that a culture that values innovation and openness positively influence the adoption and implementation of E-Procurement systems. In organizations with a culture supportive of change and technological innovation, employees are more likely to embrace and effectively utilize electronic procurement tools, enhancing the potential for positive procurement performance outcomes. "Organizational culture, particularly one that values innovation and openness, is found to positively influence the adoption and implementation of E-Procurement systems (Lu et al., 2011). The alignment between the values embedded in the organizational culture and the goals of E-Procurement initiatives is crucial. Cameron and Quinn (2006) emphasize that when there is congruence between the cultural values and the objectives of E-Procurement, the impact on procurement performance is more likely to be positive.

Conversely, a misalignment may lead to resistance and suboptimal utilization of the electronic systems. "The impact of E-Procurement on procurement performance is contingent on the alignment between the values embedded in organizational culture and the objectives of electronic procurement initiatives (Cameron and Quinn, 2006)." (Chen, Paulraj and Lado, 2004) highlight the importance of cultural adaptability and flexibility in the context of E-Procurement. Organizations with a culture that encourages adaptability and openness to change are better positioned to leverage the potential benefits of electronic procurement systems. This adaptability

can moderate the challenges associated with integrating new technologies and enhance the effectiveness of procurement performance improvements. "Cultural adaptability and flexibility are identified as key factors influencing the success of E-Procurement, indicating that organizational culture plays a moderating role in the implementation of electronic systems (Chen et al., 2004)."

The way employees perceive and interact with E-Procurement systems is influenced by the prevailing organizational culture. Research by (Denison, 1990) suggests that a culture that fosters collaboration and openness positively affects user acceptance and engagement with technological changes. This, in turn, moderates the impact of E-Procurement on procurement performance. "Organizational culture, characterized by collaboration and openness, moderates the way employees perceive and interact with E-Procurement systems, influencing user acceptance and engagement (Denison, 1990)." In conclusion, the moderating effect of organizational culture on the relationship between E-Procurement and procurement performance is evident in the literature. The alignment of cultural values with the goals of E-Procurement, cultural adaptability, and the influence on user acceptance collectively shape the outcomes of electronic procurement initiatives within organizations. Based on the issue raised, this study proposes that:

H3: organizational culture positively moderates the relationship between electronic procurement and procurement performance

2.5.4 moderating effect of organizational culture on the relationship between procurement performance and value for money

The moderating effect of organizational culture on the relationship between procurement performance and value for money is a nuanced aspect of procurement management. The organizational culture, encompassing shared values, beliefs, and practices within a company, can influence how the outcomes of procurement performance efforts translate into achieving value for money. Organizational culture is acknowledged as a significant moderating factor that shapes the link between procurement performance and the achievement of value for money. According to (Schein, 2010), organizational culture influences how employees interpret and respond to performance outcomes. In the context of procurement, a supportive culture can enhance the impact of procurement performance efforts on achieving optimal value for money. Organizational culture, as proposed by (Schein, 2010), is a key moderating factor influencing how employees interpret and respond to the outcomes of procurement performance efforts, affecting the achievement of value for money.

The relationship between procurement performance and value for money is contingent on the alignment of organizational culture with efficiency and effectiveness goals. Cameron and Quinn (2006) argue that a culture emphasizing efficiency and effectiveness enhances the ability of procurement practices to contribute to overall value for money. Conversely, a misalignment may impede the realization of economic value in procurement activities. The alignment between organizational culture and efficiency and effectiveness goals is crucial for the relationship between procurement performance and value for money, as proposed by (Cameron and Quinn, 2006). Cultural values within an organization play a role in shaping the strategic orientation of procurement practices. (Handfield et al., 2019) suggest that a culture supporting strategic procurement initiatives, such as supplier collaboration and long-term relationship building, can moderate the impact of procurement performance on achieving value for money beyond

immediate cost considerations. Cultural values, particularly those supporting strategic procurement initiatives, moderate the impact of procurement performance on achieving value for money, extending beyond immediate cost considerations (Handfield et al., 2019).

Organizational culture influences decision-making processes and risk management strategies within procurement. (Monczka et al., 2015) highlight that a risk-aware culture may moderate the relationship between procurement performance and value for money by influencing how organizations approach risk assessment and mitigation in procurement activities. The influence of organizational culture on decision-making processes and risk management strategies moderates the relationship between procurement performance and value for money, as noted by (Monczka et al., 2015). Employee buy-in and perception of value are influenced by organizational culture. (Lu, Ramamurthy, and Liu, 2011) suggest that a culture of innovation and openness positively impacts how employees perceive the value derived from procurement performance initiatives. This cultural factor can moderate the link between procurement performance outcomes and the overall perceived value for money.

Organizational culture, particularly a culture of innovation and openness, moderates the relationship between employee buy-in, value perception, and the outcomes of procurement performance, influencing the achievement of value for money (Lu et al., 2011). In summary, the moderating effect of organizational culture on the relationship between procurement performance and value for money is a multifaceted phenomenon. The alignment of cultural values with efficiency, effectiveness, strategic orientation, decision-making processes, and employee perceptions collectively influences how procurement performance contributes to achieving optimal value for money within an organization. Understanding and leveraging organizational culture is essential for maximizing the economic and strategic value derived from procurement activities. Based on the arguments raised, this study proposes that:

H4: organizational culture positively moderates the relationship between procurement performance and value for money

3.0 METHODOLOGY

3.1 Research Design

The research design in a study pertains to the fundamental approach used to gather information about the research issue, specifically highlighting the various sources from which data will be collected (Saunders et al., 2007). In social science research, three main approaches are commonly utilized: exploratory, descriptive, and explanatory research design. This study adopts an explanatory research design. The choice of research design is often guided by the purpose of the research, categorizing it as exploratory, descriptive, or explanatory (Saunders et al., 2007). An exploratory study is valuable for discovering "what is happening," seeking new insights, posing questions, and assessing phenomena in a fresh light (Saunders et al., 2007).

Descriptive studies fulfil various research objectives, including providing descriptions of phenomena or characteristics associated with a subject population and exploring associations among different variables (Cooper and Schindler, 2014). Explanatory research, on the other hand, aims to establish causal relationships between variables, demonstrating that one action leads to another. Various forms of studies can be adopted, such as case studies, surveys, experiments, ethnography, grounded theory, and archival research.

3.1 Sampling Technique and Sample Size

The researcher must choose a sample because it is not feasible for them to gather data from every case in order to answer the study questions. The total set of instances that the researcher selects a sample from is referred to as the population. Researchers frequently use sampling strategies to lower the number of cases because of time and resource constraints. Non-probability sampling is frequently linked to the design of case studies and qualitative research; case studies analyze real-world occurrences using small samples rather than drawing statistical conclusions about the whole population (Yin, 2003).

While representativeness or randomness are not always necessary for the selection of participants or instances, it is necessary to provide a clear justification for the inclusion of certain situations or individuals over others. Convenience sampling, which is popular because it is simple and inexpensive, particularly with students, entails choosing participants based on their ready and easy availability (Ackoff, 1953). Convenience sampling was used in this study to choose respondents. A total of 150 questionnaires were given to available procurement staff during the researcher's visits to the chosen businesses; this resulted in a final sample size of 136 respondents who finished the questionnaire during the visit.

4.0 RESULTS AND DISCUSSIONS

The demographic profile provides a snapshot of the characteristics of the respondents involved in the study. This information is crucial for understanding the diversity and representation within the sample, allowing for the analysis of how different demographic groups may perceive or experience the phenomena under investigation.

This information about the age distribution of the respondents., 4 respondents of the respondents' forming (2.9%) were between ages of 18 – 24 years, 72 respondents of the respondents' forming (52.9%) were between ages of 25 – 34 years, 49 respondents of the respondents' forming (36.0%) were between ages of 35 – 44 years and 11 respondents of the respondents' forming (8.1%) were between ages of 55 – 64 years. This shows that the majority falls within the 25-34 age range, constituting more than half of the sample.

The gender distribution indicates that the majority of respondents are male, comprising more than half of the total sample where 78 respondents forming (57.4%) were male, 55 respondents forming (40.4%) were female and 3 respondents forming (2.2%) prefer not to say.

The educational qualifications of the respondents, the majority were holding a bachelor's degree. 3 respondents forming (2.2%) were higher national diploma graduates, 11 respondents forming (8.1%) were doctorate graduates, 89 respondents forming (65.4%) were bachelor's degree graduates and 33 respondents forming (24.3%) were master's degree graduates.

The distribution of respondents' positions within their organizations is provided, showing a varied representation of roles such as procurement manager, warehouse manager, logistics manager, and inventory manager. 32 of the respondents forming (23.5%) were procurement managers, 12 of the respondents forming (8.8%) warehouse managers, 40 of the respondents forming (29.4%) were logistics managers and 52 respondents forming (38.2%) were inventory managers.

The classification of the respondents based on the sector in which their organizations operate. The majority work in the private sector. Thus 103 of the respondents forming (75.7%) were in the private sector whereas 33 of the respondents forming (24.3%).

Table 4.1 Respondents Demographics

Profile	Characteristics	Frequency	Percent
Age	18 – 24 years	4	2.9
	25 – 34 years	72	52.9
	35 – 44 years	49	36.0
	55 – 64 years	11	8.1
	Total	136	100.0
Gender	Male	78	57.4
	Female	55	40.4
	Prefer not to say	3	2.2
	Total	136	100.0
Educational background	HND/Diploma	3	2.2
	Doctorate	11	8.1
	Bachelor's Degree	89	65.4
	Master's Degree	33	24.3
	Total	136	100.0
Position	Procurement manager	32	23.5
	Warehouse manager	12	8.8
	Logistics manager	40	29.4
	Inventory manager	52	38.2
	Total	136	100.0
Sector	Private	103	75.7
	Public	33	24.3
	Total	136	100.0

4.1 Reliability and Validity Tests

Reliability refers to the consistency and stability of a measurement instrument. In other words, it assesses the degree to which a tool produces consistent results over time, across different situations, and among different groups of participants. Cronbach's alpha is a measure of internal consistency reliability. It assesses the degree to which a set of items in a survey or test consistently measures a single underlying construct.

Validity refers to the extent to which a measurement instrument accurately measures what it is intended to measure. It ensures that the instrument is relevant and meaningful in capturing the construct under investigation. KMO is a measure of sampling adequacy used in factor analysis. It assesses whether the data is suitable for factor analysis by examining the proportion of variance among variables that might be common variance. KMO was used because is particularly useful when you are considering factor analysis to identify underlying constructs or dimensions within the data. It helps ensure that the data has enough common variance for meaningful factor analysis.

The combined use of Cronbach's Alpha and KMO provides a comprehensive assessment of reliability and validity in the survey, ensuring that the data is both internally consistent and suitable for further analysis, such as factor analysis or construct validation.

Table 4.2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.952
Bartlett's Test of Sphericity Approx. Chi-Square	4679.419
df	595
Sig.	.000

Table 4.2.1 Cronbach's Alpha (CA) Values and Factor loadings

Electronic Procurement (CA=.955)	Procurement Performance (CA=.926)	Organizational Culture (CA=.947)	Value for Money (CA=.909)
Factor Loadings	Factor Loadings	Factor Loadings	Factor Loadings
ERP1.767	PPR1.780	ORC1.721	VFM1.827
ERP2.676	PPR2.748	ORC2.688	VFM2.815
ERP3.726	PPR3.701	ORC3.734	VFM3.766
ERP4.687	PPR4.757	ORC4.757	
ERP5.722	PPR5.761	ORC5.724	
ERP6.765	PPR6.796	ORC6.690	
ERP7.734	PPR7.793	ORC7.778	
ERP8.793		ORC8.702	
ERP9.696		ORC9.725	
ERP10.641		ORC10.682	
ERP11.708		ORC11.748	
ERP12.729		ORC12.836	
ERP13.780			

A high KMO and significant Bartlett's Test support the suitability of the data for factor analysis. The high Cronbach's Alpha values and strong factor loadings indicate strong internal consistency and construct validity for the factors of electronic procurement, procurement performance, organizational culture, and value for money in the study.

A KMO value close to 1.0 indicates a high degree of common variance, suggesting that the data is suitable for factor analysis. In this case, a KMO of .952 is excellent, indicating that the variables in the analysis share substantial common variance, supporting the appropriateness of factor analysis. Cronbach's Alpha assesses the internal consistency reliability of a set of items. A high CA value (close to 1.0) indicates strong internal consistency.

Electronic Procurement (CA=.955) is exceptionally high, suggesting that the items related to electronic procurement in the study are highly internally consistent. Procurement Performance (CA=.926) is also high, indicating strong internal consistency among items related to procurement performance. Organizational Culture (CA=.947) is high, suggesting strong internal consistency in the organizational culture factor. Value for Money (CA=.909) is high, indicating strong internal consistency in the value for money factor.

Factor loadings represent the strength and direction of the relationship between each item and the underlying factor. Values closer to 1.0 indicate a strong association. All factor loadings for items related to electronic procurement (ERP), procurement performance (PPR), organizational culture (ORC), and value for money (VFM) are relatively high, ranging from 0.641 to 0.836. This suggests that the items effectively load onto their respective factors, providing evidence for the construct validity of the factors.

4.2 Effect of Electronic Procurement on Procurement Performance

The study examined the effect of electronic procurement on procurement performance and in doing that a simple linear regression was employed to ascertain the extent that electronic procurement has an effect on procurement performance. The table 4.3 presents the results.

Table 4.3 Effect of Electronic Procurement on Procurement Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.871 ^a	.758	.756	.49221	
		ANOVA ^a			
	Sum of Squares	df	Mean Square	F	Sig.
Regression	101.749	1	101.749	419.985	.000 ^b
Residual	32.464	134	.242		
Total	134.212	135			
		Coefficients ^a			
Unstandardized Coefficients			Standardized Coefficients		
	B	Std. Error	Beta	t	p
(Constant)	.533	.161		3.305	.001
ERP	.865	.042	.871	20.494	.000

The linear relationship between the predictor variable electronic procurement and the dependent variable procurement performance is = 0.871, indicating a strong positive correlation between electronic procurement and procurement performance. R Square representing the proportion of the variance in the dependent variable (procurement performance) that is explained by the predictor variable (electronic procurement).

In this case, approximately 75.8% of the variability in procurement performance can be accounted for by electronic procurement. The significance value (p-value) is less than 0.05, indicating that the overall regression model is statistically significant. The coefficient for electronic procurement, is 0.865, indicating that for every one-unit increase in electronic procurement, procurement performance is expected to increase by 0.865 units. The high t-value = 20.494 and low p-value = .000 suggest that electronic procurement has a positive and significant effect on Procurement Performance.

4.3 Effect of Procurement Performance on Valur for Money

The study examined the effect of procurement performance on value for money and in establishing that a linear regression was performed to ascertain the extent that procurement performance has effect on value for money and table 4.4 presents the results.

Table 4.4 Effect of Procurement Performance on Valur for Money

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.682 ^a	.465	.461	.79132	
		ANOVA ^a			
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	72.841	1	72.841	116.323	.000 ^b
Residual	83.910	134	.626		
Total	156.751	135			
		Coefficients ^a			
		Unstandardized Coefficients	Standardized Coefficients		
	B	Std. Error	Beta	t	p
(Constant)	1.058	.263		4.020	.000
PPR	.737	.068	.682	10.785	.000

The R Square represents the proportion of the variance in the dependent variable value for money that is explained by the predictor variable procurement performance. In this study, approximately 46.5% of the variability in value for money can be accounted for by procurement performance. The regression sum of squares represents the amount of variance in the dependent variable value for money explained by the predictor variable procurement performance is 72.841, indicating a significant contribution of procurement performance to explaining variance in value for money. The F-statistic tests the overall significance of the regression model. A larger F-statistic indicates a more significant relationship. The F-statistic is 116.323, suggesting that the model is statistically significant. The significance value (p-value = 0.000) is less than 0.05 indicating that the overall regression model is statistically significant. The t-value = 4.020 indicates that the procurement performance has a positive and significant effect on value for money.

4.4 Moderating effect of Organizational Culture

The study assessed the moderating effect of organizational culture on the relationship between electronic procurement and procurement performance. The table 4.10 presents the results of a regression analysis where procurement performance is the outcome variable, and electronic procurement and organizational culture are the predictor variables.

Table 4.5 Moderating effect of Organizational Culture

R	R-sq	MSE	F	df1	df2	p
.9063	.8213	.1817	202.2260	3.0000	132.0000	.0000
	coeff	se	t	p	LLCI	ULCI
constant	-.1798	.4587	-.3919	.6958	-1.0871	.7276
constant	.6195	.1641	3.7762	.0002	.2950	.9441
ORC	.5493	.1445	3.8015	.0002	.2635	.8351
Int_1	-.0297	.0414	-.7162	.4751	-.1116	.0523
Int_1: electronic procurement x Organizational culture						
Test(s) of highest order unconditional interaction(s)						
R2-chng	F	df1	df2	p		

.0007	.5129	1.0000	132.0000	.4751
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The interaction term (Electronic Procurement X Organizational Culture) is not statistically significant ($p > 0.05$), suggesting that the combined effect of electronic procurement and organizational culture is not significantly different from the sum of their individual effects. The model suggests a strong relationship between electronic procurement, organizational culture, and procurement performance. However, the interaction term does not significantly contribute to explaining additional variance in procurement performance beyond what is explained by the individual predictors. This means that organizational culture does not significantly moderate the relationship between electronic procurement and procurement performance.

4.5 Moderating effect of Organizational Culture

The study finally examined the moderating effect of organizational culture on the relationship between procurement performance and value for money. The table 4.11 presents the results of a regression analysis where value for money is the outcome variable, and procurement performance and organizational culture are the predictor variables.

Table 4.6 Moderating effect of Organizational Culture

R	R-sq	MSE	F	df1	df2	p
.7945	.6312	.4380	75.3001	3.0000	132.0000	.0000
	coeff	se	t	p	LLCI	ULCI
constant	1.9069	.7393	2.5793	.0110	3.3693	.4445
PPR	.8860	.2595	3.4135	.0009	.3726	1.3994
ORC	1.5308	.2417	6.3323	.0000	1.0526	2.0089
Int_1	.2247	.0656	3.4257	.0008	.3544	.0949
Int_1: procurement performance x Organizational culture						
Test(s) of highest order unconditional interaction(s)						
R2-chng	F	df1	df2	p		
.0328	11.7353	1.0000	132.0000	.0008		
Conditional effects of the focal predictor at values of the moderator(s):						
	Effect	se	t	p		
2.5833	.3055	.1285	2.3783	.0188		

The R-squared (R-sq): 0.6312 represents the proportion of variance in value for money explained by the predictors thus procurement performance and organizational culture. Approximately 63.12% of the variability in value for money is accounted for by procurement performance and organizational culture. The p-value = 0.0008 associated with the F-statistic=11.7353 suggest that the interaction term is statistically significant. The overall model is highly significant ($p < 0.05$), suggesting that procurement performance and organizational culture together significantly predict value for money. Both procurement performance and organizational culture have positive coefficients, indicating that increases in these variables are associated with higher value for money. The conditional effects analysis shows that organizational culture positively and significantly moderates the relationship between procurement performance and value for money.

Table 4.7 Hypothesis Testing and Findings

Hypothesis	Relationship	Beta	t	p	Remarks
H1	ERP - - > PPR	.871	20.494	.000	Supported
H2	PPR - - > VFM	.682	10.785	.000	Supported
H3	ORC * ERP - - > PPR	.4751	.1116	.0523	Not supported
H4	ORC * PPR - - > VFM	.1285	2.3783	.0188	Supported

5.0 CONCLUSIONS

5.1 Findings & Summaries

Effect of Electronic Procurement on Procurement Performance

The study examined the effect of electronic procurement on procurement performance and the findings of the study suggest that electronic procurement has a positive and significant effect on procurement performance. Monczka et al. (2015) posit that electronic procurement systems reduce the time required for various procurement activities. Automation of tasks such as requisition, sourcing, and order processing leads to quicker turnaround times. Research by Mithas et al. (2011) indicates that e-procurement can contribute to cost reduction by lowering transaction costs, minimizing errors, and optimizing inventory levels. Electronic procurement helps in negotiating better prices with suppliers and identifying cost-saving opportunities through improved visibility into spending patterns (Mabert et al., 2003).

E-procurement systems provide real-time visibility into procurement activities, allowing organizations to track purchases, monitor supplier performance, and analyze spending patterns. Transparency in procurement processes contributes to accountability and compliance, as noted in research by Ellram and Siferd (1998). The literature consistently supports the idea that electronic procurement positively impacts procurement performance by improving efficiency, reducing costs, enhancing visibility, strengthening supplier relationships, minimizing errors, and ensuring compliance with governance standards. The adoption of e-procurement systems is seen as a strategic move to drive overall effectiveness in the procurement function.

Effect of Procurement Performance on Value for Money

The study examined the effect of procurement performance on value for money and the findings of the study indicate that the procurement performance has a positive and significant effect on value for money. When procurement activities are streamlined and optimized, organizations can negotiate better prices, reduce transaction costs, and achieve overall cost efficiency Monczka et al. (2015). Procurement performance involves selecting suppliers strategically, negotiating favorable terms, and managing relationships to ensure the best value from the supply chain. According to Krause et al. (2000) procurement performance directly impacts the quality and performance of goods and services acquired. High-quality procurement processes ensure that organizations receive the right products or services, meeting or exceeding specifications, and contributing to overall value. Effective procurement performance includes robust risk management practices.

A study by Bensaou and Aouad (1998) suggest that well-managed procurement processes contribute to identifying and mitigating risks, thereby safeguarding against potential disruptions and ensuring value for money. The literature, such as studies by Lamming et al. (2000), emphasizes that procurement excellence fosters innovation and can contribute to gaining a

competitive advantage. Procurement teams that perform well are more likely to engage in strategic partnerships, collaborate on product development, and bring innovative solutions to the organization. The literature consistently supports the idea that procurement performance positively influences value for money by optimizing costs, ensuring quality, managing risks, fostering innovation, and promoting compliance and governance. Organizations that prioritize and enhance their procurement performance are better positioned to achieve optimal value for the resources invested in their procurement activities.

Moderating effect of Organizational Culture on the relationship between electronic procurement and procurement performance

The study assessed the moderating effect of organizational culture on the relationship between electronic procurement and procurement performance. The interaction term does not significantly contribute to explaining additional variance in procurement performance beyond what is explained by the individual predictors. This means that organizational culture does not significantly moderate the relationship between electronic procurement and procurement performance. Literature suggests that the relationship between electronic procurement and procurement performance may be more directly influenced by technological factors, alignment with organizational structures and strategies, and individual perceptions of technology. While organizational culture may play a role in shaping the adoption of e-procurement, it may not consistently and significantly moderate the impact on procurement performance. Some scholars argue that the impact of e-procurement on procurement performance may be more influenced by technological factors than by organizational culture. Research by Kraemer and Dedrick (2002) introduced the concept of technological determinism, suggesting that the characteristics of the technology itself can have a more direct impact on performance outcomes than organizational culture.

Moderating effect of Organizational Culture on the relationship between procurement performance and value for money

The study finally examined the moderating effect of organizational culture on the relationship between procurement performance and value for money. The conditional effects analysis shows that organizational culture positively and significantly moderates the relationship between procurement performance and value for money. Organizational culture shapes the values, beliefs, and norms that guide employee behavior. When there is alignment between the culture and the organization's goals, it can positively influence procurement performance. As noted by Cameron and Quinn (2011) in their Competing Values Framework, a strong cultural alignment with strategic goals enhances overall organizational effectiveness. An organizational culture that encourages innovation and risk-taking can positively moderate the relationship between procurement performance and value for money. As highlighted by Denison (1990) and O'Reilly and Chatman (1996), a culture that fosters innovation can lead to more effective procurement strategies, driving value creation and efficiency gains. An organizational culture that values continuous improvement and learning can positively moderate the relationship between procurement performance and value for money. The ability to adapt to changing market conditions, adopt best practices, and innovate in procurement processes is crucial for achieving optimal value for money (Krause et al., 2000).

5.2 Conclusions

The study examined the effect of electronic procurement on procurement performance and the findings of the study concluded that electronic procurement has a positive and significant effect on procurement performance. The study examined the effect of procurement performance on value for money and the findings of the study concluded that the procurement performance has a positive and significant effect on value for money. The study assessed the moderating effect of organizational culture on the relationship between electronic procurement and procurement performance and the findings of the study concluded that organizational culture does not significantly moderates the relationship between electronic procurement and procurement performance. The study finally examined the moderating effect of organizational culture on the relationship between procurement performance and value for money and the findings of the study concluded that organizational culture positively and significantly moderates the relationship between procurement performance and value for money.

5.3 Managerial Implications

Understanding the moderating effect of organizational culture on the relationship between procurement performance and value for money has important managerial implications. Organizations can leverage this knowledge to enhance their procurement practices and achieve better outcomes. Managers should assess the alignment between organizational culture and strategic goals. If there is a positive alignment, efforts should be made to reinforce and cultivate cultural values that support effective procurement practices. Strategic planning should take into account how cultural elements can be leveraged to enhance procurement performance and contribute to achieving value for money.

Implementing training and development programs that focus on cultural aspects related to procurement can be beneficial. This includes providing education on the importance of cultural factors in supplier relationship management, negotiation strategies, and ethical procurement practices. Building cultural competence among procurement professionals can enhance their ability to navigate diverse cultural contexts. Leadership initiatives should reflect a commitment to fostering a culture that supports effective procurement practices. Leaders can set the tone by communicating the importance of procurement performance and value for money, emphasizing ethical behavior, and promoting a culture of continuous improvement. Cultivating an open and transparent communication culture is vital. This includes ensuring that expectations related to procurement performance and value for money are clearly communicated throughout the organization. Transparency in decision-making processes, especially in supplier relationships, helps build trust and aligns with cultural values that support value creation.

5.4 Theoretical Contribution

Contingency Theory makes a valuable contribution to understanding the moderating effect of organizational culture on the relationship between procurement performance and value for money. Contingency Theory posits that the effectiveness of organizational structures and processes is contingent upon the alignment with the external environment and internal organizational variables.

Contingency Theory emphasizes the importance of aligning organizational structures and processes with the external environment. The culture of an organization is a crucial internal factor that must align with the external demands and challenges in the procurement landscape.

A cultural fit with the external context can enhance the effectiveness of procurement practices in delivering value for money.

According to Contingency Theory, organizations should adapt their structures and processes to environmental uncertainty. The relationship between procurement performance and value for money is likely to be influenced by the level of uncertainty in the external environment. Organizational culture plays a role in shaping the adaptive capacity of the organization, influencing how it responds to uncertainties in the procurement domain. Contingency Theory contributes by emphasizing the importance of aligning organizational structures, including culture, with external contingencies in the context of procurement. It recognizes that the relationship between procurement performance and value for money is contingent upon various factors, and organizational culture plays a vital role in shaping this relationship. Managers can use Contingency Theory insights to assess and adapt their organizational culture to better support effective procurement practices and achieve optimal value for money.

5.5 Recommendations

To leverage the positive influence of electronic procurement and procurement performance on value for money, organizations can consider implementing the following recommendations. Organizations should invest in advanced and user-friendly e-procurement systems that integrate seamlessly with existing processes. These systems should facilitate end-to-end automation, streamline procurement workflows, and provide real-time visibility into procurement activities. Organizations should ensure that employees and procurement professionals receive comprehensive training on the effective use of e-procurement systems. This includes training on system functionalities, data security, and compliance with procurement policies. A well-trained workforce is more likely to utilize e-procurement tools to their full potential.

Organizations should define and communicate key performance indicators (KPIs) that align with organizational goals. Metrics such as cycle time reduction, cost savings, and supplier performance should be regularly monitored and evaluated. Clear performance metrics provide a basis for assessing the impact of electronic procurement on overall procurement performance. Organization should foster collaboration with key suppliers through electronic communication channels. Utilize e-procurement platforms to share information, negotiate contracts, and collaborate on product or service improvements. Strong supplier relationships contribute to better procurement performance and increased value for money.

Organizations should leverage data analytics and business intelligence tools to gain insights from procurement data. Analyzing spending patterns, identifying cost-saving opportunities, and monitoring supplier performance can contribute to informed decision-making and improved procurement outcomes. Organizations should integrate e-procurement systems with enterprise resource planning (ERP) systems to achieve a seamless flow of information across the organization. Integration facilitates data accuracy, reduces manual errors, and enhances the efficiency of procurement processes. By implementing these recommendations, organizations can harness the positive influence of electronic procurement and procurement performance on value for money, leading to more efficient, cost-effective, and strategic procurement practices.

5.6 Areas for Future Studies

Future research should look at investigate how different cultural typologies (e.g., clan culture, adhocracy culture, market culture, hierarchy culture) within organizations influence the

moderating effect on the relationship between procurement performance and value for money. Understanding how specific cultural dimensions impact procurement outcomes can provide more nuanced insights. Explore how changes in organizational culture over time affect the moderating role of culture on the relationship between procurement performance and value for money. Longitudinal studies can provide insights into the dynamic nature of culture and its impact on procurement outcome.

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