

Approaching transcendence: a conceptual discussion on procurement fraud, education, professionalism maturity, ethics and implications

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Abstract

Purpose – This study aims to explore and present discussions regarding the interconnectedness of procurement fraud, supply chain education, professional maturity and ethics, and their relevance to adopting a transcendence concept as well as proposing research directions thereof.

Design/methodology/approach – This study adopts a conceptual, intending to synthesize insights and propose a new conceptual framework that incorporates the transcendence framework and the process matrix. This generic framework provides a holistic view of the procurement and supply chain landscape at multiple levels – individual, team, organizational and industry.

Findings – This paper delves into the complex landscape of corruption within procurement, involving a diverse array of participants, including procurement professionals. The effectiveness of current corruption theories may be limited in this context. Despite the introduction of ethical training and anti-corruption initiatives, corruption remains widespread. The delivery of content and the design of the curriculum in supply chain education necessitate a reorientation to include not only moral education but also practical or hands-on delivery methods. In Kenya, sectors such as health and education exhibit a lack of recognition and professional maturity. When all the research constructs are examined separately, they do not provide a holistic understanding, thus underscoring the need for a comprehensive approach across the supply chain spectrum. This topic is ripe for further academic investigation with empirical evidence.

Research limitations/implications – This paper provides key insights for researchers and practitioners in the field of procurement and supply chain education, particularly in Kenya. However, it acknowledges the lack of empirical studies and the limitations of current research, including procurement fraud, the context-specific nature of the findings and the dynamic nature of corruption and procurement practices concerning the constructs. This paper calls for further research to address these gaps, validate its propositions and contribute to a more comprehensive understanding of public procurement and corruption in Kenya. It also emphasizes the need for continuous research due to the evolving nature of corruption and procurement practices.

Practical implications – This study has practical relevance for researchers, professionals and the procurement and supply chain ecosystem. It offers insights that can inform future research, professional advocacy and policy development regarding the shape of supply chain academia in Kenya. In addition, it contributes to the advancement of procurement and supply chain professionalism in the country.

Social implications – This study underscores the necessity for breaking the cycle of procurement fraud, enhancing procurement and supply chain education in Kenya, and fostering active engagement of professional associations in promoting maturity and specialization within the field.



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Originality/value – This study holds distinctive value by uncovering previously unexplored dynamics among supply chain constructs within the context of a lower-middle-income economy, i.e. Kenya. Deconstructing and synergizing these concepts calls for a more robust theoretical and empirical comprehension of these constructs within Kenya’s unique background.

Keywords Corruption, Education, Ethics, Fraud, Maturity, Procurement

Paper type Conceptual paper

1. Introduction

Procurement practices in Kenya have often been associated with the pursuit of substantial wealth through fraudulent means, rather than through legitimate and honest channels (Zalan *et al.*, 2021) and plagued by systemic corruption, with a staggering 70% of corruption cases in the country are linked to procurement, particularly within governmental departments (Miriri, 2015). Nevertheless, instances of corruption within the private sector, encompassing bribery for obtaining specific services such as business licences, official documents and tax-related misconduct also persist, with approximately one in three companies reportedly impacted by procurement fraud (PricewaterhouseCoopers [PWC], 2016).

Despite the existence of legal frameworks, anti-corruption agencies and ethical training initiatives, the pervasive nature of corruption remains unchecked. This underscores the limitations of current anti-corruption theories and traditional controls in effectively combating deeply entrenched corrupt practices that have become institutionalized.

Compounding the challenge is the perceived shortage of qualified and skilled procurement and supply chain professionals in Kenya. This is despite the fact that every year, a significant number of graduates emerge in the field of procurement and supply chain, and numerous training sessions are conducted for both seasoned and new professionals. In addition, sectors like health and education suffer from a lack of professional maturity. The root causes of corruption appear multifaceted, stemming from issues within procurement and supply chain education itself. An over-reliance on theoretical curricula devoid of moral grounding and practical application-based learning exacerbates the problem.

To break the vicious cycle of procurement corruption, a transcendence approach is essential – one that holistically addresses education, ethics, fraud prevention, professional development and recognition of the procurement profession across the entire supply chain ecosystem.

This paper begins by examining the current state of corruption in Kenya, with a particular focus on the complex relationship between procurement practices and corruption. It then moves on to discuss various theories of corruption and provides an analysis of eight specific cases of procurement fraud in Kenya, using these theories as a lens for examination. The paper then shifts its focus to the educational landscape of procurement and supply chain in Kenya, providing insights into its current state. It underscores the importance of professional recognition, maturity, and ethics within the procurement and supply chain profession in the country. Following this, the paper introduces the “transcendence framework”, a model that advocates for a comprehensive approach to professionalism in procurement and supply chain. It also presents the process matrix, a structured, cyclical methodology designed for the continuous assessment, adaptation and iterative improvement of anti-corruption efforts, all appreciating theoretical insights. The paper concludes by summarizing the key findings and implications of the research, while also acknowledging its limitations.

2. Corruption in Kenya

Kenya’s ranking in Transparency International’s Corruption Perception Index [CPI] in 2022 (32 out of 100) demonstrates the gravity of the problem (see Figure 1) (Transparency

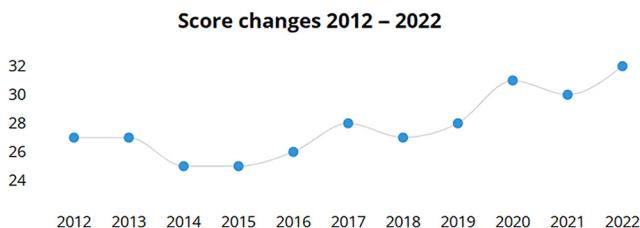
International Australia (TIA), 2023). Transparency International defines the CPI on a scale of 0–100, with 0 indicating severely corrupt and 100 indicating very clean, based on an examination of perceptions of public sector corruption in 180 countries and territories using 13 business surveys and expert opinions. Transparency International Australia (TIA) (2023) reports that a score of less than 50 indicates substantial levels of public sector corruption.

Makiva (2021) conducted a detailed analysis of public procurement oversight and the prevalence of corruption in the public sectors of South Africa and Kenya. According to Makiva's study, a staggering 77% of respondents in the Global Economic Crime Survey (2016, as cited in Makiva, 2021, p. 236) reported cases of procurement fraud arising from vendor selection in Kenya. Furthermore, Makiva (2021) noted that corruption in public procurement in Kenya encompasses a range of irregularities and illegal actions characterized by intentional deception. Nyambariga (2016) found that middle-level managers in public organizations in Kenya believe that senior managers collude and protect the corrupt, while low-level managers believe that social status, remuneration and protectionism are important factors in determining corruption perceptions.

A study by the Association of Certified Fraud Examiners (ACFE) shows that in sub-Saharan Africa, occupational fraud is a pervasive issue that spans across various organizational levels. Employees, who account for 41% of cases, are associated with a median loss of \$40,000. Managers, representing 37% of cases, are linked to a higher median loss of \$100,000. Executives, although constituting only 18% of cases, are connected to the highest median loss of \$979,000 (Association of Certified Fraud Examiners [ACFE]).

Murphy and Dacin (2011), Rustiarini *et al.* (2019), Kassem (2022) and Lyra (2022) attributed rationalization to motivating fraudulent behaviours in public procurement in other studies in the literature. Bergman (2023) cites Bandiera *et al.* (2009) to differentiate between corruption, or “active waste”, and simple inefficiency, or “passive waste”. Their research, which focused on public procurements in Italy, revealed that inefficiency-related waste is more significant than corruption-related inefficiency.

Michela Wrong's article, “Everyone is corrupt in Kenya, even grandmothers” (Wrong, 2014) sheds light on the government's seemingly contradictory stance on combating corruption, amid highly publicized mega-scandals. Corruption in Kenya spans all economic strata. A multitude of factors contribute to this crisis, including senior public officials and business policy elites (Kenya Anti-Corruption Commission (KACC), 2007; Ethics and Anti-corruption Commission (EACC), 2015; Githongo, 2015a), inadequate legislation and constitutional challenges, low public sector wages, non-adherence to procurement protocols, the low performance marked by bureaucracy, deficient planning and contract management, as well as insufficient transparency and accountability (Kenya Anti-Corruption Commission



Source: Kenya; the Corruption Perception Index (CPI) by Transparency International Australia (2023) is licensed under CC BY 4.0

Figure 1.
Kenya corruption
perception index
(CPI)

(KACC), 2007; Wanyama, 2010; Ngugi and Mugo, 2010; Odhiambo and Kamau, 2013; Ondieki and Oteki, 2015; Ethics and Anti-corruption Commission (EACC), 2015 and Van Rij, 2021).

Not surprisingly, for a decade, empirical studies in Kenya have recurring themes of the absence of qualified and skilled procurement professionals (Ngari, 2012; Ondieki and Oteki, 2015; Mathias, 2023) and the lack of ethical standards and training (Okanda, 2023), which contribute to the persistence of corruption in Kenya. However, practising procurement and supply chain officers undergo ethics as well as other professional-related training, offered by several institutions such as Global Procurement Academy, Centre for Advanced Procurement Studies and the Kenya Institute of Supplies Management (KISM) every year, through a continuous professional development programme in a bid to acquire new skills, knowledge and competencies (KISM, 2021). The KISM a national body for professionals in the practice of Procurement and Supply Chain Management (P&SCM) in Kenya. The Institute draws its mandate from the Supplies Practitioners Management Act No.17 of 2007 to inter alia, register and licence all supplies practitioners in Kenya and to regulate their practice (Kenya Institute of Supplies Management [KISM], 2023).

Scholars have been rethinking the mode and level at which ethics education is given in light of systemic and coherent corruption. Oindo *et al.* (2021) argue that exploring African moral theory, particularly Ubuntu morality, can provide a useful framework for fostering a national ideology centred on the common good and combating corruption. They suggest that ethics education should be included in schools as a means of fostering an ethical culture from a young age and reducing propensities for unethical behaviour. Similarly, Amukowa and Gunda (2013) argue that ethics should be taught at home by parents from an early age. However, there are critical aspects that are being overlooked. Firstly, that deep-rooted corruption requires moral education and secondly, recalibration of the educational system (Wokabi, 2019).

The staggering statistic that 70% of corruption cases in Kenya are linked to procurement fraud, particularly within government departments, underscores the urgent need to examine the entangled relationship between procurement practices and corruption in the country. This necessitates an analysis of how various corruption theories can expound on the underlying dynamics enabling such pervasive misconduct, despite existing anti-corruption measures.

3. The link between procurement and corruption

Articles decrying entrenched corruption are not uncommon in Kenya. Access to government contracts has evolved into a lucrative endeavour, characterized by entrepreneurs who either inflate prices for goods and services or exploit fictitious bids and purchases (Nsehe, 2015). The emerging class of capitalists, informally referred to as “tenderpreneurs”, establish affiliations with politicians and government officials to secure contracts, subsequently profiting from these partnerships (Nsehe, 2015).

In 2021, the KISM, mandated by the Supplies Practitioners Management Act No.17 of 2007, announced that procurement and supply chain officers implicated in procurement fraud would be deregistered and blacklisted (Kenya Institute of Supplies Management [KISM], 2021). KISM acknowledged the multifaceted nature of corruption cases and emphasized the need for procurement and supply chain officers to resist fraudulent activities, even in the face of intimidation or coercion, and report such incidents to the institute or relevant security authorities (Mosoku, 2018).

The ACFE found that fraud is prevalent across various departments, including operations (19%), accounting (12%), executive/upper management (11%), customer service (7%), financing (7%) and purchasing (7%). In 29% of cases, a single perpetrator is involved,

resulting in a median loss of \$50,000 (ACFE, 2020). However, in 71% of cases involving two or more perpetrators, the median loss escalates to \$100,000. The data further reveals that collusion among fraudsters leads to median losses that are twice as large as those involving a single perpetrator, underscoring the amplified risk posed by collaborative fraudulent activities (ACFE, 2020).

The demographic profile of a typical fraud perpetrator in Sub-Saharan Africa reveals a gender disparity in fraud perpetration. Men commit 84% of frauds, resulting in a median loss of \$100,000, significantly higher than the \$60,000 associated with frauds committed by women. This disparity warrants further investigation (ACFE, 2020).

The dichotomy between the “big fish and small fish” is no longer a contentious debate in Sub-Kenya. As asserted by John Githongo, an anti-corruption activist and whistleblower:

Procurement contracts are now commonly referred to as ‘budgeted corruption’ in Kenya, with political elites involved in the pillaging facing negligible consequences. (Zalan *et al.*, 2021)

In light of the pervasive corruption in procurement, it is crucial to comprehend the ramifications for those implicated in occupational fraud. The position held within an organization significantly impacts the penalties faced by these fraudsters. Specifically, owners and executives are less likely to endure internal disciplinary actions (65%) compared to their non-owner and executive counterparts (82%). This discrepancy could be ascribed to the power dynamics within organizations that allow those in superior positions to evade punitive measures more effectively (ACFE, 2020). Consequently, it is vital to identify the individuals involved, understand the extent of their participation and pinpoint the stages in the procurement process where fraudulent activities transpire. For a summarized depiction of seven representative instances, refer to Table 1.

3.1 Framing corruption theories

Various theories have sought to define and explain corruption through varying paradigms. The principal-agent theory, widely applied in anti-corruption studies, amalgamates institutional and economic frameworks (Walton and Jones, 2017; Ugur and Dasgupta, 2011). This theory centres on the principal (often represented as government entities) and agents (individuals or entities under the principal’s governance). The agency problem emerges when agents prioritize personal gain over the principal’s interests, leading to corrupt behaviour (Walton and Jones, 2017). While this theory advocates surveillance, stringent sanctions and public intolerance to combat corruption, its effectiveness is questioned in developing nations where corruption is entrenched (Walton and Jones, 2017; Persson *et al.*, 2013), prompting consideration of the collective action theory.

The collective action theory expands on the principal-agent paradigm by integrating aspects such as trust and perception of the actions of others. According to Marquette and Peiffer (2015), corruption continues because public actors consider others to be corrupt. Punitive restrictions lose efficacy in an accepting atmosphere due to a lack of motivation, permitting a culture of impunity (Persson *et al.*, 2013) or are ignored (Williams-Elegbe, 2018). However, while collective action theory suggests that people or organizations join forces to remedy a problem by cooperating and coordinating their efforts, the idea falls short in the face of systematic corruption. There are few people or even institutions committed to integrity where there is systemic corruption, and the interests represented in the government are unlikely to be interested in eradicating it (Williams-Elegbe, 2018).

Game theory, drawing from economic studies, seeks to explain government officials’ corrupt decisions. Corruption is presented as a decisive element in people’s choices (Macrae, 1982). Game theory models, exemplified by the “prisoner’s dilemma”, highlight the tension

Table 1.
Notable
procurement-related
corruption cases

Scandal	Issues	Procurement fraud	Main highlighted risk area	Source
Anglo leasing	– The one company plus 18 other such companies in the security sector – The implication of highly profiled political persons	A “ghost” private company from the UK was awarded a US\$35m government contract in December 2003 to produce tamper-proof passports.	– Method of procurement; resource allocation; sourcing strategy; tender evaluation, awarding, monitoring and evaluation	Githongo (2005b)
Arwor and Kimwarer Dams	The Cabinet Secretary, Permanent Secretary of Treasury, and 26 government officials indicted in the scandal amounting to €2.5m.	24 accusations, including abuse of office, conspiracy to defraud, engaging in a project without planning, failure to comply with guidelines and procedures relating to procurement and financial misconduct	– Method of procurement	Corruption Kenya (2022) , Standard (2020)
Chickengate Saga	A UK security printing firm was accused of bribing IEBC officials to win the tender to print ballot papers, before the March 2013 general elections (KES 59m)	Supply of electoral materials at inflated prices after paying bribes amounting to approximately Ksh 46m	– Method of procurement (direct procurement) – Improprieties in the way the defunct electoral commission contracted the company	Nyagih (2017) , Corruption Kenya (2022)
Wheelbarrow Saga	The Bungoma County Department of Agriculture purchased ten wheelbarrows in 2015 for KES109,000 (roughly €965) a piece, compared to a market price of KES5,000 (€45).	Seven public personnel in charge of the transaction were able to manipulate the invoice price upwards by approximately €9,200	Misuse of method of procurement (single sourcing)	Corruption Kenya (2022) , Van Rij (2021)
National Youth Service	Budgetary irregularities by members of the Ministry of Devolution and Planning are estimated at a total of €60m	Overcharging for the purchase of various goods (medical and electronic) issuing false invoices and ordering goods without approval	– Adhering to PPADA Act and regulations – Collusion and lack of due diligence	Van Rij (2021)
				Ogemba (2016) (continued)

Scandal	Issues	Procurement fraud	Main highlighted risk area	Source
Kenya Power Limited Company	Handing a contract to a Chinese firm that had been in existence for only 11 months and thus not meeting the requirement of having audited reports for the last 18 months	Tender awarded to a company not meeting requirements, inflation of price by Ksh. 1.6bn	– Tender evaluation irregularities	
Standard Gauge Railway	The governments of Kenya and China enabled CRBC to perform the feasibility study for the project without allowing other corporations to do so	Sub-tenders as well, such as design supervision did not follow competitive bidding processes. Two Kenyan parliamentary committees' recommendations against the process used were ignored	– Method of procurement	Otele (2021)
Coronavirus case	15 top government officials and businesspeople over the alleged misuse of \$7.8m meant for buying COVID-19 medical supplies.	Alleged criminal responsibility, the awarding of contracts to companies that had been established mere weeks prior, notably, Shop and Buy Limited, secured contracts valued at Ksh. 970m and about 100 companies implicated in the scandal	– Manipulation of the procurement process	Odhiambo (2021) , Igunza, (2020)

Sources: [Githongo \(2005a, 2005b\)](#); [Standard \(2020\)](#); [Nvagih \(2017\)](#); [Corruption Kenya \(2022\)](#); [Van Rij \(2021\)](#); [Ogemba \(2016\)](#); [Otele \(2021\)](#); [Odhiambo \(2021\)](#); [Igunza, \(2020\)](#)

Table 1.

between individual and collective rationality (Kuhn, 2019). In addition, economic game theory and network theory integration, as proposed by Bayar (2005, 2009) and Uribe (2012), delve into bribery dynamics influenced by social network positions (Borgatti *et al.*, 2013). The motivations and payoffs for the persons participating in this fraudulent operation can be analysed using game theory. In this situation, consider the individuals engaged to be players in a game, with each player having to decide whether to engage in corrupt acts. The payoffs for each player are determined by their own choices as well as the choices of the other players.

3.2 *Procurement fraud-related cases in Kenya*

As previously stated, procurement fraud-related corruption is prevalent in Kenya. A study carried out by Kenya's Ethics and Anti-corruption Commission in 2015 comprising 377 procurement officers and 573 suppliers cited favouritism, bureaucracy, inflation of prices and delay in payments as challenges they faced in public procurement, while procurement officers cited external interference, limited funds, inadequate staff, ignorance of procurement procedures and conflict of interest as their challenges (Ethics and Anti-corruption Commission (EACC), 2015). These issues are echoed in several empirical studies (Atika, 2018; Kimemia, 2014). Noncompliance with procurement standards and a lack of trained personnel are the key factors.

However, Table 1 shows that procurement exploitation, noncompliance with procurement norms and the influence of the political elite all contribute to procurement-related crimes in Kenya.

It is also important to link the cases' significance to principal-agent, collective action and game theories, as well as realize that corruption is typically complicated and multifaceted and that numerous theories may interact to explain the behaviour and consequences witnessed in these scandals. Theories provide analytical frameworks for understanding various elements of these events, but their application and usefulness vary depending on the exact context and dynamics of each situation.

There are aspects of strategic interactions among rational agents (game theory), representation by an agent on behalf of a principle (principal-agent theory) and attempts to offer public goods (collective action theory) in the eight situations described in Table 1. Other theories, such as public choice theory, fraud theory, rent-seeking theory, dependence theory, institutional economics, social norms theory and transaction cost economics, can also be applied to these circumstances, which are discussed further and summarized in Table 2.

3.2.1 Procurement corruption cases and theories of corruption. Game theory can be used in Anglo leasing to explain how various parties, including government officials and contractors, strategically cooperate to maximize their gains while taking other peoples' reactions into account. The principal-agent approach can also be used, with government officials acting as agents and the government or public as the principals. The difficulty is in balancing the interests of the agents and the principals, which can result in unethical behaviour. The theory of collective action can be used to explain how different players work together to plan crooked deals, showing a collective effort to take advantage of opportunities for individual gain. The application of public choice theory can be used to comprehend how self-serving decision-making by bureaucrats and politicians puts private interests ahead of the common good, resulting in corruption in the awarding of contracts.

Game theory can be used to examine how strategic interactions between government representatives, contractors and other stakeholders impact decisions regarding the completion of dam projects with worries about bribes and kickbacks in the instance of the

	Game theory	Principal-agent	Collective action theory	Fraud theory	Public choice	Rent-seeking theory	Dependence theory	Institutional economics	Social norms theory	Transaction cost economics
Anglo leasing	✓	✓		✓	✓	✓				
Arwor and Kimwarer Dams	✓	✓		✓		✓		✓		
Chicken Saga	✓	✓	✓	✓		✓			✓	
Wheelbarrow Saga	✓	✓		✓		✓				✓
National Youth Service	✓	✓		✓		✓				
Kenya Pipeline company	✓	✓		✓		✓	✓			
Standard gauge Railway	✓	✓		✓		✓		✓		
Coronavirus case	✓	✓		✓		✓				
Source: Compiled by author										

Table 2.
Summary of
applicability to
procurement-related
theory cases in
Kenya

Arwor and Kimwarer Dams. Principal-agent theory can also be used in situations when public officials assign duties to private companies, potentially leading to conflicts of interest and opportunities for fraud in the procurement process. The rent-seeking behaviour of actors participating in the dam projects can be explained using the rent-seeking theory. This behaviour encourages the pursuit of economic benefits through political methods, which fuels corruption. The dependence theory can be used to comprehend how power dynamics between nations and international agreements can affect decision-making and corrupt behaviour in cross-border projects.

Game theory can be used in the Chicken Saga instance to better explain how strategic interactions among different stakeholders influence decisions and corrupt practices. The local representative of the British company alleged to have bought contracts by offering bribes to Kenyan officials. Principal-agent theory can also be used in situations when public servants are given responsibilities, which can lead to corrupt behaviour because of improper incentives. Multiple actors working together to take advantage of opportunities for their gain can be explained by collective action theory, showing coordinated efforts to commit corruption. Rent-seeking behaviour may cause actors to take advantage of government programmes for their financial gain, which would contribute to corruption, according to rent-seeking theory.

In the Wheelbarrow Saga instance, game theory can be used to understand how interactions between officials, contractors and other parties impact decisions and corrupt behaviour. Principal-agent theory can also be applied when government officials delegate tasks to employees and contractors, which may create conflicts of interest and provide opportunities for corruption. How actors collaborate to maintain corrupt practices can be explained by the notion of collective action. The rent-seeking theory can also be used to investigate how fraudulent resource allocation was caused by the actions of the different parties involved in the saga's rent-seeking behaviour.

In the National Youth Service issue, game theory can be used to investigate how strategic interactions between insiders and suppliers impact choices regarding the transfer of funds for bogus commodities or extravagant prices. The principal-agent theory can also be used to explain how when duties are assigned by government workers, conflicting interests can result in corruption. The collective action hypothesis states that for corrupt behaviours to occur within the institution, collaboration between numerous individuals is likely necessary.

The Kenya Power Limited Company example can be examined using game theory to see how stakeholder relationships affect decisions and corrupt behaviour. When government officials distribute authority because their incentives aren't in line, there is a potential that it may lead to corruption, according to the principal-agent theory. The rent-seeking hypothesis can also be applied in these circumstances since numerous parties involved in the case engaged in rent-seeking behaviour that contributed to resource allocation corruption.

Game theory can be used in the Standard Gauge Railway example, where strategic interactions between the governments of Kenya and China allowed China Road and Bridge Corporation (CRBC) to operate without interfering with the operations of other enterprises. Where there was no competitive bidding process for sub-tenders, such as design supervision, the principal-agent theory might also be applicable. The suggestions of two Kenyan parliamentary committees against the used procedure were disregarded.

Finally, in the Coronavirus case, game theory can be applied to understand how strategic interactions among government officials and businesspeople shape decisions related to the alleged misuse of \$7.8m meant for buying COVID-19 medical supplies. Principal-agent theory can also be applied, where government officials act as principals, delegating tasks to contractors (agents). The challenge lies in aligning the interests of the agents with those of the principals, leading to corrupt practices. Collective Action Theory can be used to explain

how various actors collaborate to orchestrate corrupt deals, indicating a collective effort to exploit opportunities for personal gains. Alleged criminal responsibility included awarding contracts to companies that had been established mere weeks prior, notably Shop and Buy Limited secured contracts valued at Ksh. 970m and about 100 companies were implicated in the scandal.

Additional empirical studies in Kenya have adopted other theories to explain corruption and non-adherence to procurement laws. [Nyambariga \(2016\)](#) focuses on the bad apple theory, which explains why an individual may engage in corrupt behaviour. [Kimemia \(2014\)](#) and [Nyambariga \(2016\)](#) focused on the organizational culture theory, which explains how an organization's values, beliefs and norms can either promote or discourage corrupt behaviour. [Nyambariga \(2016\)](#), [Oindo et al. \(2021\)](#) and [Van Rij \(2021\)](#) focused on the clashing moral values theory, which refers to conflicts that arise when individuals or groups have different moral values or ethical standards.

In a study conducted by [Omukaga \(2021\)](#), the question of whether the fraud diamond perspective is valid in Kenya was explored. The research assessed the impact of the elements within the fraud diamond theory on detecting financial statement fraud among non-financial firms in Kenya. The findings robustly supported the significance of all four elements – opportunity, incentive, rationalization and integrity – in influencing financial statement fraud within Kenyan non-financial firms. However, when comparing the applicability of different models, such as those proposed by [Yoon et al. \(2006\)](#) or the modified [Walton and Jones \(2017\)](#), the study results yielded mixed outcomes. Consequently, there is a compelling need to develop a novel model specifically tailored for detecting earnings management in the Kenyan context.

Each theory provides a unique perspective for analysing the dynamics of corruption, including the motivations, interactions and factors that contribute to corrupt behaviour. An examination of procurement corruption cases in Kenya and theories reveals that corruption is a complex phenomenon involving the interplay of individuals, groups, institutions and societies. The systemic nature of corruption may not be well explained if the focus is given to only two or three theories. Therefore, it is essential to adopt a multi-faceted approach to addressing corruption, considering the various factors that contribute to its occurrence.

3.2.2 The fight against procurement-related fraud. As previously mentioned, adopting a multifaceted approach to addressing corruption in Kenya is necessary. In this regard, the Kenyan Government has implemented several measures to combat corruption, including establishing the Ethics and Anti-Corruption Commission (EACC), the Public Procurement and Regulatory Authority and the Public Procurement Administrative Review Board.

In addition, the government enacted the Anti-corruption and Economic Crimes Act, Public Officers and Ethics Act 2013, Public Procurement and Disposal Act (2015[2022]), introduced e-procurement through the Integrated Financial Management Information System and established the Public Procurement Information Portal to publish information about tenders and their outcomes. Other institutions and mechanisms supporting these efforts include the Directorate of Criminal Investigations, the Asset Recovery Agency and the Kenya Revenue Authority. To further strengthen these institutions and mechanisms, Kenya launched the National Ethics and Anti-Corruption Policy in 2018.

Failures in the prosecution of corruption cases in Kenya cannot be blamed on a lack of legal and institutional frameworks, but rather on inadequacies in the frameworks. [Makiva \(2021\)](#) conducted comparison research between South Africa and Kenya, on public procurement, concluding that corruption persists despite the formation of anti-corruption organizations and systems, as well as the acceptance of international standards.

The 2020 report by the ACFE suggests a strong reliance on formal structures and policies in combating fraud in sub-Saharan Africa. The most prevalent controls include external audit of financial statements (92%), code of conduct (86%), internal audit department (85%), management certification of financial statements (82%) and external audit of internal controls over financial reporting (79%) (ACFE, 2020).

Other notable controls include management review (70%), hotline (69%), independent audit committee (69%) and anti-fraud policy (61%). Interestingly, proactive data monitoring/analysis and rewards for whistleblowers are underused, used in only 31% and 21% of cases, respectively, given that fraud is detected mainly through tips (48%), internal audits (14%) and management review (11%) from employees, customers and anonymous parties (ACFE, 2020). In addition, organizations that use hotlines detect fraud within 12 months, 6 months earlier than organizations without hotlines (ACFE, 2022).

However, as Makiva (2021) emphasized, internal controls in South Africa and Kenya are commonly used to meet legal criteria and achieve international credibility, but in some cases, they are designed in a way that encourages corruption. This underscores the need for careful design and implementation of controls.

This discourse offers an exhaustive analysis of the prevailing state of procurement fraud in sub-Saharan Africa. It underscores the significance of stringent controls and the pivotal role of whistleblowing in mitigating fraud. However, it also draws attention to the potential shortcomings of the existing controls and policies. The discussion emphasizes the imperative need for additional research and the formulation of targeted strategies and policies to tackle this intricate issue effectively.

While theories like principal-agent, collective action, fraud theory, public choice, rent-seeking theory, dependence theory, institutional economics, social norms theory, transaction cost economics and game theory offer frameworks to view the strategic interactions and misaligned incentives driving procurement corruption, their limited scope in fully capturing Kenya's systemic corruption landscape points to other contributory factors. As previously stated, procurement practitioners are often criticized for lacking the necessary skills and qualifications. Evaluating the state of procurement and supply chain education emerges as critical to understanding whether gaps in curricula, teaching methods and industry relevance are hampering the development of an ethical, proficient procurement workforce capable of upholding integrity.

4. Journey to attain procurement and supply chain professionalism: Education

The assumption that a shortage of qualified, skilled and trained professionals contributes to corruption implies that either professionals lack sufficient training or they have insufficient knowledge regarding procurement, supply chain practices and ethical standards. However, in Kenya, it is illegal for any individual to undertake procurement responsibilities without a valid practicing licence. This licence is exclusively granted to individuals who hold a professional qualification in addition to their educational background. Therefore, it becomes critical to examine the Kenyan education system, specifically focusing on education related to P&SCM. By analysing educational frameworks and practical applications in anti-corruption education, we can gain insights into how these factors contribute to corruption and the scarcity of qualified, skilled and trained personnel.

4.1 The state of the education system

The education system in Kenya has faced criticism for failing to produce graduates equipped with the knowledge and skills necessary to achieve the objectives of Vision 2030

(Wanzala, 2015). Quality education, as defined in this study, encompasses holistic learning experiences, a conducive learning environment, relevant curricula and materials and a student-centred approach facilitated by trained educators (Eze, 2009). However, Kenya's existing 8-4-4 educational system (eight years of primary education, four years of secondary education and four years of university education) has garnered disapproval from educators, researchers and intellectuals for its focus on exams at the expense of nurturing creativity and innovation (Makokha, 2009; Sifuna and Sawamura, 2010; Ogeto, 2015; Njoya, 2018).

4.1.1 Challenges at different education levels. At the primary and secondary levels, students are compelled to achieve high grades to secure admission to secondary school, pursue their desired degrees at university and enter the professional job market. This pursuit of excellence places considerable pressure on students (Makokha, 2009; Sifuna and Sawamura, 2010; Ogeto, 2015; Njoya, 2018). Similarly, the university level presents its own set of internal and external challenges. Universities grapple with inadequate physical infrastructure, facilities and services, leading to overcrowded lecture halls and compromised academic environments (Ogeto, 2015). Over time, universities have experienced declining staff morale, prolonged graduation timelines and a surge in exam irregularities, including cheating (Gudo *et al.*, 2011, Odhiambo, 2018).

With these issues, criticism is directed at the culture of education in Kenya. The East Africa Character Development Trust portrays the education system as perpetuating rote learning, excessive testing and perpetual mock examinations (EACDT, 2021). This environment stifles creativity and innovation among learners (CUE, 2019; Odhiambo, 2018).

4.1.2 Faculty and curriculum challenges. Once again, for this discussion, quality education is defined as encompassing engaged and healthy learners, an enabling learning environment, curriculum alignment and a student-centred approach facilitated by adequately trained educators (Eze, 2009). Several studies highlight that there are concerns regarding the quality of education in Kenyan universities (CUE, 2019; British Council, 2016). Some of the critical issues mentioned include rigid and unresponsive curricula and the capitalization of "marketable courses" for the institutions to attract more students.

The Commission for University Education (CUE) intervened by banning 133 courses from universities and colleges, deeming them ineffective, shallow and unmarketable (Business Today, 2019). Universities, aiming to alleviate supply and demand constraints and minimize costs, engage part-time faculty who receive lower remuneration than their full-time counterparts (Business Today, 2019). While the ideal ratio of full-time to part-time instructors is 2:1, many universities, as of 2016, failed to meet this standard, with ratios as skewed as 1:2, 1:42 and even 1:72 (Chepkoech *et al.*, 2018). Regrettably, part-time lecturers often wait up to five years for compensation (Aineah, 2018), and this precarious situation forces them to confront ethical dilemmas regarding the quality of education they provide (Aineah, 2018).

According to university statistics from 2017 to 2018, government grants are the primary source of funding for public chartered universities in Kenya. In 2017/2018, salaries and wages accounted for 71% of the total current spending of Ksh. 84.6bn, followed by operations and maintenance at 34% and other expenditures at 18%. It is important to note that during this period, most universities were operating at a deficit of Ksh. 3.2bn (Commission for University Education, 2019). As a result, universities are facing both internal and external factors that affect the quality of education, some of which are within their control and others that are not.

4.1.3 Reforming content delivery. Curriculum-related concerns further compound the challenges universities, including those in Kenya, often face criticism for adopting a primarily theoretical approach to subjects that demand practical proficiency, resulting in

curricula heavy on theory but lacking essential practical insights relevant to the corporate world (Cevik Onar *et al.*, 2013). This issue resonates in Kenya too well. Njihia and Kiende (2016) discovered that lecturers' teaching methods in universities in Kenya were more theoretical than practically oriented.

The current process of developing a university curriculum begins with individual departments in consultation with relevant industry stakeholders, according to the Commission for University Education's criteria. Before being brought to the Senate for adoption, the information is also internally peer-reviewed at the faculty level. It is subsequently forwarded to CUE for external review, and the university adopts the curriculum after taking into account any recommendations made by CUE.

Unfortunately, again, there is limited empirical research that focuses on supply chain, procurement and logistics management education in Kenya, or sub-Saharan Africa. Globally, research has been carried out regarding supply chain education such as Bernon and Mena (2013), who proposed categorizing supply chain management courses into three distinct groups: knowledge gap programmes, specialized technical programmes and strategic support programmes.

Researchers have advocated for various methodologies and tools to deliver supply chain curricula that go beyond mere conceptual teaching and create impactful learning experiences. Active and experiential learning methods, such as simulations, games, computerized tools, consulting projects, internships, leadership training, site visits and guest lectures from supply chain practitioners and industry experts have been employed across educational levels to enhance understanding (Chuang, 2020; Mangan and Christopher, 2005; Jordan and Bak, 2016; Bernon and Mena, 2013; Goffnett *et al.*, 2013; Shi and Handfield, 2012). These methods provide students with hands-on experience and practical knowledge that can help them better understand the concepts being taught.

When Kenyan students studying supply chain, procurement and logistics are solely offered theoretical education and exams that encourage rote memorization, how can they truly grasp the requirements of these fields? For instance, instead of merely describing bid forms used in company contracts, learners in procurement could actively engage in "mock" negotiations or be tasked with drafting a contract for assessment. This practical approach ensures a deeper understanding of real-world scenarios.

Additionally, educators can leverage the Beer Distribution Game to enhance students' comprehension of supply chain complexities beyond theoretical knowledge. Developed by Massachussets Institute of Technology Sloan, this game immerses participants in the role of managers within a dynamic system that simulates beer (or root beer) production and distribution (Dizikes, 2012). Through this interactive experience, critical aspects such as systems thinking, supply chain dynamics and effective interpersonal interactions come to life.

How can we adapt the curriculum for procurement, tendering, ethics and supply chain management to offer practical experience and what would be the implications of this on combating corruption? These questions need to be addressed definitively, taking into account factors such as policies, university infrastructure and other elements that could influence the delivery of this education.

Educational theories, particularly character education, and constructivism, are pivotal in shaping curricula that address corruption. Character education, as proposed by Lickona (1991), underscores the importance of cultivating virtues and moral values, fostering qualities such as integrity, responsibility and fairness (Lickona, 2014). This theory, when applied to the curriculum, provides students with more than academic knowledge; it equips them with a moral compass that is crucial for ethical decision-making.

Complementing character education, the constructivist theory, attributed to [Piaget \(1950\)](#), emphasizes active knowledge construction through interaction with the environment. This theory supports the integration of real-world problem-solving tasks into the curriculum, such as simulations of procurement processes and case studies. This approach not only facilitates knowledge acquisition about corruption but also nurtures critical thinking, ethical reasoning and effective collaboration.

The synergy of character education and constructivist principles ensures a holistic approach to anti-corruption education. This multifaceted strategy equips students with theoretical knowledge, practical skills and a strong moral foundation. The amalgamation of these educational theories prepares students to confront corruption challenges in the real world, especially within the intricate landscape of procurement processes.

Recent literature underscores the importance of character education and constructivism in anti-corruption education. Studies such as “Introducing Character Education” ([Nebo, 2023](#)) and “Anti-corruption education as an effort to form students with character humanist and law-compliant” ([Dewantara et al., 2021](#)) exemplify the global recognition of character education’s significance in fostering ethical values. In addition, research like “Understanding corruption in the Twenty-first Century” ([Wickberg, 2021](#)) and “Fighting corruption in International Development” ([Harnois and Gagnon, 2022](#)) supports the application of constructivist principles in managing corruption challenges.

In the realm of P&SCM, ensuring a comprehensive and up-to-date curriculum becomes paramount. The evolving landscape of procurement and supply chain practices demands continuous updates, relevance and practical applicability. By infusing these educational theories, supply chain management curricula can address not only the ethical dimensions but also the dynamic and evolving nature of the industry. Proactively incorporating these theories ensures a morally grounded and adept workforce, contributing to a culture of integrity and excellence in supply chain practices.

4.2 Skills gap and university graduates

Addressing the skills gap is crucial for education, curriculum and the job market. [Ahmed \(2018\)](#) highlights the importance of graduating students possessing not only degrees but also practical skills and innovative thinking. Professional organizations in Kenya have attempted to fill the void created by the CUE’s limitations by intervening to close university programmes that they allege do not meet industry standards; however, these bodies lack statutory authority and have been sued for their interventions. For instance, in 2011, the Engineering Registration Board of Kenya declined to recognize engineering degrees from three of Kenya’s premier public universities due to weak curricula, a lack of qualified instructors and a lack of appropriate facilities ([Odhiambo, 2018](#)). On identical grounds, the Council of Legal Education of Kenya denied petitions to practice law from graduates of various Kenyan public and private universities the same year.

Kenyan graduates specializing in procurement, supply chain and logistics are required to obtain a licence from the KISM to practice their profession. Additionally, individuals who have completed secondary school can pursue a diploma or professional certification (APS-K and CSPA-K) from the Kenya Institute of Supplies Examination Board (KISEB) to join the field. KISM serves as a national organization for professionals engaged in P&SCM in Kenya. Meanwhile, KISEB is a corporate entity established by the Supplies Practitioners Management Act 2007. Its responsibilities include formulating the syllabus, administering exams and grading them. The board is composed of five individuals nominated by the Council from among KISM members. Consequently, KISEB plays a vital role in

administering the Supplies Practitioners Management (Examinations) Regulations under the guidance of KISM.

Furthermore, KISM as well as the Global Procurement Academy and Centre for Advanced Procurement Studies provide ongoing professional development training that encompasses a broad spectrum of topics. These include ethics, contract management, inventory management, supply chain auditing, supplier management, negotiations and more. However, there is a need for empirical evidence to ascertain whether interventions by professional institutions can effectively address the skills challenges in Kenya.

As much as there are procurement and supply chain courses by professional associations, delivery of the curriculum is heavily dependent on the textbook approach similar to universities. Empirical studies show that there is a need for employee training regarding procurement practices (Kagendo, 2012; Kariuki and Namusonge, 2015; Njihia and Guantai, 2016). However, Atika (2018) found a positive, weak statistically significant relationship between employee skills and the successful implementation of ethical procurement practices. Despite these avenues, challenges persist: students resort to cramming and cheating in exams, while labour markets emphasize degrees for job selection and promotion (Akala, 2021). Alas, the Federation of Kenya Employers (2018) asserts that 66% of Kenyan college graduates lack the preparation needed for employment.

In considering the supply chain education and studies linking the lack of skilled procurement professionals in Kenya to corruption, it is important to recognize the critical role that supply chain education plays in meeting job market requirements. McKevitt *et al.* (2012) argue that research overemphasizes obtaining specialized “knowledge” rather than forming individual “identity” for procurement to develop into a career with a moral foundation at the societal level. They propose that individuals involved in the process should possess not only the essential knowledge and abilities, but also exhibit behavioural characteristics aligned with specific inputs, leading to observable results.

The rapidly evolving landscape, including the Fourth Industrial Revolution, marked by technological advancements like the Internet of Things, blockchain, natural processing language, deep learning and robotics (Garner Inc, 2020), demands a paradigm shift in supply chain practice, education and training. As previously mentioned, there is a shortage of supply chain talent with the right combination of knowledge, skills, experience and behavioural maturity. Only 27% of global leaders have the talent necessary to meet current supply chain performance requirements (Gartner Inc, 2020).

The challenges identified in procurement and supply chain education curricula, from an over-emphasis on theory to a lack of application-based learning and moral grounding, raise concerns about whether Kenyan graduates possess the requisite skills and ethical foundations desired by industry. This logically prompts an examination of the broader issue of professional maturity and ethical standards within Kenya’s procurement workforce, particularly in vital sectors like health and education where the ramifications of corruption can be dire.

4.3 *Procurement maturity and ethics*

4.3.1 *Procurement maturity.* The terms “procurement” and “purchasing” are sometimes used interchangeably; however, certain authors differentiate between the two. Procurement is viewed as a more advanced function that encompasses activities such as inventory management, communication, knowledge acquisition and cross-organizational strategies while purchasing tends to be more limited (Lysons and Farrington, 2006; Miemczyk *et al.*, 2012; Carvalho *et al.*, 2012; Stecke and Kumar, 2009; Tachizawa and Gimenez, 2010; Blackhurst *et al.*, 2011; Jüttner and Maklan, 2011; Zsidisin, 2003; Yang and Yang, 2010; Christopher *et al.*, 2011; Tang, 2006). For this study, the definition of procurement maturity

is the concept of “readiness for purchasing and supply maturity” which is adapted from Foerstl *et al.* (2013), indicating the level of professionalism in executing purchasing and supply management practices. In that sense, Lysons and Farrington (2006) emphasize that besides the technical issues regarding the procurement function, non-technical challenges and management issues are also important subjects to be considered in procurement in a supply chain context.

Chizu (2011) argued that many firms perceive supply chain management and procurement as administrative tasks, best assigned to individuals who lack discipline and necessary qualifications or underperform, resulting in lower pay. As a result, the procurement and supply chain professions do not hold the same strategic significance as other roles within an organization. This finding is similar to Sipalo's (2021) examination of the Zambian public procurement system, which revealed several legal obstacles. The study emphasized that procurement is often not acknowledged as a strategic function within organizations, which can negatively impact the efficiency of procurement processes and systems. The research also discovered a deficiency in professional, managerial and leadership skills among those in procurement roles. This shortage of skills can result in process inefficiencies and create vulnerabilities that could potentially facilitate corruption and mismanagement. Despite the presence of a legal framework, these issues continue to exist, indicating that existing guidelines and regulations may inadvertently provide opportunities for exploitation and misconduct.

In Kenya, positions are held by individuals who are not procurement practitioners. These individuals often secure their roles through nepotism and bribes (Ombanda, 2018) and subsequently return to school to obtain the necessary certificates. Furthermore, companies have been known to advertise procurement and supply chain-related positions without adhering to the legal minimum requirements. This practice undermines the integrity of the procurement and supply chain profession and can contribute to inefficiencies and corruption within the system. For instance, demanding educational backgrounds in accounting or social sciences for a job description that befits a procurement and supply chain professional. The KISM condemned these practices, citing the Kenyan constitution and section 47 of the Public Procurement and Asset Disposal Act 2015 (Government of Kenya, 2015), which emphasizes the need for highly skilled procurement and supply chain professionals at a strategic level. The professional association has also referenced the National Supply Chain Management Professional Framework outlined in academic qualifications gazette notice No. 14166 (KISM, 2022).

Roman (2015) delves into the administrative responsibilities of public procurement specialists and highlights an intriguing gap: despite the substantial growth in scholarly literature in this field, the study of these responsibilities remains largely unexplored. Experts in this subject often receive insufficient attention in empirical research, leaving us with limited knowledge about their daily duties beyond anecdotal accounts. This prompts a crucial question: What are the primary job responsibilities of supply chain and procurement specialists in the Kenyan public sector? Furthermore, can we gather empirical evidence to assess their professional maturity?

Is providing expert advice on the tendering process one of the primary administrative duties of the head of procurement and supply chain in Kenya? To assess the significance of this role, empirical data comparing it to similar roles in other nations and their legislative requirements is essential. This evaluation will determine whether the role is strategic, functional or tactical. However, additional questions arise regarding the procurement department's status. Given that the accounting officer designates all committee members in the tendering process and ensures adherence to procurement legislation, it remains unclear

whether the department merely “rubber-stamps” decisions or actively supports the evaluation committee’s judgements.

The level of procurement and supply chain professionalism in sectors like health and education is worrying, despite the perception that they play a “rubber-stamp” function in the tendering process in public procurement.

4.3.1.1 Procurement maturity in the health sector. The Kenyan health sector is facing numerous worsening shortages of essential pharmaceuticals and raw materials, as well as corruption, including 2 billion unemployed and corruption associated with the political and business elite (Green, 2022; Igunza, 2020). In response, the KISM called for collaboration to provide technical assistance, experience and capacity building (Kenya Institute of Supplies Management [KISM], 2021), but the issue of corruption was not addressed.

As mentioned before, another challenge is the supportive role played by procurement and supply chain functions. For example, the Healthcare Products and Technologies Supply Chain Strategy (2020–2025) states that pharmacists and pharmaceutical technologists perform most Health Products and Technologies (HPT) supply chain functions at the central and regional levels. At HPT service delivery points or health-care facilities, pharmacists, pharmaceutical technologists, nurses, clinical clerks and medical laboratory technologists perform HPT supply chain management functions, including inventory management. Procurement and supply chain officers only perform procurement and supply planning functions (Ministry of Health, 2021).

Health Procurement Africa, a platform aiming to raise the standard and efficiency of health procurement across the continent, underscores the importance of this issue (Health Procurement Africa, 2022). The World Health Organization has also highlighted that the African Region faces the most severe health workforce shortage, estimated to reach 6.1 million by 2030 (World Health Organization, 2022).

Brown *et al.* (2019) observed that governments in low- and middle-income economies have a narrow view and understanding of procurement and SCM and, therefore, it is difficult to integrate supply chain operations into their strategic operating models, leading to the delegation of tasks to personnel who lack the necessary skills or process knowledge to achieve effective supply chain performance (Brown *et al.*, 2019).

To address this issue, Brown *et al.* (2019) suggested a paradigm shift in the human resources approach within the health-care supply chain. The proposed approach begins with countries hiring qualified supply chain professionals and offering suitable career incentives. This could potentially lead to high staff satisfaction and retention, making supply chain jobs desirable and sought after. Ultimately, national institutions should provide relevant qualifications for supply chain positions. Key stakeholders who can contribute to creating this environment include the private sector, professional associations, academic institutions and the humanitarian and development sectors (Brown *et al.*, 2019).

Cross-functional and cross-organizational collaboration can improve procurement and supply chain performance by leveraging the expertise of other functions. For instance, insights from pharmacists on the expiration dates of certain medications and feedback from nurses can inform inventory practices and procurement strategies. Technical input from laboratory specialists can also help determine which equipment best suits the needs of health-care facilities. However, there are other critical aspects in which the supply chain needs to be involved, both as a strategic, cross-functional and supportive department and as a contributor to the realization of universal health coverage, the third Sustainable Development Goal, Immunization Agenda 2030, Vaccine Agenda 2030 and Kenya’s Vision 2030.

4.3.1.2 Procurement maturity in the education sector. The education sector in Kenya has faced challenges in employing procurement and supply chain professionals and adhering to procurement laws. To address these challenges, the Kenyan Ministry of Education initiated steps in 2009 to incorporate procurement legislation requirements into educational institutions. The goal was to improve the efficiency of procurement processes and enable schools to spend public money wisely (Embeli *et al.*, 2014). All public secondary schools received circulars instructing them to implement the new requirements to streamline procurement methods and processes. These steps included the formation of educational tender committees and the training of committee members, consisting of principals, three faculty members, a procurement and supply chain officer and an accounting officer (Kinuthia *et al.*, 2021).

However, certain instances have arisen where county and sub-county educational officers, along with Board of Management members, were appointed as ex-officio members on tendering committees – contrary to established procurement norms (Kinuthia *et al.*, 2021). Within the education sector, procurement and supply chain personnel operate at the county level, leaving individual institutions to manage procurement functions either directly under the accounting officer or through delegation to non-procurement professionals. Unfortunately, the perception persists that these duties can be adequately handled by non-practitioners. This situation poses a risk, particularly concerning potential occurrences of corruption. Therefore, there is a pressing need for a more strategic approach to P&SCM within the education sector.

4.4 Procurement ethics

As mentioned earlier, 70% of Kenya's corruption cases are linked to procurement, and purchasing maturity and ethical procurement in the country are impacted by purchasing experts' exposure to unethical behaviour. However, a survey by Awuor and Muthoni (2014) found that professionals with qualifications believed they were more ethical. Despite this, training courses on how to deal with ethical constraints in companies are rarely carried out regularly, and compensation packages have been found to influence the ethical behaviour of procurement workers (Awuor and Muthoni, 2014).

Eltantawy *et al.* (2009) argued that supply chain ethics primarily focuses on preventing unethical behaviour, and some effort has been made to develop rules that guide sensitive behaviours such as giving or receiving gifts or supplier preferences. Professional ethics are important for protecting professionals and clients by providing clarity and advice on acceptable behaviour and improving consistency (Otalor and Eiya, 2013). "Ethics play a crucial role in ensuring the protection, growth, trustworthiness, acknowledgement, esteem and triumph of the profession" (Feil, *et al.*, 2017).

Despite the existence of a code of ethics and the vetting of procurement and supply chain professionals, corruption continues to be a problem among practitioners. Some are implicated in corrupt activities, while others face transfer, demotion, or intimidation for standing against corruption. To enhance the legitimacy of their governments and to be recognized as professionals, procurement officials must assume the role of stewards rather than merely acting as agents, as stated by Klay (2015). In South Africa, a study by Nzimakwe and Biyela (2021) explored the procurement challenges in the South African public sector. The authors found that despite extensive government codes of conduct mechanisms and policies, there seems to be a manifestation of unethical procurement practices.

To ensure that professionals can carry out their duties securely, free from the threat of intimidation, transfer or job loss, professional associations should take a proactive approach

in supporting cases in that professionals resist corruption. This can be achieved by providing legal representation, compensation and even incentives to promote and encourage ethical behaviour. Such measures can foster a culture of integrity and accountability within the profession.

The limitations observed in each preceding section – rampant procurement corruption enabled by systemic factors, procurement and supply chain education shortcomings, lack of professional procurement maturity and integrity vulnerabilities – clearly illustrate that a piecemeal, isolated view is insufficient. Individually addressing these aspects is akin to applying bandages without treating the underlying condition. This realization necessitates a paradigm shift towards a holistic, coordinated “transcendence” approach that synergistically integrates reform pathways across education, professional development, ethics and anti-corruption measures.

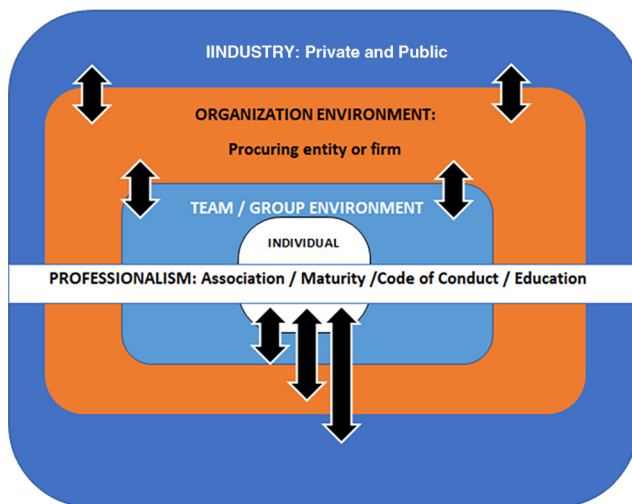
5. Approaching transcendence as a concept

According to Maslow’s concept, self-transcendence is the act of moving beyond the present situation to encompass the realm of possibilities. This transcendent perspective is not bound by immediate stimuli, current situations or existing realities, and encourages a shift from concreteness to the exploration of both actuality and potentiality. The call for transcendence applies not only to individuals but also to collectives, institutions and systems. By surpassing the confines of conventional managerial approaches, institutions may harness the cumulative expertise and acumen of their personnel and associates to devise original resolutions to intricate challenges, thereby enhancing their efficacy and responsibility (Gnoffo, 2021).

In the context of the procurement and supply chain landscape, the transcendence framework encourages a shift from the immediate and concrete realities of corruption to the exploration of potential solutions. This transcendent perspective is not bound by the current state of affairs but seeks to move beyond it to encompass a realm of possibilities. Just as Maslow’s self-transcendence applies to individuals, the transcendence framework applies to collectives, institutions and systems involved in procurement and supply chain. By surpassing the confines of conventional managerial approaches, these entities can harness the cumulative expertise and acumen of their personnel and associates to devise original resolutions to intricate challenges such as corruption. This enhances their efficacy and responsibility, thereby contributing to the fight against corruption.

Corruption is a multi-faceted problem that cannot be fully explained by just a few theories. As such, it is important to recognize that certain strategies may be limited in their ability to address the entirety of the problem. Efforts that only treat the symptoms of corruption, rather than addressing its root causes, are unlikely to bear fruit and thus, the process matrix comes into play providing a structured methodology for continuous assessment, adaptation and iterative improvement of anti-corruption efforts. It incorporates inputs of the various theories and concepts, providing a theoretical foundation for the transcendent approach advocated by the transcendence framework. By regularly evaluating and adjusting the strategies based on the insights gained from the transcendence framework, organizations can enhance their effectiveness in combating corruption. Thus, the transcendence framework and the process matrix together provide a comprehensive approach to combating corruption in the P&SCM ecosystem.

Figure 2 illustrates the summary of what has been discussed in this paper. As a proposal for the transcendence framework for supply chain professionalism in Kenya, suggesting pathways for supply chain education, professional maturity and ethics that contribute to professionalism. This model acknowledges that individual professionalization is



Source: Created by author

Figure 2.
Transcendence
framework

intertwined yet distinct from the professionalization of the occupation itself (Sparkes, 2002) and a process to adopt to do so, based on the theories of corruption (see Figure 3).

The transcendence framework provides a holistic view of the procurement and supply chain landscape at multiple levels - individual, team, organizational and industry and sheds light on how actions and dynamics at these levels interact and influence each other. In a complementary manner, the process matrix provides a structured, cyclical methodology for continuous assessment, adaptation and iterative improvement of anti-corruption efforts. Integrating this process-oriented approach with the transcendence framework's multi-level perspective allows for a comprehensive strategy that holistically addresses corruption across individual, team, organizational, industry and societal levels. The transcendence framework maps the various stakeholders and environments where corruption risks manifest and interact, while the process matrix outlines key steps: diagnostic assessments, applying theoretical insights, implementing tailored mitigation strategies, continuous monitoring and response, industry-wide learning and benchmarking and stakeholder feedback loops.

The process matrix calls for the engagement of all stakeholders, including academia, industry players, professional associations and practitioners. The application and adaptation of theoretical insights involve revisiting institutional frameworks and optimizing foundational theories such as principal-agent dynamics. It also reinforces collective action and game theory by integrating insights from theories like institutional theory, public choice and rent-seeking. These theories form the pillars of the matrix and are based on the multi-level players in the transcendence framework.

Implementation of dynamic mitigation strategies may involve a multi-pronged approach targeting various levels and stakeholders outlined in the transcendence framework. At the individual level, relevant, practical education and training programmes can be developed to instil ethical values, enhance awareness of corruption risks and equip professionals with the necessary knowledge and skills to uphold integrity. Professional associations play a crucial role in setting standards, advocating for recognition of the profession, enforcing codes of conduct and leading integrity initiatives within their respective fields. In addition, initiatives

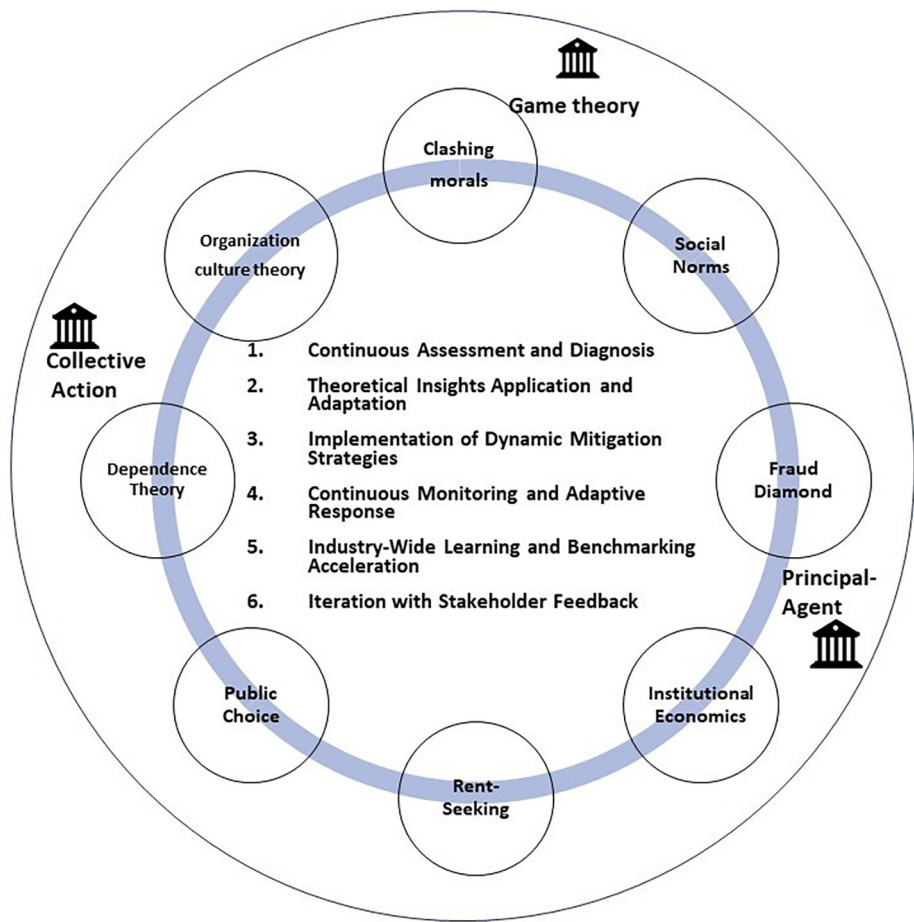


Figure 3.
Process matrix of
transcendence
framework

Source: Created by author

such as professional recognition programmes, maturity assessments and pupillage or specialized training courses in procurement and supply chain management can be implemented. These measures not only enhance competencies but also promote a culture of transparency, accountability and fair employment opportunities for all.

Complementing these efforts, continuous monitoring and adaptive response mechanisms are essential for real-time detection and prompt addressing of corruption incidents. The process matrix emphasizes the importance of continuous monitoring, which can be facilitated by establishing robust systems for data collection, analysis and reporting across the P&SCM ecosystem. By integrating these elements, organizations can create a comprehensive and sustainable approach to mitigating corruption, fostering a culture of integrity and promoting transparency and accountability.

Industry-wide learning and benchmarking aims to develop knowledge-sharing platforms and promote a culture of continuous learning, recognizing the contributions of diverse

stakeholders. Conclusion and iteration with stakeholder feedback involve establishing mechanisms for stakeholder engagement, evaluating anti-corruption policies, P&SCM educational reforms and iteratively refining measures based on stakeholder input, ensuring responsiveness to evolving needs and concerns.

6. Conclusions, implications and limitations

In essence, this paper has delved into a comprehensive exploration of the elaborate interplay between procurement fraud, the education system, specifically within the framework of supply chain education, skill requisites and procurement maturity in Kenya. By discussing these dimensions from the viewpoints of supply chain students, graduates, faculty members and specialists – both individually and collectively – the study has illuminated the complex tapestry of challenges and prospects inherent in these domains. To the authors' best knowledge, this is the first research to discuss these constructs in the Kenyan context.

Through unearthing the multifaceted determinants that shape supply chain professionalism, this study effectively catalyzes raising awareness and nurturing potential enhancements – transcendence. It underscores the significance of the collaborative synergy between academia, industry practitioners and policy architects to usher in constructive transformations in the realms of procurement and supply chain professionalism, education and final brick, moral training in the fight against corruption, explained through several theories of corruption, as these benefit not only individuals and organizations but also to reverberate as a force for positive societal change.

This research offers scholars and practitioners several implications and insights. The journey of an individual, whether a procurement and supply chain student or practitioner, towards the realization of specialized knowledge, skills and values involves interactions with immediate groups, functional teams and cross-functional teams, and extends to the organizational and industry/national levels. From secondary school onwards, an individual can learn about the requirements and expectations of the field, specialize in a particular area, receive training or even pupillage and gain exposure to various actors in the private and public sectors. This includes universities and employers who help identify industry competencies, base salary packages and competency requirements.

Collaboration between professional associations, industry and universities in the field of procurement and supply chain education can broaden an individual's perspective on the role of a supply chain professional. This collaboration can drive the development and implementation of competency frameworks that are tailored to the needs of businesses and industries. By working closely together, academics and practitioners can explore areas where their unique goals can be realized and build a shared understanding of the needs, competencies and skills required for the future workforce.

Institutions of higher education can offer hands-on curricula and market-based courses through various avenues. These may include offering specialization options (e.g. health supply chain, humanitarian supply chain), industry-university/college partnerships, cohort-based programmes adapted for new courses such as blockchain or statistical/machine learning for supply chain, or offering these as electives. To attract and retain qualified lecturers and instructors, globally competitive remuneration packages and favourable tenures may be necessary. For example, offering full-time employment rather than semester or yearly-based contracts can reduce the effects of part-time lecturing.

In the realm of research, particularly in P&SCM, a postgraduate student may collaborate with a corporation under the guidance of an academic advisor. This collaboration aims to align with the corporate objectives and engage in practical projects, fostering a mutually beneficial relationship. It can potentially draw financial support or sponsorships for projects,

stimulate the hiring of research pioneers within the corporation and secure additional funding for academic institutions. Implementing research strategies such as applied research, collaborative research, recruitment-oriented research and funded research can significantly impact P&SCM practices and policies. To ensure a broad understanding of these areas, policies mandating a certain percentage of these to focus on these areas could be beneficial. This approach prepares students for real-world challenges and contributes to the advancement of the field.

As P&SCM professionals are encouraged to report any instances of procurement fraud to the relevant authorities, professional associations can develop proactive measures that support initiatives that protect members, inspire them and allocate resources to further strengthen the profession through specific national policies. Professional associations can seek legal justice and compensation for procurement/supply chain professionals and initiate action against those implicated in procurement fraud.

Moreover, these associations can enhance awareness among stakeholders about career development, the implementation of policy frameworks for education and curricula and continuous improvement programmes. They can address procurement-related fraud and the professionalization of functions in both the private and public sectors. A particular emphasis is placed on the development of key actors within the discussed multi-systems. This comprehensive approach significantly contributes to the prevention of corruption and the promotion of high ethical standards in the industry.

Despite its significant contributions, this research has several limitations. Firstly, the study's focus is on Kenya, and the search for terms related to the topic yielded limited results across various research databases, including the title, abstract and keyword fields. The specific terminologies under scrutiny included *procurement*, *supply chain*, *education*, *profession**, *maturity* and *Kenya*. However, the paper also incorporated publications that discussed broader constructs such as corruption and curriculum challenges faced in Kenya.

Secondly, the eight case studies used in this research were sourced from news articles and websites specifically addressing corruption in Kenya and were generally placed in theory categories based on a few constructs. Also, due to a scarcity of empirical research papers specifically discussing these cases and targeting these constructs (*procurement*, *supply chain*, *education*, *profession*, *maturity* and *Kenya*), future studies could enhance this work by using research methods such as surveys and comparative analysis. In addition, potential limitations may arise from data availability and reliability, as well as potential biases in the selection and interpretation of sources.

Thirdly, the generalizability of the findings discussed in the paper is largely context-specific to Kenya. Therefore, caution should be exercised when attempting to generalize these findings to other countries or regions, as local factors, governance structures and cultural nuances may differ, thereby impacting the applicability of the study's insights. Fourthly, the dynamic nature of corruption and procurement practices implies that patterns and challenges can evolve. Therefore, the paper might not capture the latest developments or emerging trends in corruption within the public procurement sector. Finally, from an interdisciplinary perspective, the study takes a multidisciplinary approach, incorporating insights from fields like education, ethics and governance. However, it may not fully capture the depth of each discipline. A more in-depth investigation from specialized perspectives could yield additional insights, underscoring the need for future research to delve deeper into each discipline to provide a more comprehensive understanding of the issues at hand.

Although this research provides valuable insights into the state of public procurement and corruption in Kenya, it is important to acknowledge these limitations. Future research should aim to address these gaps and continue to build on this foundational knowledge. This will contribute to a more robust and comprehensive understanding of public procurement and corruption in Kenya.

In closing, the core objective of this research is not merely to explore and present discussions regarding the interconnectedness of procurement fraud, supply chain education, professional maturity and ethics, and their relevance to adopting a transcendence concept, but also to catalyze a transformative perspective among procurement and supply chain professionals and stakeholders within Kenya. Furthermore, it serves as a rallying call for researchers to empirically scrutinize the tangible impacts of these challenges and domains, particularly within economies characterized by lower- and middle-income countries.

In this light, while the research questions presented are not exhaustive, they offer invaluable guidance for researchers with an interest in exploring the intricate landscape of procurement fraud, ethics, supply chain education and maturity in Kenya. These questions form the bedrock upon which investigations into the multifaceted challenges and prospects within these realms can be erected. By earnestly addressing these questions, researchers have the potential to contribute to a more nuanced understanding of the intricacies surrounding procurement fraud, ethical decision-making, supply chain education and the advancement of supply chain professionalism:

- Q1. What forms of procurement fraud are prevalent in Kenya and what underlying factors facilitate their emergence?
- Q2. To what extent do ethical considerations influence the decision-making processes of procurement professionals, and how effective are training programmes in mitigating fraudulent and unethical behaviour?
- Q3. How well do graduates of supply chain programmes possess the practical skills required for the industry, and what impact do experiential learning methods have on enhancing their readiness for real-world challenges?
- Q4. What dimensions of procurement and supply chain maturity exist across various industries in Kenya, and how do these dimensions correlate with organizational performance?
- Q5. How do collaborative efforts among academia, professional associations and employers contribute to the enhancement of procurement and supply chain education and professionalization in Kenya?
- Q6. What strategies can effectively reshape perceptions of procurement and supply chain roles as strategic and essential components within various industries, fostering a sense of transcendence and industry integration?

Although the research questions presented are not exhaustive, they offer valuable guidance for future researchers interested in exploring procurement fraud, ethics, supply chain education and procurement maturity. These questions serve as a framework for investigating challenges and opportunities within these domains. By addressing these questions, researchers can contribute to a deeper understanding of these issues and pave the way for empirical studies in various contexts.

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