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# PROCUREMENT TRANSFORMATION ALLIGNMENT: DISCUSSIONS ON MODERN KEY DRIVERS

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**Abstract**
The key aim of procurement transformation agenda is to develop a responsive practice. This paradigm shift is reflected in the increasing emphasis on key transformational drivers. There are many drivers that could guide this process. Our discussion on the transformation drivers was motivated by an MBA discussion seminar held between the period ranging from January to April 2021. The key drivers identified were policy based procurement, operation strategy supported procurement, intelligence procurement, tax inclined supply chains, urban mining strategies, service sector procurement, risk management, indirect expenditure and procurement planned procurement. The endeavor demands that the processes be agile, transparent, and that the skills of the practioneers be tailored appropriately to create sensitive agents to transformation and generate value for money.

**Keywords:** Procurement transformation, procurement key drivers, procurement strategies

## 1.1 INTRODUCTION

Traditionally, the focus of procurement is efficient purchasing based on the principles of public accountability, transparency, value for money, open and fair competition. The practical field procurement is constantly changing, as the competitiveness of international companies is more and more dependent on key drivers likely to aid in producing and delivering customized products and services fast and efficiently all over the world (Halldorsson, et al 2007). Treatment of key transformational drivers is particularly controversial and its discussions are not fully exhaustive (Hon & Kwon, 2012). In practice the discussions have not been fully addressed to propel value

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to be more responsive and transformational procurement. Procurement transformational activities in organizations play a significant role in economic, infrastructural, environmental and social development. The strategic importance of procurement transformation is clearly captured in its cost saving efforts within supply chains. Globally, there is been significant progress on procurement transformation assessment. Academic discussions have been used as transformational agents likely to validate transformation. These academic discussions support the designing of transformation agenda could well be driven by established value chains, agility and expediency.

Transformational literature shows that, in practice, organization's operating cost are approximately 0 .8 percent of the enterprise's overall spending. For instance, in the UK, the government spends around £240 billion per annum on the procurement of goods and services (Maude, 2012). In Indonesia most of the procurement charges and corruption are associated with spending on goods and services (Femilia, Abdul, Anis & Fikry, 2017). In southern and east Africa procurement transformation reforms have promoted financial transparency and accountability in previously corrupt public institutions (Hunja 2003 cited by Muwuko Dza' Ron &Rod, 2013). In Kenya, although the procurement practice is progressive dynamic and significantly skewed towards the public sector, delays in tendering, increased costs of works, strategic surprises, cases of fraud and fallen in-house value creation transformational procurement has generated significant cost.

With transformational objectives procurement, the development of effective and strategic procurement is increasingly becoming a priority for managers. Managers recognize the definitive role in procurement success (McClelland, 2012). Though this is the case, inherent challenges and appetites for powerful transformation pressure suggests a dire need to uphold key drivers and strategies uplifting the practice and reducing process variability within different times. This paper is a result of documentary reviews and discussions of MBA seminar unit for supply chain management specialists. It is a result of the assumption that there are few discussion forums for procurement specialists on or about transformation by practioneers in academic settings. Employing stabells and pjsteds value shop preposition it is assumed that procurement entities are engaged in repetitive activities that could be tapped to be shared to set enough ground for further studies.

## OBJECTIVE

The main objective of this paper is to highlight the key driver of procurement transformation, offer an evaluation and ignite academic discussions on procurement transformation.

## 1.2 KEY DRIVERS AND PROCUREMENT TRANSFORMATION TODAY

### 1.2.1 POLICY BASED PROCUREMENT

Most areas of procurement are relatively new field of study. This means that their policies and procedures are immature (Rendon, 2008 as cited by Kelle, Wousley & Schneider, 2012). In procurement practice, whether in public or private sector, the amount of research conducted on procurement transformation is limited to procurement activities placing policy sciences second. It is increasingly important that policy based procurement is fully utilized as a strategic enabler

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to improving quality, competition and efficiency. According to selected public policy research there is a tendency to treat the emergent procurement issue in a way that distances it from policy and the open systems model (Arrow & Smith: Knight et al 2005). Like in most jurisdictions the issue of policy based decision would only arise when dealing with transparency, probity, competition and value for money under ethical considerations. For ethical markets this is the reverse. For example, in Kenya the realization that there was discriminating policy skewness has led to prosecution against malpractices being act based during the financial year (2020). Nevertheless, the use of such acts and other supportive legislation has been a subject of debate among supply chain operation research aligned scholars, who argue that such decisions are not scientifically supported. To move away from the tradition of this thinking line department need to combine legislation and scientific rigor. Take the case of hospital or medicines, import substitution procurement, web based procurement, and support systems that cannot be valued without policy inputs. While embracing this, the transformation process needs to stress on scientific processes supported by policy (Nyeck, 2015). In most countries, regulatory authorities, procurement acts, plans, manuals, operational techniques in line with ISO 10845 have stood the test of time by being supported by policy on competitive tendering, two stage, restricted, single source procurement and price quotations as a priority matter.

### 1.2.2 STATISTICAL AND OPERATION RESEARCH APPROACH SUPPORTED PROCUREMENT

In the minds of most scholars, the procurement process emerges as a process marred with decisions which cannot be supported with scientific approaches. However, applications in data envelopment, queuing theory, goal programming, portfolio management concepts, mixing problems and other Public and private procurement algorithms supports could take over jobs and tasks of decision making in constraint scenarios (Ahi & Searcy, 2015). Models assisted procurement could establish decision dashboards assist in quick and informed decisions in sensitive industries such as healthcare and atomic industry. Statistical and operation research based algorithms are touted to help solidify the practice. For instance, locally, the use Statistical approaches are significant in project management activities. Approaches such as six sigma are being applied to check on delays in tendering analysis of construction processes (Taner, 2013). According to Green, (2010) developing an effective statistical and scientific approaches could assist in identification, specification, customers, suppliers input and output. Applications of operation research approach supported procurement approaches could help map supplier input-output-customer value chains. The application of such approaches are ideal to guide the practioneers to identify the relevant elements in the process to be improved. In a broad sense, procurement activities from purchasing of raw materials, manufacturing and distribution, products and reverse logistics can be controlled using statistical and operation research approaches (Murray, 2012). Owing to the fact that the SC activities of a product cannot be designed in a stand-alone and isolated way, this wide range of operational activities work together and are correlated through statistical and operation research approaches. The emergence of statistical and operation research approaches is of significant milestone, causing cost reduction, flexibility and process improvement (Mehrjerdi, 2011). Data supported operation research goals are attained through the process of mapping of different cogs of the supply chain and each analyzed in terms of contribution. In logistics the support and application of statistical

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and operation research approaches is attributed to the recent disruptions in the normal flow of Supply chains caused by natural and man-made disasters. This has forced discussions to be aligned towards statistical modeling Sustainability and risks (Kelle, Wousley & Schneider,2012).

### 1.2.3 INTELLIGENCE PROCUREMENT SYSTEMS

Intelligence procurement systems form a considerable proportion of decision tools in the contemporary procurement. These tools assist generate global data base of events and automatic computer generated procurement reports which could assist the procurement department in documentation efforts and audits. Widely used, the applications help procurement departments in gathering market intelligence, AI decisions and design based negotiations (Schulze, Hueven, Scheffle &Schelle, 2020). The systems identify inherent risks, carry out ad hoc supplier audits, product quality tests and even assist in predictive policing. In terms of system value addition 3D printers could assist by rendering anything that could be printed on 3D not to be organizationally procured.

Intelligence procurement systems could also help in material requirement placements, protection of property rights and reduce elements of MRO for support items. Intelligence value processes such as 3D printing by procurement organizations could also be encouraged to create closed Co2 cycles. For instance, coal related $co_2$ harvesting could provide graphene Nano raw materials for 3D printing (Russell & Norvig, 2016). The application of intelligence procurement systems is further used in strategic procurement and decapsuling of past documents to decision making principles anticipation of future strategies.

Quite related is the strict requirement of due diligence. In contemporary and strategic procurement, the processes are increasingly becoming a priority for procurement specialists. Due diligence is significantly supported due to its definitive role in the ultimate success of contracts (McClelland, 2012). To reduce the loopholes and costs associated with the process, the use of digital avatars and virtual reality headsets provide locations and photorealistic viewing of suppliers' production plants and processes. In enterprise integration, intelligence procurement systems will enhance use of technology allowing tight collaboration for virtual integration (Semolic, 2012). In procurement, this tighter collaboration will be conducted, more critically, in the area of innovation, virtually enterprise integration and data mining.

On the part of the virtually enterprise integration and intelligence system creation cloud computing and cognitive computing serve as a foundation of procurement's digital strategy. Such digital strategies are characterized by greater usability, provide access to more content in the organization and facilitate core procurement activities to be paired with real-time analytics that supports industrial internet of things that generates deeper insights to enhance decision-making and projection (Lambert & Schwieterman, 2012). Internet of things (IOT) gives departments' access to new worlds of data to feed to the analytics engine. This will that could enable companies to paint a much more comprehensive picture of the state of their operations such as setting up, conducting requests for proposals, finding relevant suppliers and evaluating suppliers' performance.

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### 1.2.4 TAX ORIENTED SUPPLY CHAIN DESIGNS

Tax oriented supply chain designs are models that evaluate particular locations where to place centralized locations of procurement for tax purposes. The supply chains assist tax authorities to originate the products and enforce policies of tax payments on profits in countries where profits are made. Based on tax oriented supply chain designs many multinational enterprises restructuring supply chains to reduce their cost structures by centralization of production activities in one countries where taxes are low (Bertolini & Carmignani, 2010).

With the fall of trade barriers and improvement of communications technologies, it has become easier and more cost-effective to manage business operations across international borders. This has motivated businesses to centralize, reorganize, and relocate many business processes to be performed in efficient manner. While they do this, many businesses are shifting business activities from high-tax to low-tax jurisdictions. However, such designs have provided challenges in most supply chains due to the fact that different tax jurisdictions will impose different levies (Guest, McQueen & Namey,2012). This challenges and the fact that different objectives encourage collaboration of supply chain literature and tax articles the two are strictly separated with little scholarship attempts to link both. Consequently, it becomes imperative that contemporary supply chains address the driver effectively. This is demonstrated by recent articles Jointly, tax and procurement decisions could symbiotically relate to areas of business location, markets and the distribution of finished goods (Webber 2011).

### 1.2.5 URBAN MINING STRATEGIES

The increased industrial revolution, supported by the completion of resources and the increased demand for metal ore for the construction industry has steadily reduced ore grades in geogenic deposits making countries to embrace recycling (Arndt & Ganino, 2012). This increasing difference create deficits which have initiated alternative geological knowledge thinking and scientific innovations to fill the gap. Urban mining advances the concept of keeping the environment and ensuring the advancement of resource conservation through 3Rs (reuse, recycling and recovery) of valuable and pressurize materials from waste. The urban mining concept draws its inspiration from the structure development goals. For instance, SDG target 3.9 emphasizes on substantial reduction of the number of death an illness from hazardous chemicals and air, water and soil pollution and contamination. This is also captured in the SDG11.6 that by 2030, the reduction and advancement of per capita environmental impact on cities pay attention on air quality and sustainable waste management. Through these efforts, resources recovered from urban mines as emerged as one of the imperative process supporting industrial growth (Kumar, Holuszko & Espinosa, 2017). Though Procurement has always accused of promotion of environment erosion, optimization of its purchasing spend has been understated forcing it to seek the use of material sustainably. For instance, this reliance on mines for metal ores is discouraged and instead urban environments are advocated for.

In the recent past there has been a significant reallocation of resources from in-ground ore deposits to urban systems, diversification of supply sources and circular economies (Jones et al., 2013). Hence, again emphasis is being placed on exploration and exploitation of resources from urban systems. Urban Mining, refers to the process of reclaiming compounds and elements from

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any kind of anthropogenic stocks, including buildings, infrastructure, and products as secondary materials supply (Zhao, Wei & Ye, 2012), 2015). The application of such approaches requires that organizations are dependent upon their purchasing function, not just for sourcing and maintaining supply, but also for identifying and utilization of innovations arising from upstream and downstream supply chain.

### 1.2.6 SERVICES SECTOR PROCUREMENT

With the growing emphasis on services, service procurement and outsourcing is not a new practice any more. Despite the increasing importance, little effort has been made and there are still more calls for more studies to address service specific features (Ellram et al., 2020). Unlike manufacturing procurement where steady intermediary role exists, in a service outsourcing, dynamic relationships and mechanisms exist between entities which eventually make service procurement challenging (Li & Choi, 2009). Moreover, selection activities, combination, order of application of resources and need service activities vary according to the requirements of the customer and problem. Using service thinking the procurement departments are assumed to have a fixed set of activities that enables them to produce standard products. Although models such as the value shop models proposed by Stabell and Pjsted have become handy in service value addition, service sector procurement of consulting in medicine, law, architecture, engineering and healthcare services are getting more complex and harleculian for purchasing managers (Schiele & McCue, 2006). In public service procurement, service providers in the market are forced to be conscious on satisfying diverse consumer groups by maximizing efficiency (Brege et al., 2010). For service sector procurement, sets of high level of expertise and procurement knowledge are required for the successful operation of service organizations. Service sector procurement lessons could be extracted from petroleum exploration and field development upstream which are intensive and based on problem-solving.

### 1.2.7 PREPARING FOR THE UNEXPECTED: RISK MANAGEMENT

A research conducted by computer science corporation shows that 60% of surveyed companies ranked supply chain risk management as the second crucial issue to be managed. The study supports this case, since transactions are performed in environments with uncertainty (Aghajannian, 2018). Globally, externally economic shocks in oil, Brexit and trade wars have adjusted procurement efforts in world economies to continuously thrive and be prepared for the resultant risks. These uncertainties, place the procurement function at the forefront of organizations as risk minimization champions. Moreover, in most firms' risk managers' journals, internal risks arising due to lack of transparency. Such risks significantly affect in situations defined by supplier and customer dependence, supplier concentration, single sourcing, global sourcing and quality reliant supply chains (Mandal, 2012). While managing risks being compliant with legal standards is just not enough, as risks have become paramount in aligning procurement functions in areas with less risks and transparent ones. Worldwide, transparent systems are advocated for since they do not only reduce exposure to risk but also fill the information gap helping manage risks (Niels & Suvitulia, 2020).

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### 1.2.8 INCREASING FOCUS ON INDIRECT SPENDING

Indirect procurement is the procurement of materials, goods or services that are used internally in a business. Such procurement could be revenue generating expenses or expenditures not relating directly to products being sold. According to Israel (2019) the expenditure relates to maintenance, repairs and operating capital equipment and service. Indirect expenditure takes a smaller proportion of spending but have a very high frequency of low value purchases. According to Zhao, et al (2012) the study of indirect spend suffers from complex anatomy mostly ignored by research due to the small associated purchases (Zhao, Wei, & Ye,2012). Even though indirect spend have gained some attention from organizations, the lack of research is still conspicuous by its absence. In an average business, indirect spend is equivalent to between 30 – 40% of turnover. When fixed costs such as rent, rates and salaries are excluded, 15 – 20% turnover remains as addressable spend where costs can be substantially reduced with transparent systems (cox et al, 2005 as cited by Kelle, Wously & Schneider 2012). The little research undertaken has aligned organizations to focus on indirect spending and put efforts to its control. Indirect spending or tail spending in most organizations follows the 80/20 rule. In the contemporary world, procurement practice, due to the involvement of a large supplier base, processes under indirect spending have been advocated, be streamlined and given preference to avoid leakages as small amounts cumulatively constitute large spending and cause maverick spending.

### 1.2.9 PROCUREMENT PLAN BASED PROCUREMENT.

As advanced procurement discussions emerge, a regulatory framework for procurement and management is required. Procurement can be made of different processes, support different objectives, present different angles of value and different sectors, to be optimized for specific objectives. Choosing the optimal conditions method at times is not trivial, and tends to be a major caveat of the practice. Approaches from management sciences and agencies rarely draft annual procurement plans. The result is that ‘programs/projects and scopes/specifications are not planned and identified properly’, ‘lack of meticulous planning on projects/ activities and in determining the scope and specifications of tenders’. (AG, 2012). This failure to planning result in procurement process is the failure by suppliers to deliver goods in accordance with specifications which result in the goods received being sub-standard and less useful than they should have been. This is compounded by the failure of procurement officials to issue purchase orders and of suppliers to issue invoices, are key issues that can only be checked by procurement plans and specifications.

### 1.2.9 METHODOLOGY

Halldorsson, et al (2007) cited by Ahi & Searcy (2015) support methodology as an important role in generating procurement and logistics knowledge, particular, connecting philosophy of science, theoretical perspectives and practice. Though this is the case, much of literature herein remains largely managerial and lacks rigorous orientation in theory development. The methodology aspect offers a framework for procurement based on previous research, study objectives and managerial orientation. Most researchers argue that procurement research further supports the use of expert seminars as a methodology, for theory building, and explanations of “best practices”.

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The collection of theoretical evidences in this paper was made through the following five steps:

a) distribution of discussion topics
b) definition of the support journals
c) Paper validation (contents must be about key drivers of procurement)
d) Assessment of some review time frame
e) Paper review

#### 1.2.9.1 SELECTING JOURNALS

To achieve the objective of the paper, articles of SCM from 2011-2021 were reviewed: content or process variants of literature were specified. The overall time frame for reviewing journal papers was January 1st, 2021 to February 27th, 2021. Google Scholar" database of published articles was applied.

#### 1.2.9.2 PAPER REVIEW

A review sheet was developed. During the review process 25 paper were validated based on content focus. The review elements were: primary driver of analysis; level of analysis; research design applied; time frame; and elements of philosophy of science or management knowledge.

#### 1.2.9.3 EXPERT SEMINAR.

Since the brief for the study was to look at recent and contemporary driver analysis, each seminar presentation was run by a group of six MBA students with practicing knowledge of supply chain management. The groups were designed to incorporate a variety of perspectives from the journals and their own experiences. The detailed content of each discussion held on a blended presentation mode (zoom and face to face interaction) between 3 and 20$^{th}$, March 2021.

### 1.3 MANAGERIAL IMPLICATIONS

Procurement transformation contributes to organizational growth through supply market value creation. It enhances relationships with stakeholders and relies on available resources and tools. Transformational enabling procurement practices simplifies and improves long procurement procedures, enabling creation and improvement of new operating models. Organizations procurement department need to be dynamic, implement transformation and adapt to the needs of the time and requirement. Transformation influences all areas of procurement that promote suppliers' negotiation, collaboration, upholds data analytics, improves sourcing, supplier relationship management, planning and contract management. Managers failure to engage in transformation procurement could lose their focus in satisfying the user departmrnts needs (Schweitzer, 2017).

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