Impact of Procurement on Service Quality of the Oil and Gas Industry: Case Study of TechnipFMC in Azerbaijan

Thesis Supervisor: Dr. Elkin Nurmammadov

Dean, School of Business: Dr. Huseyn Ismayilov

Kanan Heybatli

Master's Thesis

14/05/2022

Table of Contents

1. Introduction

1.1.Global Oil and Gas Industry, Production and Consumption Trends

Oil and gas energy is very crucial to human life which has an enormous impact on the economies of both importer and exporter countries. Indeed, the oil and gas production sector not only contribute to the public life of the active market player countries, but also to the rest of the world. The revelation of hydrocarbons has made a huge difference in the world's industrial growth along with facilitating the transportation at both the national and international levels. Namely, the role of oil and gas energy can be evaluated as the facilitative factor in the daily life activities cooking, heating, electricity, transportation, and as such (Bastianoni et al., 2005).

The oil and gas sector has been a big income stream for countries, which remarkably contributes to the GDP level and economic growth. For instance, over the past 30 years, the petroleum industry has added more than NOK 8000 billion to the Norwegian economy. In 2008, the oil and gas sector made up 27% of the country's total value which is three times more than the value made by soil industries and about 23% more than the value made by the country's primary sectors (Norwegian Petroleum Activities, 2022). The global oil and gas industry generates sufficient amount regarding money, taxation, and job opportunities; an estimated 7 million people are directly engaged in the oil and gas industry, and an extra 62 million or so jobs are also created by the industry (ILO Library, 2022).

On the other hand, oil and gas production can be considered as a potential threat to the environment, people's health, and traditions regarding its side effects. Namely, pollution is the most common and serious side effect of exploration and production work in this context. Throughout drilling, manufacturing, modifying, and shipping, more than 900 different chemicals are released into the air, water, and soil. Considering the fact that oil and petroleum products, are commonly consumed all around world, the aforementioned environmental consequences appears as long lasting process by the inevitable costs in the long-term manner in terms of geographic, sociocultural, and fiscal factors.

The oil and gas industry regularly passes through certain ups and downs because of the side factors. Among all factors, global recession caused by COVID-19, is quite distinguishable from any other stagnations with its lasting effect. Many companies are at risk, and the demand for

petroleum is going down for a long time. We thought that the world's trade and capital markets would bounce back more quickly than they did in the final quarter of 2019. However, the pace of recovery in the next few months is still unpredictable considering the possibility of increase in COVID-19 cases that might lead to more shutoffs and limitations, particularly in Europe and the United States (2021 Oil and Gas Industry Outlook, 2022). Indeed, the COVID-19 by containing the uncertainty about the possible changes in the future regarding the effectiveness of the treatments, obstructs the process of making valid predictions about the relative responses and alterations in the oil and gas sector and hereby the economies of the states. However, in the best-case scenario, it is possible to predict the lasting negative effect in the economies in terms of poor macroeconomic balances, slow economic growth, and unemployment rates. (2021 Oil and Gas Industry Outlook, 2022).

In 2020 the world's demand for crude oil dropped to 92 million barrels per day. In 2021, the demand for oil products, which includes bioenergy, is expected to rise to 97 million barrels each day (Sonnichsen, 2022). The oil is highly preferred consumption product in varying sectors such as the road sector, which makes up more than a third of the world's need for oil, mostly because of the use of motor spirits derived from oil. As of 2040, the OPEC predicts that worldwide oil consumer spending will reach 110 million barrels a day though, most of which will come from transportation fuels like petrol and diesel, which will remain the most popular products (Sonnichsen, 2022). 28 million barrels of fuel are expected to be used each year by 2050. (Statista, 2022).

1.2.Background of the Research, Azerbaijan: Economy of Country

Oil and gas resources are critical to the economic and cultural development, and welfare of citizens of Azerbaijan, which is one of the main oil and gas suppliers in the international ground through ratified international and binational contracts. A significant portion of the fuel and energy complex is devoted to oil and gas production, which contributes to the economic resurgence and development of society (Ciarreta and Nasirov, 2012).

Azerbaijan is located in the Caucasus's south-eastern region and shares borders with Russia, Georgia, Turkey, Iran, and Armenia. Indeed, historically oil has been a defining actor in

the political and economic stance of the country, however, the predominating emergence of oil and gas sector leans on the Azerbaijan's gaining its independence and hereby, starting to generate economic growth through massive inflows of foreign investment. In 1847, a rudimentary percussion drilling apparatus was used to dig the world's first oil well in Absheron, Bibiheybat, as the main geographic oil sources of country (Mir-Babayev, 2002). By the end of the nineteenth century, Baku had established itself as a center for large-scale industrial investment on a global scale. Baku was Russia's primary oil supplier throughout the Russian Empire's reign, supplying 97.7% of the country's needs in 1890 and half of global demand in 1901 (Mir-Babayev, 2018).

Between 1988 and 1996, Soviet Union trade collapsed and economic output fell by more than 50% as a result of the transition from a state-run economy to a capitalist one, resulting in decrease in GDP and a spike in inflation. Industrial output plummeted by 55%, agricultural output by roughly 44%, and the GDP by almost 65% from 1990 to 1995 (World Outlook, 1995). Due to significant investment in the oil and gas sector, GDP growth in Azerbaijan averaged 28% per year from 2000 to 2010, when the country began to substantially strengthen its oil and gas industry, which resulted in increase in oil income by currency reserves reaching 18.5 billion USD by the end of 2009, more than twice the country's total foreign loans, and 42 percent added value to GDP (Bruno, 2009; Investment,2022). Non-oil sector value added output fell by 5 percent in real terms from the previous year, while oil sector value added production remained unchanged from the previous year's level. Compared to 2015, Azerbaijan's industrial sector accounted for 38% of the country's GDP in 2016, up from 33% in 2015 (Baku Research Institute, 2018). Indeed, the non-oil sector is mostly fueled by state spending via State Oil Fund of Azerbaijan (SOFAZ) transfers, and its contribution to GDP is declining as these transfers keep increasing. The Center for Economic and Social Development (CESD) reports that, despite SOFAZ's assets totaling 31 billion US dollars, Azerbaijan's dependence on oil has risen dramatically in 2011.

Azerbaijan has several hydrocarbon reserves on land and in the sea the vast majority of which is being used, and existing fields can sustain output for another 80-85 years. 20% of the country's land has not been thoroughly investigated for the presence of oil and gas resources, while 45 percent of the world's oil and gas reserves haven't been discovered yet, according to geological data. Onshore oil and natural gas discoveries account for 23% of all discovered oil and 16% of all discovered natural gas (Azerbaijan Oil Reserves, Production and Consumption Statistics, 2022).

1.3.About TechnipFMC

In the traditional and emerging energy industries, TechnipFMC is a global tech provider, producing completely integrated solutions, products and services. TechnipFMC company is a French-American, UK-based global oil and gas organization that offers the services for the energy industry from start of extraction to finish of production. It is 23rd on the list of the world's Top 225 International Design Firms in 2017 by Engineering News-Record, which is a trade magazine (" Engineering News-Record", 2017). According to the company's website, it is founded by a merger between FMC Technologies of the United States and Technip of France ("FMC Technologies, Technip to merge," 2016), which began in 2016 and was completed in 2017. TechnipFMC works in three different areas: exploration and production, offshore and onshore, and surface developments. The company is legally based in the UK, but it has a lot of business in Houston and Paris, where its predecessors are based in. It employs about 23,000 people from 126 different countries and does business in 48 different countries including Azerbaijan. It is traded on the NYSE and the Euronext Paris exchange. According to the report called "French elections could change the state's corporate portfolio," the French government has a 4% stake in this company (2017).

This research studies the procurement and its impact on service quality of TechnipFMC in Azerbaijan. The procurement planning, procurement policy, and hereby, the sustainability of procurement chain are investigated with an in-depth analysis, as the main factors that affect services of TechnipFMC as the provider for the oil and gas sector of Azerbaijan.

1.4.Procurement Problems in Oil and Gas Sector and its Impact on Service Quality

The oil and gas industry has a complicated process, thousands of dollars to be invested, and a lot of risk. Due to the challenging environment of extreme locations, marginal oilfields, new global business trends, new technology breakthroughs, and the instability of oil and gas prices, the oil and gas industry is conducted with the aim of seeking better solutions to solve these difficulties, which includes developing and implementing new and innovative procurement strategies, among other things. Considering the crucial role of oil and gas industry, it is significant to evaluate the sector as a separate and sophisticated industry in its own. Without referring to multidisciplinary implications of the practices and lessons gained from the other industries, such as construction, an etc. The energy sector has noteworthy differences when it comes to the engineering, operation,

and maintenance phases (Shakulikova, 2021). Amidst fluctuating oil and gas prices, problematic oilfields, unusual locations, and new global business competitive landscape, the oil and gas industry is obliged to look at new procurement tactics to solve these issues. People in other industries are working on new ways to buy things, however, in the oil and gas industry the process is relatively more compound in comparison to aforementioned instanced industry sectors. This is due to the fact that the petroleum industry business must be treated as a distinct and complicated enterprise. Another possible reason why there has not been a tremendous amount of change in the way oil and gas projects are done leans on an inevitable fact that the number of big and dominant players in the industry, like project owners and contractors are not sufficient enough in order to trigger remarkable change.

Procurement and supply chain strategies for oil products (and related components) vary widely across oil corporations. Politics, regulatory flexibility, and regulations for contracting with other businesses are all important considerations in procurement policy. In the oil and gas business, most laws are established by the government acts of parliament that created the oil and gas corporations itself. For private firms like BP and Shell, procurement policies, rules, and regulations often come directly from those companies themselves. When a company needs to buy things, for example, who should be hired and why they should be hired, the regulatory environment policy has a big impact on how the company does this. For oil and gas companies, a lot of the time, they hire transportation and logistics companies and shipping companies to do these things. It also means hiring drilling companies to find the oil rigs for the company. In addition, specific activities such as sourcing and e-procurement remarkably assists the company in the process of finding relevant suppliers, as well as contributes to the process of tendering. Furthermore, the most noteworthy procurement technique is judged by how transparent the company is. Following the principles of competitive bidding and tendering processes, Yenkeff (2011) claims that it has enabled the BP corporation to receive the most pre-eminent services and products available on the market for the needs of company.

Oil and gas businesses also have to spend plentiful amount of money on the process of the procurement planning considering the volatility of the oil market, which forces them to stockpile or overproduce oil. Oil and gas mines need to be aware of the outside factors, particularly the

political factors. Bashina (2018) claims that planning for the market is important for both effective service delivery and inefficient procurement, which should equally be necessitated. The changes in the market and other things require synchronised plans that make sure that the production is enough to meet the needs of the market. This stops the company from overproducing and underproducing, which is more costly because it costs the company time and money. Procurement planning also takes into account how many people will work. For example, a company like TechnipFMC has a considerate number of the employees working in its factories. Labor planning is also another important point for the company, which helps to ensure the fact that the facilities are fully productive during peak season and also warrants that extra employees are not hired when the business does not perform in an efficient way. As a result, the corporation is able to save money during periods of decreased production or decreased demand for oil.

1.5.Problem Statement

Following a thorough assessment of pertinent publications and papers, it becomes clear that there is a gap in the literature, with little information on procurement components of the oil and gas business being discovered, cited, or discussed in detail. There were so many articles found, but only a few of them had a direct connection to procurement. This token as the case, it does not generally entail about the non-existing issues; however, it could be due to that fact that the commercial vulnerability of declaring and sharing concerns among only a limited and relatively low number of players in a particularly specific environment. Disclosures of this nature could harm an image of organization, along with its reputation, and brand equity in a high-profit sector.

The oil and gas industry is critical to the development of Azerbaijan, nevertheless, procurement industry has received little attention in the country, despite the contributive role of these industries to the overall development level of the state. Much of the talk in the industry has been about the intended socio-economic benefits of the sector, however, hardly any effort has been devoted to the whole picture of the quality of service in the industry. As part of this study, the overall process of buying goods and services by the oil industry is analyzed by an in-depth overview. The study takes into consideration the facts that how the procurement is planned, the potentially preferred methos of the use of\ procurement policies, and the way of implications of the sustainable procurement mechanism in the industry. As a result of this study, the paper aims to define the role of sustainable, planned, and regulated procurement as assisting and contributive

factor to the development of the TechnipFMC Oil & Gas Company in Azerbaijan, which in turns plays a crucial role in the economic growth of the state.

1.6.Research Objectives

This chapter of the paper explains the focal interest of the research along with its significance by clearly emphasizing the purpose of the study and indicating the specific goals of the study. Indeed, the main objective is to analyze the role of the procurement processes at TechnipFMC Oil & Gas Company in Azerbaijan affect service performance. The paper is investigated in the purpose of meeting the particular research objectives that are mentioned below:

1. To ascertain TechnipFMC's existing procurement patterns.
2. To find out how the procurement policy at TechnipFMC affects delivery of services at the company.
3. TechnipFMC wants to find out how procurement planning affects service delivery in the company.
4. To find out how TechnipFMC's sustainable procurement discipline affects the way it provides service to its customers.

1.7. Significance of the Study

The procurement segment in the petroleum industry of Azerbaijan is still very young and the public, on the other hand, has high expectations for the economic benefits of the discovery to materialize as quickly as feasible. Besides that, the industry also has to respond to environmental safety and make money for its shareholders. To fulfill the high public expectations for service quality advantages, while also limiting environmental damage and national tensions connected with oil exploration, especially the companies running their business in the developing countries like TechnipFMC Oil and Gas Company in Azerbaijan, sustainable procurement in the industry should be referred as the major solution measure. This approach not only is promising for the process of improving service delivery, but also plays a vital role in advancing the business sustainability goal, as shown by Green et al. (1996) and Seuring (2004), due to its position and ability to manage external entities in the supply chain.

This importance of the study lies in disclosing how the industry places its procurement activities in order to achieve the service delivery demands of oil and gas company - TechnipFMC functioning in Azerbaijan. The paper aims to determine the procurement methods implied by TechnipFMC Azerbaijan which in its turn affects the delivery quality of services in the oil and gas

industry. Namely, it is intended to define an existing linkage between the well-developed procurement chain and its positively contributive role in TechnipFMC the oil and gas company in Azerbaijan regarding increases in quality service delivery, such as detecting the best practice alternatives for sustainable procurements in the oil industry, which is promising in the long term, not only for the development of the company itself, but also regarding its contribution to the economy in the state level.

1.8.Structure of the Study

This thesis consists of six chapters. Chapter 1 presents an introduction for oil and gas industry and trends in this industry. The chapter goes on to describe background of the study and Azerbaijan as an oil and gas producer with its economic historical performance. The study continues with a brief information about TechnipFMC as a case study company of the research and existing procurement challenges and its impacts on service quality of oil and gas companies. Chapter 1 also includes parts of the study such as research gap, purpose and significance of the study as a conclusion of the chapter.

The next part, chapter 2, talks about current literature related to the topic. The chapter then goes on to have an overview of the procurement and service understanding with their dimensions. The discussions here cover factors relating to procurement sections such as planning, policy and sustainability of it and at the same time, it indicates service delivered in oil and gas industry from provider and consumer point of view. The chapter 2 ends with comments with how the current literature indicates relations between procurement and service quality in oil and gas companies and introduces hypothesis.

Chapter 3 is about methodology of the study. It contains research strategy and design which is used for analysis of hypothesis. Afterwards, it goes on with dataset of the study. In these subheadings it will be described that how to collect the relevant data with the most efficient and available method. The chapter ends up with regression model of the research indicating dependent and independent variables of the model.

Chapter 4 presents the findings of the research. Data from the questionnaire conducted by the researcher, which forms the basis of the research's primary data is the main basis of the researcher's presentation of findings and subsequent analysis and discussions. The chapter will illustrate how statistically procurement elements are correlated with service delivery potential of oil and gas firms.

Chapter 5 is the discussion section of the study and gives the researcher's interpretation of the research findings. The interpretation of the research findings is then compared with existing literature, as presented in chapter 2, to check out for similarities or conflicts with the existing literature.

Chapter 6 is the concluding chapter of the study and contains the summary and conclusion of the research; recommendations on policy direction and implementation; research limitations; and further research recommendations.

2. Literature Review

2.1.Procurement

Prior to having an in-depth investigation, it is crucial to precisely understand the definition of the term "procurement" that is implied in the overall context of the entire idea and referred in this study as the main definition. This paper refers to the concept of procurement as an act of selecting and settling on terms for the acquisition of goods, services, or works from an outside source. This is mainly done with reference to the processes of either tendering or competitive bidding. On the other hand, the process of choosing what to buy among the existing scarce resources is also described as procurement as a random option. This section of the research addresses the literature, in addition to the existing scholarly and peer-reviewed academic publications that are pertinent to the subject of how procurement affects the quality of service in the oil and gas sector and are based on various experiences in various companies of several nations. Moreover, procurement issues such as planning, policy, and sustainability, as well as the service provided in the oil and gas business from both a supplier and a customer perspective are discussed in a detailed way with precise clarifications and examples by referring to the reliable and valid sources of the data. Then perspectives on the relationship between procurement and service quality in oil and gas firms will be mentioned in an interrelated manner vis-à-vis the practices of the TechnipFMC Oil and Gas Company in Azerbaijan. As the final step, a hypothesis of the study will be introduced, in the end of the literature review, with clear explanations about whether the hypothesis is accepted or rejected, which in turn plays an evaluative role of the effectiveness of the study.

Analyzing the effects of procurement and its sustainability in the oil and gas business is essential to start with. To get to this step, though, you must first comprehend the phrase and procedure of procurement. Therefore, one of the most well-known procurement theorists, Van Weele, defines procurement as "all actions required to transport a product from the manufacturer to its final destination" (Weele and Puil 2014). Aacquiring capability on its own, inventory level determination, specification advancement, price and term deal making, supplier assortment, transportation, supplier analysis, inspection and quality assurance as well as upkeep of a strategic relation with suppliers are all included in this definition. According to Lysons and Farrington (2006), who were other scholars, purchasing is the procedure by which an institutional unit is tasked with obtaining or aiding user divisions in obtaining the necessary products and services in the institution in the most efficacious way possible in terms of amount, efficiency, duration, and value, as well as the efficient and productive governance of providers (Lysons and Farrington 2006). The surveillance of the supply side and trying to identify potential sources of supply, evaluation and selection of providers, input and recommendations on item or service requirements for fresh or amended items purchased, negotiation and development of agreements, handling of purchasing and stock sustainment requests, and arranging and trying to manage of contracts are all included in the purchasing function (CIPS 2012c). The purchasing agency's job in the modern organization is therefore more strategic, relational, integrated, and proactive since procurement involves a wider range of processes than buying. Additionally, the "United Nations Procurement Manual" (2020) defines procurement as the actions required to obtain goods, such as objects and real estate, and activities, such as works, via purchase or lease.

On other side, major businesses in oil and gas industry have made some modifications. As an instance, Halliburton said that it will stop pursuing conventional Engineering, Procurement, Installation, and Commissioning (EPIC) contracts because of "the developing imbalance in the risk-reward profile of major offshore EPIC projects" (Halliburton 2003). Coalitions, partnerships, and collaborations have all had their share of problems. These sorts of procurement agreements confront a number of challenges in this high-risk market, including building trust, defining roles and duties, and assuring alignment with shared goals (McHaffie et al. 1993; Donnelly, 2003). To minimize mistakes and any unpleasant associations that may prove costly, short- and long-term partnerships under partnering agreements must be managed carefully (Stevenson et al 2003).

So, without a doubt, the most crucial activity and defining characteristic of an organization's and, consequently, an industrial sector's approach towards sustainable management and responsible purchasing are its purchasing policies and plans. Price, rules and rules, resource preservation, stakeholder demand, and institutional attitude are a few of the external and internal elements that have an impact on the organization's capacity to acquire products and services sustainably.

2.2.Procurement: Planning, Policies, Sustainability

The study looks at procurement and how it affects the service quality of the subsea company. In this regard, the procurement process is examined from three separate angles, including planning the process, business policy, and the sustainability of the purchase cycle of the organization.

- **Procurement Planning:**

A limited group of key stakeholders, primarily project initiators (clients/owners) and implementers, define the oil and gas business (contractors). However, according to Pedwell et al. (1998), the presence of a small group of proprietors and engineering/contracting firms has helped to foster the development of a substantial number of official and informal interactions between the partners. The effectiveness of these connections and their reciprocal interdependence directly affect the program's overall cost and the risks involved in the conclusion of formal contracts. The lack of standardized procurement processes in the oil and gas sector results in an inadequate amount of regulations (or constraints) on the landlord's choice of the procurement system being used or consultant to select, as Pedwell et al. (1998) once again highlighted that purchasing tools and approaches differ by nation or area.

Accordingly, Pedwell et al. (1998) and Huse (2002), the oil and gas industry's most popular procurement methods include the following:

- Lump Sum;
- Cost Plus;
- Engineering, Procurement, and Construction (EPC)/Turnkey;
- Service Type.

Traditional cost-based or price-based purchasing techniques, such lump sum, prioritization of the capital expenses, and price competitions among suppliers offer that satisfy the tender's essential requirements. Some certain benefits of this strategy are noted by Gransberg and Ellicot (1997) which are mentioned below:

- a time-consuming yet simplified procedure for preparing and reporting tenders,
- a quick selection procedure where the most responsible and lowest-priced option prevails,
- It is challenging to object since the harmed party must show how the process is defective because the lowest tender is clearly the lowest.

The cost-plus technique, which is the second category of purchasing methodology, requires the customer to pay the contractor for all costs incurred as well as a set profit margin. Margin or fee structures may be fixed, flexible, or determined by a percentage of actual expenses, since the higher the expenditure is means the greater the profit will be, regardless of accomplishment. Thus, this method could not inspire anybody to work swiftly or effectively in a way that the client may include an incentive system in the deal's pricing conditions to make up for this lack of motivation (Gao, 1994).

When an EPC or turnkey technique is utilized, the vendor is solely in charge of both the planning and the implementation of the job, as clearly asserted by Huse (2002). The client ultimately receives a finished project that meets his performance expectations. He or she does not need to make any further search for extra information on the performance and caliber of the contractor's job. Yeo and Ning (2002) underlines a number of existing and prevailing difficulties that EPC projects must ultimately deal with, which are ranked below:

- Interdependence between activities,
- Complicated organizational structure,
- Task fragmentation,
- Phase overlaps,
- Difficulty correctly anticipating planned outcomes.

Similar to Lump Sum, the provider will only get payment for the agreed-upon fee when the second way of the procurement procedure is used. According to Halliburton (2002), this

agreement can possibly be proven to carry certain risks and threats towards an oil and gas environment.

The service-type technique is frequently employed as needed during the oil and gas field's building, operating, and repair phases. It is a supplement to the major procurement strategy. The locations, types, and purposes of freelancers' services vary. This might include everything from providing meals and replacement parts to supplying plants and equipment for the oil and gas industry. This service-oriented strategy often involves competitive tendering based on the lowest offer. It may be successful in reducing the price of the services to be rendered, but it raises the internal expenses incurred by customers during the bidding process and may also make it difficult for suppliers to make a profit.

Expenses, pricing, and investments are falling, as is the case with several established businesses, which leads to higher efficiency. Due to the predominance of monetary complexities, "getting it done at any cost" is no longer appropriate in the oil and gas business in particular. Fortunately, there has been a lot of economic and technical advancement, enabling the sector to keep offering affordable options to their growing operating expenses based on the experiences of other sectors. The following are some examples of the current and relatively more successful methods that have been used:

- Performance-based (Kashiwagi and Al-Sharmani, 1997; Kumaraswamy and Dulaimi, 2001);
- Partnering/Alliancing/Joint Venture (Wright, 1996);
- Controlling the supply chain (Yeo and Ning, 2002).

Partnering, allying, and joint ventures have about 9,000 definitions, making them one of the cutting-edge methods for procurement operations. Henry (1992) defined partnership as an agreement between a customer and a contractor/supplier wherein both sides undertake to collaborate closely for their mutual advantage. "Partnering teams" create collaborative judgment processes, which include steps for quickly resolving issues, and "recognize measures to meet appropriate adjustments in performance level," according to the CIOB (2003). They also "agree on shared goals that maintain the interests of all stakeholders." However, the partnership technique contains shortcomings and pitfalls, just like any other contemporary strategy. According to Percival et al. (1992), these drawbacks result from a lack of understanding and tolerance for one

another's fundamental beliefs. The second factor is that there is occasionally a lack of long vision and a reluctance to promote it. A successful procurement process also fails due to ambiguity over roles, a poor coordination with regard to common goals, and a shortage of confidence between the relevant parties.

Moving to the next approach of purchasing, performance-based, the following qualities characterize it clearly. This approach enables comparison of all creative solutions, eliminates the need for pre-qualification, prizes initiatives based on factual price and quality in one step, encourages companies to continue improving, chooses the best contractor for the best price for each specific requirement specified by the customer, where the choice is based on substantiated and validated performance (Kashiwagi and AlSharmani, 1997; and Kumaraswamy and AlSharmani, 2001).

Supply chain management (SCM), according to Yeo and Ning (2002), is the process of organizing the transit and storage (if necessary) of components, completed items, and materials from suppliers through manufacturers, and then to consumers or end users. The SCM approach encourages companies to extend their internal focus to their suppliers and their suppliers' suppliers, so building the chain. The core principles of supply chain management include creating a collaborative mindset among chain participants, reengineering business processes to build a networked business model, and synchronizing procurement activities all through the chain (Yeo and Ning, 2002; Burton and Lanciault, 1999).

Another factor that influences procurement is procurement planning. According to Mapulanga (2015), a strong foundation of planning is required for successful procurement. If the purchase is well-planned and well executed, it can meet the company's needs. This is because insufficient preparation puts a company at risk of financial loss by restricting the acquisition of "urgent" products while leaving critical stuff out. The procurement process benefits greatly from the use of budgets for strategic planning. Fisher and Corbalán (2013) advise that each department describe the goods it needs for the aforementioned approach, along with an estimate of the cost to obtain those products.

The revenues of the company must be vitally taken into consideration in order to ensure that the procurement budget and real-case scenario can be measured as realistic. All of them concur that budgeting is an essential component of procurement (Brochner et al. 2016; Camen, Eriksson,

and Garvare 2016). That's because it makes sure that before the procurement process starts, all requirements are satisfied.

Aside from budgeting, another aspect of procurement planning is preparing for human resources. According to Tumuhairwe and Ahimbisibwe, many firms lack procurement personnel with the necessary knowledge in procurement tasks (2016). Some employees are very knowledgeable and skilled in other fields but not procurement. According to the publications of Amann, Roehrich, Ebig, and Harland, procurement departments in many firms are recruiting individuals without prior procurement knowledge as a result of poor service performance and losses (2014). Additionally, according to Brown and Hyer, procurement planning often comprises purpose determination, scope definition, customer demand assessment, identification of crucial procurement processes, cost and time estimation, and duty assignment (2010). A specified degree of procurement competence and practical understanding of procurement rules and legislation are required of the person in charge of procurement. The procurement personnel should be conversant with budget allocation and budgeting strategies, such as cost estimation techniques.

- **Procurement Policies:**

When it comes to procurement policies, it is more about general notions and public awareness, such as regulation, legislation, and guidelines - to be accompanied by, the judicial viewpoint of the subject, while the aforementioned numerous methods can be used in instances of procurement planning procedures, in the oil and gas sector. According to recent study, the policy-making process must include trust and openness in the acquisition process. As a result, regulatory procedures to guarantee the openness of procurement operations have been developed. But transparency differs from nation to nation. While some nations mandate that companies publish their tender notices in newspapers, others mandate that companies keep online inventories and other online tools that make the bidding process visible to suppliers and the general public (Martemyanova, 2018).

Transparency is also highlighted as a value based on the Procurement Manual (PM) of the United Nations, in addition to this aspect of procurement (Department of Operational Support Office of Supply-Chain Management Procurement Division, 2020). Transparency, as used in this

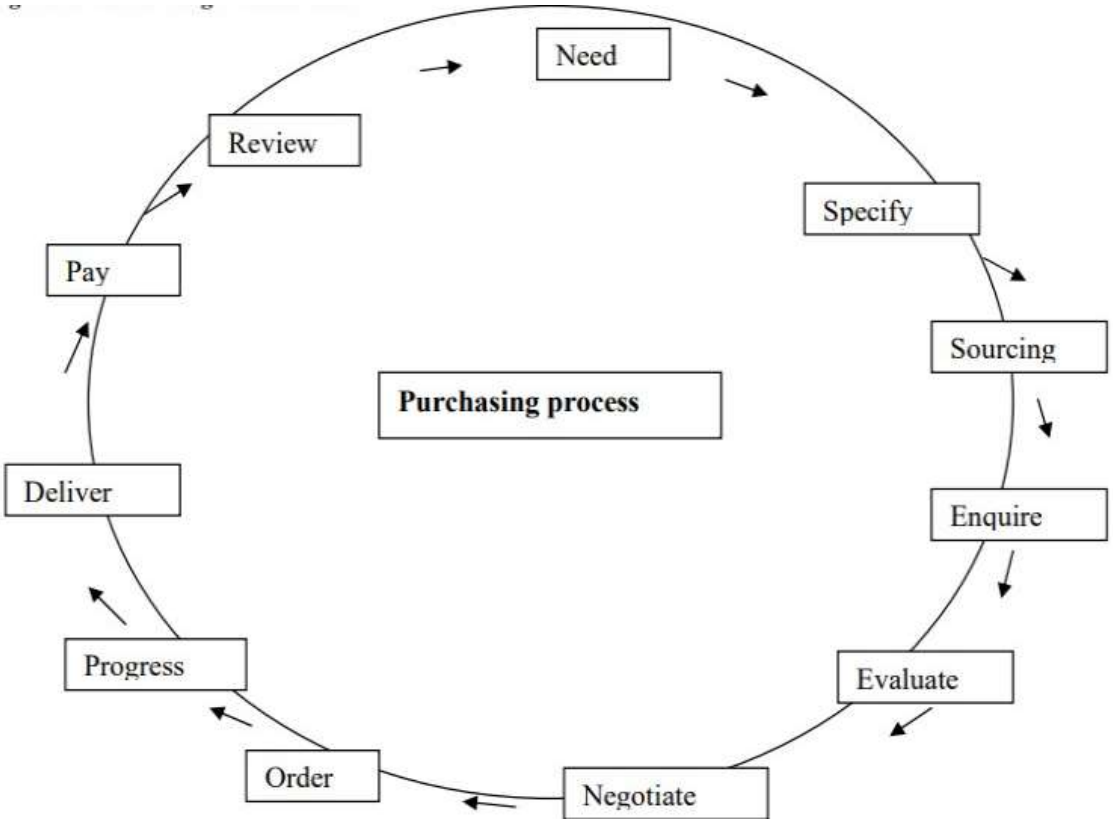
Manual, refers to the availability to all interested parties at the same time of all information on procurement rules, practices, opportunities, and processes that has been established unambiguously. In a transparent system, there are clear safeguards in place to guarantee that predetermined standards are adhered to (e.g., objective assessment criteria, uniform solicitation forms, equitable access to information for all participants, offer confidentiality). These metrics contain data that may, if required, be reviewed by auditors. Vendors that are unable to submit competitive bids might be told the benefits and drawbacks of their own proposals. Information about awards is made public by the UN. This procurement policy principle guarantees the early discovery of unfair or unequal treatment. There are several standards that have been established and applied depending on the demands of the customers, according to the United Nations Procurement Manual. The following primary guidelines are required to be followed in the procurement policies and are based on "Financial Regulation 5.12" of the UN, another of the key financial regulations which include the following points:

- Highest financial value,
- Fairness, honesty, and transparency;
- Strong worldwide competition;
- UN interests

In addition to the guidelines provided in Financial Regulation 5.12, procuring officers must ensure that the activities they take are done so that they always aim to meet consumer needs in the most effective and affordable way possible (Department of Operational Support Office of Supply-Chain Management Procurement Division, 2020).

The purchasing function, often known as procurement, is crucial for business in present-day cutthroat corporate environment. This evolution has caused the buying function to change from being product-centered, and hereby gradually turning towards performance-focused direction. In order to advance performance-centeredness in the public sector, this tendency has pushed process review. This knowledge has led to large investments by various public sector organizations and governments in restructuring public sector purchasing or procurement procedures in order to improve performance in terms of savings and quality services. Weele (2010) cites the fact that many businesses have recently turned to enhancing procurement operations as a

means of cost-cutting and savings in order to remain in operation as evidence in favor of this present trend.



Source: Emmert and Crocker (2008)

The series of steps that buying uses to purchase products and services to support the operations of the company are known as purchasing procedures (Weele 2010, Monnczka, Trent & Handfield 2002). Based on buy objectives and goals, as well as customer expectations and satisfaction, purchase performance is the immediate or indirect result of operations (Sollish & Semanik 2007). The phases start with determining a need and finish with payment and a review of the entire procedure (Emmert & Crocker 2008, Baily et al 2005, Burt, Dobler & Starling 2006). The defined performance targets are directly impacted by the procedures. If the procedures are rigid and unable to adjust to respond to changes in consumer demand, customers will never be pleased with the sort of services the function will give. As a result, one of the main factors contributing to the success of procurement strategies is client centricity.

The legal and contractual environment is another procurement policy concern, in addition to openness, according to McKevitt and Davis' (2014) analysis of the policy-making process.

Businesses should be conversant with the nation's contract rules as they have a significant impact on procurement strategies. According to Raymond (2008), successful firms seek out individuals with experience in contract law and the legal system to ensure that their procurement procedures comply with local laws. This protects the business from being held liable for contracts it enters into or cancels. The business should make sure that all of its procurement practices, including bid rules and non-competitive bidding procedures, abide by all applicable laws and regulations in the nation.

The technical requirements of the contracts are a crucial problem in terms of policy. Ronnback (2012) contends that businesses have to use professionals to create contracts and their technical requirements. As failure to describe the technical specifications of the products and services required by the firm might result in losses and legal action, this is done to ensure that the items, such as oil or drilling machines, given to the company are the ones that the company needs. Another crucial element of the procurement policy is the political climate or risk level of the nation. Political risks vary between nations, according to Love, Davis, Edwards, and Baccarini (2008). Many may carry the potential political risk components, such as the possibility of violence and political unrest, that could inevitably impact the agreement and the capacity of the industry to pit and extract oil, particularly in oil- and gas-rich nations like Libya where political risks are higher than in other nations like Russia considering the unstable and weakly arranged political practices of state (Nijaki and Worrel, 2012).

- **Sustainability:**

The idea of sustainability first emerged in the 1960s in response to worries about environmental deterioration brought on by ineffective resource management. As the environment became a more important global concern, sustainability was embraced as a common political goal. In order to promote policies that would lead to "the highest sustainable economic development and occupation in Member States in order to increase employment and enhance living standards," the Organization for Economic Cooperation and Development (OECD) was founded in 1960. (2001).

The purchase should be sustainable in addition to all the planning and policy-making processes. The personnel in charge of the procurement operations would do well to respond to the following questions in this process of sustainability (Niboi, 2018):

- What exactly does your organization mean by sustainable procurement?
- How important are pricing, community development, and environmental preservation to you when making purchase decisions?
- What are your top priorities when it comes to sustainable procurement?
- What are some of the considerations your business considers when choosing purchases, such as price, environmental preservation, and community development?

First of all, it must be defined that which aspects of the procurement process should be more sustainable, and then, as the following step, the implication methos should be figured out in a way of implementing the sustainable procurement process. Prior to the step of adopting sustainable procurement, there are several "components" of sustainability that must be primarily recognized and assessed, according to Krause and others (2009). Carter and Rogers (2008) claim that the academic literature has begun to acknowledge three elements of the triple bottom line: financial growth, environmental responsibility, reduction of waste, and emissions reductions, and economic equality. As part of their overall ecological strategy, firms are increasingly aiming to include environmental performance into their business models, according to the triple bottom line idea (Fiorino, 2010). According to this viewpoint, sustainability calls for a balance between economic factors, socio-political structures, and environmental demands (Birkin et al., 2009b). Consequently, employing the triple bottom line approach is one method for a business to show its dedication to social equality, environmental conservation, and economic prosperity (Bai and Sarkis 2010).

To make the idea of sustainable economic procuring simple to comprehend, CIPS - Context of Procurement and Supply describes it as one of the financial drivers of sustainable procuring is increasing the economic value of procurement processes to establish a long-term stable organization. In respect to the Triple Bottom Line approach to sustainability, it is one of the fundamental components of sustainable purchasing activities. By boosting purchase effectiveness and efficacy as well as supplier engagement and relationships, these variables aim to ensure that

the goods and services acquired are worth the money spent on them (2012). Elkington's statement emphasized the widely held belief that "we need to keep in mind that it is not feasible to attain a desired degree of environmental, societal, or commercial sustainability (separately), without attaining at least a basic degree of all three kinds of sustainability, concurrently." In his own words, "the sustainability agenda is turning out to be much more complicated than some early business enthusiasts imagined." The sustainable development agenda has long been understood as an effort to synchronize the conventional monetary bottom line with arising thinking about the ecologic bottom line. More and more, we consider the "triple bottom line," emphasizing economic success, environment protection, and social justice—an aspect that industry has a tendency to disregard (Elkington, 1999).

Another element that must be satisfied is social sustainability. Despite being a part of the triple bottom line, social issues rarely receive the same amount of attention as those relating to the economy or the environment. Reporting on social performance is infrequent and inconsistently done across enterprises, according to the Global Reporting Initiative (GRI), which was created in 1997. (2000). The Western Australian Council of Social Services (WACOSS) states in recent thorough research that while there has been tremendous effort on the environmental and economic components, the social has tended to fall off the sustainability agenda (Barron, Gauntlet, 2002). In both communities and enterprises, social sustainability is both a desired condition to be in and a way to help them get there. Following are examples of the condition, as well as actions done to create and implement it (McKenzie, 2004):

- intergenerational equality, which ensures that future generations are not adversely affected by the activities of the current generation; - access to essential services (such as health, education, transportation, housing, and recreation);
- a framework for cross-cultural contacts that values and protects the positive qualities of many cultures and promotes cultural fusion when people and groups express a desire for it;
- a mechanism for a community to collectively identify its strengths and needs; - a mechanism for a community to meet its own needs;
- a system for passing down knowledge of social sustainability from one generation to the next;

- a sense of community responsibility for maintaining that system of transmission.

Concerning the third aspect of sustainable procurement, the environment, the researchers Dyllick and Hockerts said that other nations are starting to understand the significance of balancing the interests of the current and future generations while also maintaining the environment (2002). Companies looking to improve their environmental performance may, for instance, create close ties and work with suppliers to meet their objectives of reducing material toxicity or the amount of packaging used in supply (Sharfman et al., 2009).

Environmental factors have a role in the process of advancing ecologically sustainable manufacturing. Basic explanation of process offered by Pettigrew (1997): "A sequence of individual and group events, acts, and activities that develop through time within a framework." Both purchasing and manufacturing processes are basically made up of coordinated, sequentially interdependent decision-making events that take place in a network linked by mutual relationships that take place across time in particular contexts. Many businesses and people, especially those who are new to sustainability, believe that the concept of sustainability has a limited application since environmental and green concerns are often confused with sustainability (Hopkins, et al. 2009; Montiel 2008). According to Lang and Murphy (2014) in Business and Sustainability: An Introduction, the fundamental goal of sustainability policy has changed from environmental protection to biodiversity conservation, and Goodland refers to this approach as "natural capital maintenance" (Goodland 1995). Sustaining the health of ecosystems, their maximum capacity, and their diversity is necessary for environmental protection. It calls for the protection of natural assets as a source of resources for the economy and a place to dump waste. The rate of resource gathering must be compatible with the rate of resource regeneration.

Additionally, Elkington developed this ICM - interconnecting circles model for sustainable manufacturing employing the idea of the "triple bottom line" (TBL) (1998). ICM, which is most frequently employed in sustainability, presents the three influence domains as being equal and having an affect on production simultaneously. This idea holds that businesses should assess their sustainability from an economic, social, and environmental standpoint.

The three dimensions of sustainable manufacturing are closely linked, according to the foundation of TBL. ICM's primary value is "sustainability," to put it more precisely. In its most

basic form, this refers to the continuous production of industrial goods and services. Figure 1 displays the ICM:

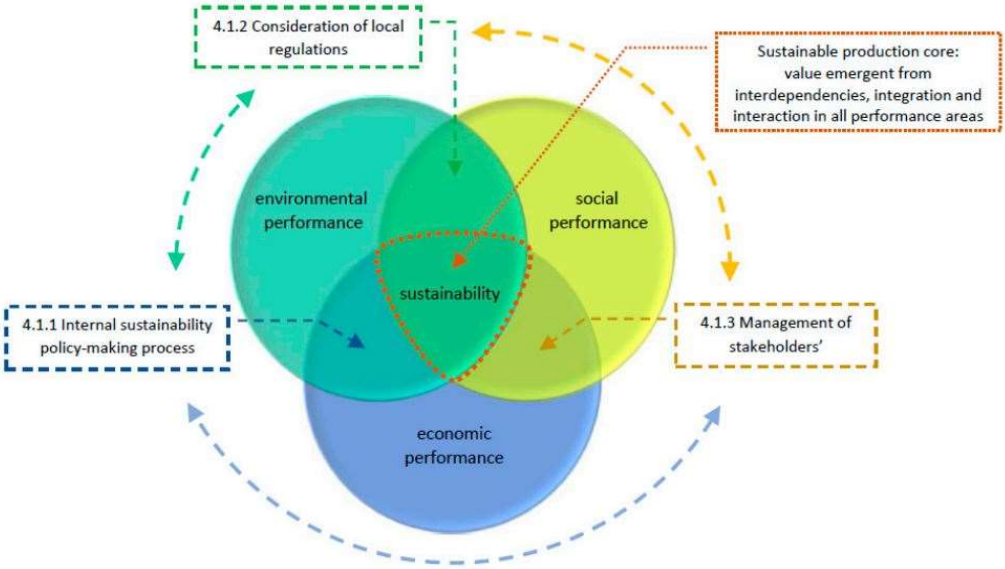


Figure 1: Interlocking circles model of sustainability

The "economic" and "social" spheres, which are philosophically viewed as subsystems, are two of the three concentric rings that make up alternative sustainable production models. In these graphic spheres, the "healthiness" of the environmental sphere is portrayed as being reliant on "economy." In order to ensure sustainability, the CCM's multiple realms must be interconnected, either in a hierarchical manner or, perhaps more exactly, in a sequential manner. As Green and several collaborators stated, sustainability may be realized throughout the supply chain by

concentrating on the environmental elements over time through networked interaction (1996).

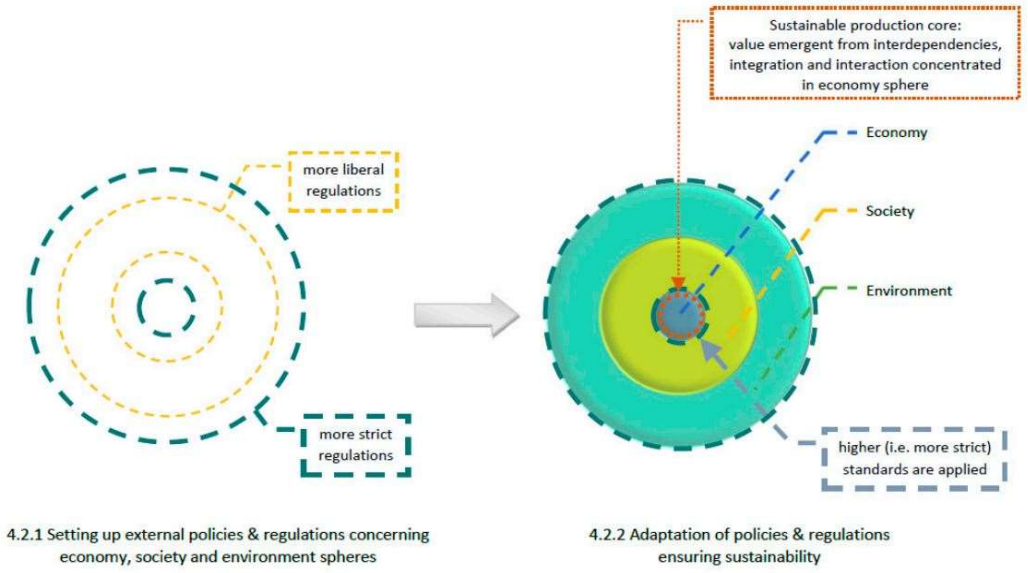


Figure 2: Concentric circles model of sustainability

ICM, the original and by far most popular method, defines sustainability in terms of a single moment in time, whereas CMC sees sustainable production as a series of subsystems that are arranged hierarchically and sequentially. The approach's foundational articles by Thompson (1967) on the interdependencies and production contingencies in networks serve as its focal point. By concentrating more specifically on the IMP network approach, which is a business model, approaches like these may be applied in a commercial context to better comprehend how players, resources, and actions lead to the establishment of sustainable purchase in value-based systems. Hoejmose et al. created a defense for using the IMP technique to examine socially and ecologically responsible buying (2012). As foundations of IMP strategy, they underlined significance of long-term planning and integration in corporate partnerships.

2.3.Service delivery

When it comes to the portion of the research that focuses on service delivery in the oil and gas industry, this process should inevitably be analyzed from both the provider's and the buyer's points of view in order to ensure that the assertations are objective and valid.

- ***Buyer Perspectives***

The main objective of service delivery from the buyers' perspective is attained customer happiness. The business provides its consumers with this service in an effort to guarantee customer happiness. There are several ways to gauge how quickly a service is provided to clients. According to PWC, the speed at which a service is supplied is crucial in determining whether or not it is good (2011). Delivery delays are a sign of bad service. On the other hand, prompt delivery of the desired goods and services denotes quality or satisfactory service. In addition to being able to supply the items that the customer asked, one must be able to fulfill their demands in order to provide good service. "Service delivery" refers to making sure that consumers receive the goods and services they have bought, according to Service Futures (2015). Meanwhile, Johnson (2011) asserts that many governments' institutions creates a negative self-image for not providing for the demands of their citizens. In the public sector, where customers do not play a significant role, market concepts do not apply; this is because the primary motivation in the public sector is not profit. Furthermore, Batley and Larbi (2004) point out that it is essential for businesses to provide high-quality service delivery due to the tendency of privatization public organizations and the capacity of the private sector to compete for business. African nations' service expansion has lagged far behind that of other emerging nations, creating a gap that will only widen unless adjustments are taken. In order to improve service delivery in those Sub-Saharan African countries' road infrastructure, telephone networks, and power generation, changes must be undertaken (Odaro, 2012). The quality-of-service delivery must increase for the continent to achieve its full economic potential, spur growth, and transition from a raw material supplier to a manufacturer of finished goods.

In the study "Causes of Poor Service Delivery in Africa and Their Impact on Development" conducted by Esohe Denise Odaro, accountability is suggested to be another issue with service delivery in African countries and is suggested to be resolved through partnership; in this case, it is highlighted as a public-private partnership (2012). The notion of procurement activities may be readily connected to the term associated to this study on the oil and gas business since there wouldn't be a delivery issue if the corporations in those nations had effective procurement plans. Additionally, corruption has been a problem for the delivery of services in both public and commercial sectors that receive foreign money. The World Bank authorized a private business, Lahmeyer, to be linked to contracts sponsored by the bank even after the company was found guilty of corruption in connection with a water project in Rwanda (Hall and Lobina, 2006). This

fact serves as yet another justification for service delivery failing to function properly owing to a lack of a sustainable procurement plan.

Many scholars have emphasized the critical nature of this concept, particularly because it is a multidisciplinary strategy to support design and implementation based on human-centered and consumer methodologies. According to Halvorsrud et al. (2016), "recognizing the service delivery from the consumer's viewpoint is important for profitable service layout and governance" (Halvorsrud et al., 2016; Polaine et al., 2013; Stickdorn & Schneider, 2011). With her work on service blueprinting, Shostack (1982) is considered as a pioneer in the subject of service delivery evaluation, aiding in the comprehension and analysis of the service delivery process in service design (Halvorsrud et al., 2016). The process of "service blueprinting" makes use of flowcharts to show the stages that go into providing a service (Halvorsrud et al., 2016). The customer may not be aware of the behind-the-scenes procedures, but they are essential for service delivery, and a blueprint clearly distinguishes them from the buyer-facing process steps (Halvorsrud et al., 2016).

- ***Provider Perspectives***

Employee participation is another crucial component of service delivery from the viewpoint of the opposite side, the providers. People who are eager to help customers are necessary for good service delivery. In addition to positively influencing consumers' trust, highly competent staff can reassure customers of the service's quality. Businesses that boost service delivery, according to Batley and Mcloughlin (2014), often train their employees to ensure they have better professional skills and understanding on how to assist clients.

The second argument made by the providers is that employee participation in the work process also takes into account how the employees feel about providing customer support. Customer views of service delivery were impacted by staff having a favorable attitude toward customers as contrasted to those with a negative attitude. However, according to the researchers Fukey, Issac, Balasubramanian, and Jaykumar (2014), service delivery is different from employee engagement, and the latter is a human resource practice rather than a problem with service delivery. Despite this, employee involvement affects service delivery and is a necessary part of providing outstanding service. Disengaged workers are unable to provide excellent or decent service. Employee absenteeism has been identified as one of the challenges in providing public services by

Brown, Ryan, and Parker (2000). According to Singh, Pathak, Naz, and Belwal (2010), tardiness and absenteeism are the two main issues influencing service quality in public institutions.

Therefore, understanding and managing customer expectations is a crucial component of corporate management of organizations in order to please costumers and hereby attain the higher customer satisfaction rate. The Expectations Model developed by Hsieh and Yuan (2019) explains how service providers may influence consumer expectations by using expectation drivers (Figure 3). Regarding areas that may be used as levers of action to change consumer expectations, Hsieh and Yuan (2019) offered three unique propositions (P1, P2, and P3). Since this model illustrates a clear connection between customer expectations and customer emotions, as well as between the drivers of expectations, the zone of tolerance, and the ultimate satisfactory service experience, it seems especially essential to take it into account in this study.

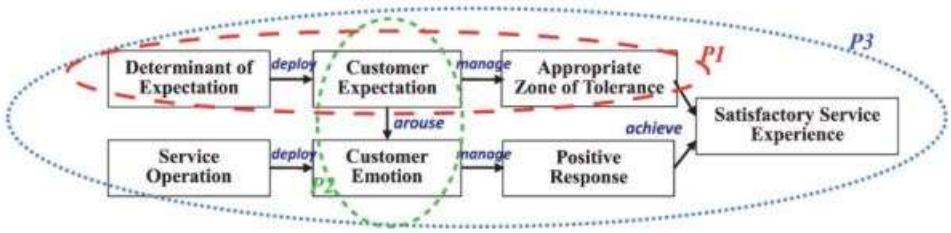


Figure 3. Expectations Model

2.4.Impact of Procurement on Service Delivery

According to a study titled "Procurement procedures impacting service delivery: an example of TNK-BP Oil & Gas Company in Russia," TNK-policy BP's had an impact on the provision of services (Martemyanova, 2018). Additionally, Rosneft, a state-owned oil and gas firm in Russia, purchased TNK-BP, which at the time was the third-largest oil and gas company in the country. This might be attributed to the organization setting up a competitive bidding process, which made sure that only the best were chosen to give services to the company. Additionally, procurement openness increased customer confidence in the company and made sure that only the best vendors and service providers were used to enhance customer service. This was in line with (Tkachenko, Yakovlev, and Kuznetsova 2017), who claimed that depending on the type and

breadth of the policy, public procurement policy might have a range of effects on service delivery. Procurement policy is significantly impacted by a variety of factors. For instance, a procurement policy that promotes honesty and integrity in the procurement process has a beneficial impact on the procurement process. Good service delivery is a byproduct of effective procurement procedures, claim Rehmatulla, Smith, and Tibbles (2017).

Customers' impressions of the value that the firm provides are also being improved by procurement planning that takes into account rivals' offerings and ensures that the company may offer its services at a cheaper price than competitors (Hawkins et al. 2015). Having knowledgeable workers about the procurement procedures results in customer happiness, and this procurement policy's integration of human resource planning results in good service delivery. Having procurement specialists on team guarantees that proper planning is executed (Brewer and Arnette 2017). It ensures that every delivery is done on schedule and in good order, boosting dependability and the ability to meet client expectations. When opposed to absentee and disengaged personnel, those that are engaged and ready to serve and attend to clients enhance the perception of service delivery (Manso and Nikas 2015). Similarly, disengaged employees are incapable of putting into practice suitable plans and private contract clauses that guarantee suppliers are fully obligated to produce high-quality goods, resulting in unsatisfactory service delivery (Meehan, Ludbrook and Mason 2016).

Schooner and Whiteman assert with assurance that the effective supply of services is facilitated by procurement policies (2000). Impact on the procurement process is one of the most crucial elements of procurement policy due to the fact that it promotes transparency and honesty throughout the whole procurement cycle, and such policy has a favorable effect on the procurement process. According to Rehmatulla and other academics, good procurement rules are linked to better service delivery (2017). The Organization's procurement of products, works, and services must be transparent and adhere to the right standards if it is to deliver high-quality services.

Employees that are appropriately taught, provided with the required knowledge, and capable of performing the stated procurement tasks should be a part of a complete procurement system (OECD-DAC) (2006). Due to evolving procurement procedures, the introduction or growth of alternative contracting strategies, and a growing reliance on service delivery by private sector

firms, it is challenging to build a procurement unit or staff with the appropriate skills and competencies (Government Accountability Office, 2005, 2006).

The process of sustainable buying practices vis-à-vis its impact on service delivery is examined by Nyoike and Ismail (2017). Namely, the study highlights that that managers' evaluations of purchases would guarantee efficient purchasing procedures. According to the critical viewpoint, when a company can develop a conceptual schedule based on the priority order, it is more effective at controlling its profitability yields. Through this strategy, the business is able to fulfill all of the demands and purchases necessary to carry out all of its operations. By doing this, they may better manage all costs related to logistics and other types of equipment while streamlining the procurement procedures. Once more, using modern technology within a company helps decision-makers to save costs while enhancing service quality.

It is asserted that one important aspect of procurement, planning, has the capacity to improve governmental institutions and advance service delivery. Mullins (2003) also discovered that procurement planning aids public enterprises in providing services more successfully and efficiently. According to Raymond (2008), the absence of competent and experienced procurement professionals prevents public procurement firms from fulfilling their compliance requirements. Aila and Ototo, the researchers, also assessed the idea of sustainable buying and how it connects to service delivery (2018). Sustainable procurement is one of the factors that influences organizational growth, according to the research. Sustainability in buying is crucial for a firm, according to the report. The term "sustainability" refers to the practice of making choices that enhance the social, economic, and quality of life of the community in order to ensure the organization's long-term success. In order to maintain a high level of service delivery, businesses must investigate the idea of sustainable buying. Prior to beginning any buying activity, the organization may do an evaluation thanks to sustainable procurement. This makes it possible for the organization to develop a schedule for buying all necessary materials. Utilizing resources effectively also helps the company avoid wasting money, which enhances its procurement procedure and, as a consequence, its performance.

According to a study entitled "Assessment of variables impacting procurement process in Public sector" (Paul, 2020), which was based on the instance of the Arusha City Council, procurement had a favorable effect on delivering services. Consequently, this study's goal was to

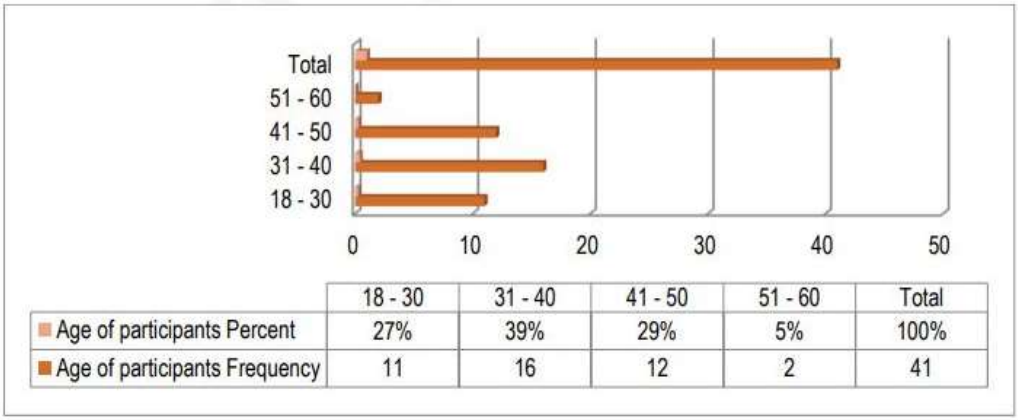
examine the effects of procurement practices at the Arusha City Council (ACC). The next parts go into further depth on how this aim was met by looking at the effects of procurement planning, the implementation of an EProcurement system, and the evaluation of procurement costs at ACC. In order to guarantee that the sample comprises respondents who work in the Procurement Management Unit (PMU) or who use PMU services, the calculated sample size of 41 respondents was distributed as indicated in the table below. As a consequence, the sample contained 13 department heads, 33 user departments, and 7 PMU members.

Category (department)	Sample size
Procurement management unit	7
User departments	23
Head of departments	11
Total	41

Source: Paul, 2020

Here, in the sample, user departments are the people who are using the procured products, goods. The study looked at the impact of procurement planning at the Arusha City Council (ACC).

In relation to this research, according to the data mentioned in the next table, 67.9 percent of respondents from the user department believe that procurement planning has a high influence on obtaining services at ACC, and 32.4 percent believe that procurement planning has a very high influence on achieving services at ACC. On the other side, 42.9 percent of respondents from the Procurement Management Unit (PMU) believe that procurement planning has a high influence on achieving services at ACC, and 57.1 percent believe that procurement planning has a very high influence on achieving services at ACC. Overall, 63.4 percent of research respondents agree that procurement planning has a strong influence on obtaining services at ACC, and 36.6 percent believe that procurement planning has a very high influence on achieving services at ACC (Paul,2019) .



	18 - 30	31 - 40	41 - 50	51 - 60	Total
Age of participants Percent	27%	39%	29%	5%	100%
Age of participants Frequency	11	16	12	2	41

Source: Arusha City Council (ACC), 2019

These findings properly indicate that that procurement planning is a critical component of the procurement practice which remarkable positively contributes to and improves the delivery of services at ACC.

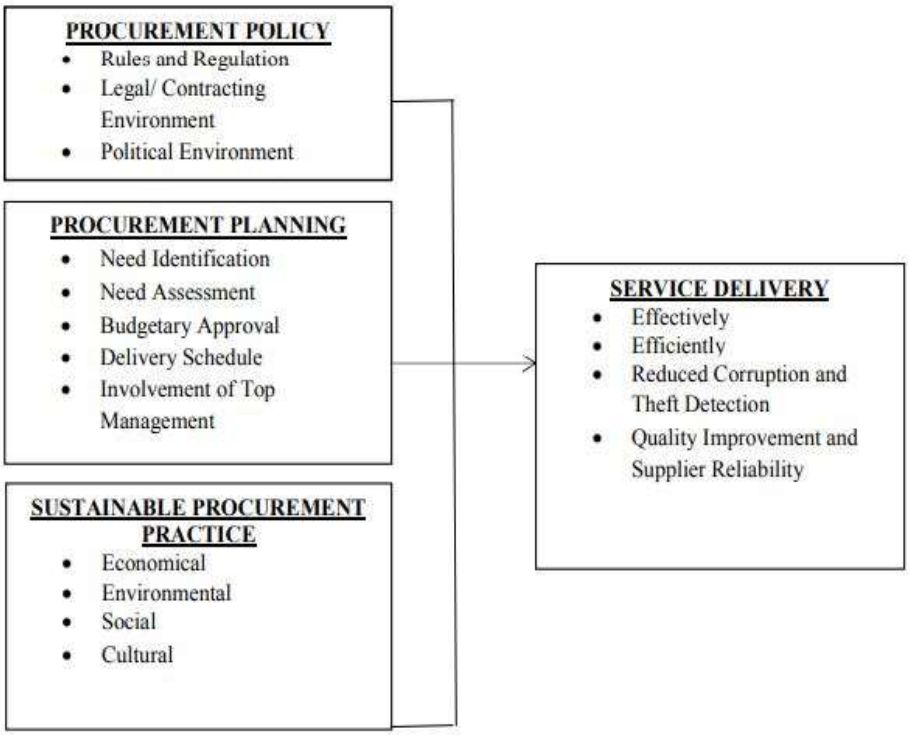
More precisely, when procurement policies are properly implemented in a variety of ways, such as economic, environmental, social, and cultural service delivery, these activities become more effective and efficient. Corruption decreases, theft is easier to spot, and the quality of the service improves. If the procurement practices are well coordinated, the supplier becomes more reliable, due to the positively dependent linkage between the procurement process and service delivery (Anane, Adoma and Awuah, 2019).

2.5.Conceptual Framework

To sum up, based on the findings from the numerous studies conducted by various scholars and professionals in the literature review, it is possible to highlight that the interrelation between procurement policies and effectiveness of the service delivery appears as a controversial topic with varying perspectives which are supported diverse perspectives and arguments. Namely, while some argue that procurement policies and planning have an impact on service delivery in the oil and gas industry, another group of people argue the opposite. Moreover, when it comes to procurement and its impact on service quality of oil and gas sector TechnipFMC Oil and Gas Company in Azerbaijan, there is a huge gap in literature considering the fact that this topic has not priorly been investigated and analyzed before in an academic level. In the literature review, an in-depth overview is provided with proper analysis and explanation about the side and assisting

determinant factors in terms of the relationship between service delivery and procurement activities. In this regard, a direct link between the two variables is detected.

The statistics indicated in the following scheme nicely demonstrates the significance of procurement but sustainable procurement operations on service delivery of items. The effect that procurement methods have on service delivery is briefly discussed below by the author of the research study "The Effect of Procurement Practices on Service Delivery: A Case Study of VRA, Ghana" (2019).



Gathering evidence to accept or reject an existing hypothesis is the goal of theory-building research. The study also aims to shed light on why and how the petroleum industry's sustainable procurement practices are occurring. More specifically, the paper analyzes the existence of positive linkage between the procurement process by separately analyzing the procurement planning, procurement policy, and sustainable procurement practice and effectiveness of the service delivery of the TechnipFMC Company. In this regard overall procurement process, including procurement planning, procurement policies, and sustainable procurement practices of

TechnipFMC company are referred as the focal independent variables of the study, while effectiveness of the service delivery is referred as the dependent variable.

As a hypothesis of the research, in accordance with the factors explained and described thoroughly, such as processes on the service delivery reviewed above, this paper is investigated for the purpose of testing the following statements:

Hypothesis 0: Procurement has no direct influence on the quality of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

Hypothesis 1: Procurement policy has a positive relation with the success of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

Hypothesis 2: Procurement planning has positive relation with the success of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

Hypothesis 3: Procurement sustainability has a positive relation with the success of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

The objective of this part of the study was to examine the direct relationship between the existence of procurement and the quality-of-service delivery in the oil and gas industry. To ascertain the correlation between them, first, existent studies related to the topic have been highlighted, and then they will be tested in the next coming paragraphs of the research.

3. Methodology

3.1.Introduction

The study of research technique includes an examination of the rationale behind the adoption of specific research procedures. This section covers the research methods employed in the study. It explains the research mindset, the research approach and the data gathering methods employed in this thesis. It offers details on the sampling practice, data collection process, and data analysis techniques that were utilized during the qualitative research.

3.2.Research Methodology.

While practical issues should be taken into account when deciding on a research philosophy, a researcher's particular understanding of the link between knowledge and how it is generated is likely to be the most important factor in deciding on a research philosophy (Crossan, 2003). Form this point of view, the positivist and interpretivist paradigms, which are often utilized by academics, were among the paradigms examined, discussed, and explored in most researches (Halfpenny, 1987).

Proponents of positivism rely on the scientific approach of natural scientists who are dealing with observed reality in order to produce generalizations (Comte, 2015). With more stringent attention on pure data and facts, positivism focuses on the significance of what is offered generally, without being impacted by human world of psychology (Irshaidat, 2019). In an ultra-positivist perspective:

- Researchers would view organizations and other associated social entities as real, much like physical things and natural phenomena.
- Finding facts or patterns that can be observed and measured is the goal of this inquiry. Furthermore, the seen and measured occurrences should contribute to the establishment of credibility and significance in the data. In order to create law-life generalizations similar to those created by scientists, the researcher would look for causal links between the data acquired.

Positivism is critiqued from a subjective perspective by interpretivists (Williams, 2000). Unlike physical phenomena, human beings are considered distinct entities that cannot be studied in the same manner. Interpretivism, on the other hand, focuses on a wider range of variables and aspects that are tied to context. As a result, research in the social sciences must be distinguished from research in the natural sciences. In an interpretivist perspective, cultural, environmental, and temporal variables are all taken into account when formulating theories of social reality (Walsham, 1995). Unlike positivism, interpretivism seeks to include more complexity in its findings.

Qualitative approaches are best suited for gaining profound insights based on a specific context because of the interpretivism paradigm's inherent features (Chowdhury, 2014) . Researchers could be more general in their descriptions if they used quantitative methods instead

of qualitative ones (Ryan, 2018). As a result, the type of study being conducted and the surrounding environment might have an impact on the research methodology selection process.

Taking all aspects related to two key research philosophy into consideration, positivism was used to test if procurement procedures affected service delivery in this study. Positivism provides a sound basis for determining if procurement procedures have an impact on the quality of service provided. Researchers' preconceptions and prejudices can be eliminated by using this method rather than interpretivism, which relies on the researcher's subjective interpretation of the data (Shah, 2021).

3.3.Research Strategy

It can always be challenging for researchers to decide between two study approaches: intensive or extensive (Fatimah B., 2010). The terms "qualitative" and "quantitative" research are often used interchangeably with intensive and extensive when referring to different types of study. Based on the criteria described by Andrew Sayer, it can be stated that intensive research is qualitative and extensive research is quantitative research (Sayer, 2010). According to a variety of factors, there are significant differences between qualitative and quantitative research. A constructivist perspective is commonly used in qualitative research to support the researcher's knowledge claims (Newman & Benz, 2006).

As a result, the most important differential between these two research design approaches is the matter of scope of the work in terms of data collection (McCusker & Gunaydin, 2014). The study questions, data gathering techniques and methodologies, constraints, and how the objects are specified varies significantly across the two research types. Qualitative research differs from quantitative research in that it goes beyond the distinction between statistical analysis and in-depth interview, survey, or case study (Parylo, 2012).

Since the collecting of qualitative data, such as words, emotions, and sentiments, is the focus of a qualitative data collection method (Kim & Yoon, 2016), the collecting of quantitative data necessitates the gathering of data that can be measured and verified. As a result, quantitative data gathering was the best option for this study because the research is aimed to have information that could be verified.

3.4.Research Design

A researcher's strategy is the approach which is utilized to collect data from their subjects. Experiments, observations, and surveys are just a few of the methods that can be used in empirical investigations (Tsang, 2013). There are several kinds of experiments each of which has a certain pre-defined goal in mind attempted to achieve. For investigating non-human phenomena, experiments are typically carried out in a scientific setting (Leavitt & Pondy, 1964). On the other hand, in order to conduct an ethnographic study, researchers must live in the community being researched for an extended period of time (Awasthy, 2015). Watching for behavioral shifts in the phenomena under investigation is the most common form of observation. It is most commonly employed to study non-humans, such as germs or animals. Furthermore, it is expensive to conduct long-term observations, which makes it an unsuitable choice for scientific research. Researchers can use surveys to select a sample of participants within a bunch of population to represent the entire community. Since it insured that the subcategory of the interactions was picked and used to analyze the hypothesis, this approach was chosen for this study's analysis. The most major benefit of an online survey is that it saves money because it doesn't require the entire group to participate (Gable, 1994). Because the researcher only has to deal with a tiny portion of the data, it also saves time for him. For a deductive investigation that requires scientific and verifiable information, surveys are the best tool because they collect data that can be easily confirmed.

3.5.Data Collection

In this paper, the data collection relies on the online surveys, considering the fact that surveying people face-to-face, via postal mail, or via telephone can be expensive and time consuming. The rising data collection strategy based on internet/e-based technologies (e.g. online platforms and email), is a comparatively cost-effective and timely friendly survey option (Regmi, Waithaka, Paudyal, Simkhada & Van Teijlingen, 2017). It is possible to collect a huge amount of data in a short period of time using these new data collection methods, which are more efficient. Additionally, they appear to be viable and useful for gathering data on delicate subjects or for obtaining samples that are otherwise difficult to obtain. Since the majority of people are now digitally linked, researchers in academia and the business sector are benefiting from the change traditional surveys to online ones. However, in this case, an online questionnaire survey was the most effective data collecting tool because it captured information that was only related to the research objectives, as opposed to constructing and executing a paper version of the questionnaire

(Marshall, 2005). In addition, the questionnaire is cost-effective because it may be sent to research participants in a variety of ways. The questionnaire starts with personal information of respondents, afterwards dependent variables which are procurement policies, procurement planning, and sustainable procurement related questions are implemented. Finally. service delivery related questions are asked from respondents to make sure of that the survey will cover research model fully in terms of dependent and independent variables.

If the instrument to gather data is a questionnaire-based survey, then a specific method should be utilized in order to obtain data from a specific group of people. In this case, population of the survey are workers of TechnipFMC company in Azerbaijan, especially from supply chain and procurement department. The research participants are obtained through a sampling approach. Even though a subsection of the phenomena needed to be selected, it was necessary to devise a mechanism for selecting the subsection. It is possible to utilize non-probability sampling or probability sampling, both of which are valid methods (Acharya, Prakash, Saxena & Nigam, 2013). Probability approaches use procedures to ensure that each participant has an equal opportunity to participate in the study (Mohsin, 2016). Due to the fact that a representative sample is chosen, they are recognized the most scientific. Methods that don't rely on statistical probability favor one part of a phenomenon over another, such as non-probability (Draugalis & Plaza, 2009). Thus, non-probability approaches were employed in this investigation. Participants in sampling study are chosen based on their current availability. Time constraints made it extremely difficult to accommodate everyone, therefore this had to be implemented.

An email was sent to the TechnipFMC administration requesting authorization to conduct research on the impact of procurement methods on service delivery in order to gather the necessary data. As soon as management gave their blessing to the study, the author gathered the e-mail addresses of all procurement staff and sent them an invitation to take part in the survey. Participants were contacted through email through which they have been asked to indicate their answers for 16 questions, by having 13 questions on a Likert scale, while the remaining 3 questions were in multiple-choice type. Indeed, the questions are organized with the aim of having an overview towards the quality of the service delivery with reference to analyzing the procurement planning, policies, and sustainability factors that have been discussed in the empirical part of the research. More preciselyby, the questions regarding the transparency, budgeting, tendering, the role of

specialists, pricing, ethic norms, and as such have been directed by the questions. The survey questions are indicated in the Appendix A of the paper.

The questionnaire was sent as the email attachment. Based on the fact that TechnipFMC had more than 213 procurement staff, the study chose a sample size of 96 respondents, which expressed the workers in an approximate ratio of 1:2. More specifically, the survey response rate is estimated as 45%, which might be considered as sufficient number, considering the fact that it can be approximated as almost half of the whole target population – procurement staff of TechnipFMC. Moreover, based on given 45% population proportion, and having sample size 96, margin of error is calculated as 4.83% with 80% confidence level.

3.6.Data Analysis: Regression Model

When analyzing the data, tabulated means and frequencies, as well as tables of the outcomes, were used to make decisions. The data was then analyzed with Excel Data Analysis tool to determine the association between the factors in the procurement process and the quality of the service provided. To determine whether there are any linkages between the empirical data groups (or variables), the quantitative statistical approach of analysis of variance (ANOVA) was applied (Keselman et al., 1998). If the means of several variables are identical, then ANOVA can be used to compare the statistically significant results of three or more means.

For the purpose of determining the link between service delivery as a dependent variable and the independent variables, regression analysis is utilized. In this case, simple linear regression model is processed in order to see correlations between each independent variable and dependent variable separately. Thus, the model is the following:

$$Y_1=a_1 + b_1(X_1) + e_1$$

$$Y_1=a_2 + b_2(X_2) + e_2$$

$$Y_1=a_3 + b_3(X_2) + e_3$$

Where:

- Y_1 is the dependent variable, in our case, it is the quality level of service provided by the company;
- X_1 is one of the independent variables, in our case, it is procurement policy;

- X_2 is one of the independent variables, in our case, it is procurement planning;
- X_3 is one of the independent variables, in our case, it is procurement sustainability;
- "a" is the intercept point and "e" is an error term.

4. Findings

4.1. Descriptive Analysis of the Sampled P:articipants

As it is mentioned before, the study is analyzed with a real case of TechnipFMC, an oil and gas company, which is operating in Azerbaijan. Most of participants work at supply chain and procurement department. The descriptive statistics of the sample is as the following:

	Customer feedback for service delivery of the company	**Time period an employee works for the company**	**Age**
Mean	3.6	4.4	34
Standard Error	0.1	0.2	1
Standard Deviation	1.0	2.0	6
Sample Variance	0.9	4.1	35
Kurtosis	1.0	-0.4	0
Skewness	-1.1	0.2	1
Range	4.0	8.0	22
Minimum	1.0	1.0	26
Maximum	5.0	9.0	48
Count	96.0	96.0	95

Table 1. Descriptive statistics of the sample. Source: own elaboration

	Yes	No
Procurement policy awareness	84	12
	Male	Female
Sex	85	11

Table 2. Descriptive statistics of the sample. Source: own elaboration

The table mentioned above indicates that 96 participants took part in the survey and almost 88% of respondents are male and their average age is 34 years old, with minimum of 26 and maximum of 48. Average career duration of people participated in the questionnaire in that company is around 4 years and the longest time period of a worker who have been employee of the company is 9 years. In addition, as it can be mentioned, population of the survey are mostly

aware of procurement policy of the company, since they are member of those department and their daily job description demand to have sufficient knowledge about the policy with procurement and supply chain process of the firm.

When it comes to thoughts of staff related with customer satisfaction with the service delivered by TechnipFMC, mostly they are neutral for this decision to say customer is happy or strongly unhappy with the service quality, however, it is slightly above 3 which indicates that most of audience in the survey think that buyers from TechnipFMC are likely happy with the service delivered.

4.2.Procurement Policies: Correlation With Service Delivery

As one of independent variables of the regression model, procurement policy and correspondents' approach towards it is analyzed with the following likert scale (from strongly disagree to strongly agree rating):

	1	2	3	4	5
Transparency in procurement process is in high level					
A competitive bidding is allowed within procurement process					
There is a team of specialists who is responsible for tender contracts					
Mutual ties are considered while tendering					

Table 3. Questionnaire for procurement policy. Source: own elaboration

After the questionnaire is completed by the respondents, the descriptive statistics of the answers is as the undermentioned:

	Transparency in procurement process is in high level	***A competitive bidding is allowed within procurement process***	***There is a team of specialists who is responsible for tender contracts***	***Mutual ties are considered while tendering***
Mean	3.70	3.82	3.60	2.49
Standard Error	0.10	0.08	0.08	0.09
Median	4.00	4.00	4.00	2.00
Mode	4.00	4.00	4.00	2.00
Standard Deviation	0.95	0.77	0.81	0.87
Sample Variance	0.91	0.59	0.66	0.76

Kurtosis	0.60	-0.73	-0.44	0.33
Skewness	-0.77	0.03	-0.11	0.52
Range	4.00	3.00	3.00	4.00
Minimum	1.00	2.00	2.00	1.00
Maximum	5.00	5.00	5.00	5.00
Count	96.00	96.00	96.00	96.00

Table 4. Descriptive statistics of the questionnaire for procurement policy. Source: own elaboration

As it can be seen from the table above, most of survey participants think that procurement process is transparent since average rating is 3.7 out of 5 which means they are more likely agree with the statement. Furthermore, they argue that bidding process is competitive enough and the company has got a professional team of procurement specialists who are eligible for preparing tender documents according with standards. Additionally, as it may happen frequently, although relationship between suppliers and procurement specialists is also kept under control for each tender and each procurement process, respondents slightly disagree with the statement as much as 2.49 point out of 5. They believe that some cases may happen that tenders can be biased and some participants as providers of the service of product the tender is looking for are treated purposefully with procurement management authorities who want them to win the tender.

When it comes to regression results of procurement policy and service delivery, the undermentioned tables indicate regression statistics and ANOVA analysis.

Regression Statistics				
Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.581	0.337	0.330	0.40	96

ANOVA				
	df	*MS*	*F*	*Significance F*
Regression	1	7.520	46.628	0.657
Residual	94	0.160		
Total	95			
	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	1.259	0.489	2.581	0.247
Procurement policy	0.737	0.110	6.827	0.678

Table 5. Regression analysis for procurement policy and its correlation with service delivery. Source: own elaboration

According to the results of regression, adjusted R square shows that procurement policy is able to explain 33% of any change happening in service quality of the company from procurement point of view. Procurement policy is considered as an important element for service delivery of the company, however, it is not statistically significant ($p<0.005$) although one point of increase in procurement policy may result with 0.737 point growth in the quality of service that the company offers for the market.

4.3.Procurement Planning: Correlation With Service Delivery

In order to understand the situation related with planning level of procurement process within the company, the undermentioned questions are asked from participants of the survey with a likert scale format:

	1	2	3	4	5
Special budget is formed for procurement department before the year starts					
Planning process includes other departments within the process					
Future purchases are considered inside of the budgeting					
There are enough specialists skilled with budgeting and planning in procurement department					

Table 6. Questionnaire for procurement planning. Source: own elaboration

The table undermentioned will illustrate results of the descriptive statistics of answers from participants related with how the company is efficiently planning its procurement process:

	Special budget is formed for procurement department before the year starts	***Planning process includes other departments within the process***	***Future purchases are considered inside of the budgeting***	***There are enough specialists skilled with budgeting and planning in procurement department***
Mean	3.67	3.79	3.75	3.58
Standard Error	0.10	0.08	0.08	0.09
Median	4.00	4.00	4.00	4.00
Mode	4.00	4.00	4.00	4.00
Standard Deviation	1.00	0.81	0.77	0.87
Sample Variance	1.00	0.65	0.59	0.75
Kurtosis	0.85	-0.61	-0.58	-0.58
Skewness	-0.95	-0.09	0.04	-0.16
Range	4.00	3.00	3.00	3.00

Minimum	1.00	2.00	2.00	2.00
Maximum	5.00	5.00	5.00	5.00
Count	96.00	96.00	96.00	96.00

Table 7. Descriptive statistics of the questionnaire for procurement planning. Source: own elaboration

Although the sample chosen from employees argues that budget for procurement is planned with considering the needs of other departments at the beginning of the year, however, they are less likely to assume that the company is not careful about hiring professional budgeting and planning staff. However, most of them think that it is not because of company human resource strategy, rather there is not enough professional in employee market who is master with budgeting and planning of procurement department.

In order to analyze the correlation between planning level of procurement with the service of an oil and gas company, the regression analysis is run in which service delivery is dependent variable while planning of procurement is independent.

Regression Statistics				
Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.63	0.40	0.39	0.380	96

ANOVA				
	df	*MS*	*F*	*Significance F*
Regression	1	9.042	62.486	0.000
Residual	94	0.146		
Total	95			
	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	2.048	0.323	6.358	0.000
Procurement planning	0.572	0.070	7.904	0.000

Table 8. Regression analysis for procurement planning and its correlation with service delivery. Source: own elaboration

Compared to procurement policy, participants think that correctly planning of procurement processes explain much more part of any change in quality level of services by an oil and gas company. It is because of, on time delivery of service is always the most important factor for consumer in order to have a view about the partner company and its service quality. Thus, adjusted R square of regression model is around 0.39 which is higher than 0.33 in procurement policy regression model. In addition, one point change in procurement planning makes an increase of 0.572 point in service delivery level of the company, with $p<0.005$ of statistically significant data.

4.4.Procurement Sustainability: Correlation With Service Delivery

As it is mentioned in the study, the last but not least independent variable of the research is sustainability level of procurement cycle, and the study also identifies how this factor makes a sense for the quality of service offered by an oil and gas company. In order to understand what the audience think about sustainability level of procurement processes in their company, the undermentioned Likert scale rating is introduced to them:

	1	2	3	4	5
Correct value of services compared to market prices are provided by the firm					
Ethic norms are met within the procurement processes					
Corporate social responsibility is considered while making decisions related with procurement					
Local society is given attention to before any action with procurement cycle					

Table 9. Questionnaire for procurement sustainability. Source: own elaboration

Considering the likert scale above, descriptive statistics from the respondents related to sustainability of procurement are as the following:

	Correct value of services compared to market prices are provided by the firm	***Ethic norms are met within the procurement processes***	***Corporate social responsibility is considered while making decisions related with procurement***	***Local society is given attention to before any action with procurement cycle***
Mean	3.77	3.85	3.72	3.76
Standard Error	0.09	0.08	0.08	0.09
Median	4.00	4.00	4.00	4.00
Mode	4.00	4.00	4.00	4.00

Standard Deviation	0.89	0.79	0.80	0.84
Sample Variance	0.79	0.63	0.65	0.71
Kurtosis	0.02	0.51	-0.38	1.17
Skewness	-0.45	-0.37	-0.19	-0.70
Range	4.00	4.00	3.00	4.00
Minimum	1.00	1.00	2.00	1.00
Maximum	5.00	5.00	5.00	5.00
Count	96.00	96.00	96.00	96.00

Table 10. Descriptive statistics of the questionnaire for sustainability level of procurement. Source: own elaboration

Overall, the statistics of questionnaire shows that procurement team is happy with indicators related with sustainability of procurement processes. They assume that corporate social responsibility is taken into account before any action and ethical issues are always in attention within department. In addition, with average point of 3.76, they agree that local people and companies are considered mostly during procurement processes like tenders or hiring which is another boost for keeping procurement department and their activities sustainable. There is no doubt that, pricing is kept under control in order to make the service of the company compatible and valuable for consumers, the respondents agree with this statement by 3.77 mean out of 5 in the Likert scale.

As sustainability within procurement is a key element of keeping the service quality high and the study analyses this relation with the following regression model results:

Regression Statistics				
Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.589	0.347	0.340	0.40	96

ANOVA				
	df	*MS*	*F*	*Significance F*
Regression	1	7.774	48.664	0.000
Residual	94	0.160		
Total	95			
	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	2.328	0.326	7.165	0.000

Procurement sustainability	0.502	0.073	6.977	0.000

Table 11. Regression analysis for procurement sustainability and its correlation with service delivery. Source: own elaboration

The regression results indicate that sustainable procurement process is statistically significant ($p<0.005$) for an oil and gas company in order to make sure of service quality. Which means, one point change in sustainability level of procurement cycle may end up with 0.502 point of increase in service delivery professionalism of the company. Therefore, survey respondents argue that keeping the services responsible for community and environment is the major factor for their clients and procurement department considers this situation before making any decision.

5. Discussion

Since the quality of the products and services provided by the company is dependent on their employees' ability to deliver high-quality services, a transparent procurement process is essential. Even so, in cases when the purchasing process is kept under wraps, the products delivered are of poor quality and are not on time, which significantly impacts the service delivery. As a result, policies that encourage transparency remarkably contribute to improvement of the service quality and performance, while policies that do not support transparency leads towards an opposite outcome, resulting in underperformance. According to the results of descriptive statistics, a large portion of respondents agree that procurement processes are transparent in TechnipFMC, Azerbaijan. It is one of the key factors for procurement policy of a company, according to Martemyanova (2018).

In addition, policymakers' knowledge of contract law has ramifications for service delivery. There are many reasons why service delivery can suffer from poorly written contracts, such as ambiguity in legal responsibilities or possible repercussions for failure to meet contractual obligations (such as financial penalties and reimbursements), as well as a lack of clarity in contract terms or implications for failure. The contract's technical requirements also have an impact on the quality of the service. In comparison to vendors that are developed without technical expertise, companies with specialists on staff are better able to provide quality service. An organization's ability to provide high-quality service is enhanced by policies aimed at making procurement

processes more inclusive of technicians. Among the most significant aspects of acquiring new equipment for the company are the negotiations between the many departments involved. Technical standards that are well-defined encourage providers to develop new and better goods, which in turn improves customer care and the value of the company's business. The study shows that respondents think that there is staff enough in TechnipFMC with knowledge and skills related to local and international legal and tendering regulations. As McKevitt and David (2014) and Ronnback (2012) argue that procurement policies are not only stabilized with transparency or country risk level, but also, having a team of professionals who are eligible to organize agreements with contractors according to legal procedures of the country in which the company performs and also internationally.

Although the current literature argues that procurement policies have a great impact on service quality of oil and gas companies (Raymond, 2008; Love, Davis, Edwards & Baccarini, 2008; Mansaray, Lapkoff & Little, 2021), in our study there is also a correlation proved between procurement policy and service delivery of the company, however, it is not statistically significant. This is largely because that other factors of procurement have more impact on quality level of services in companies and it differs from country to country according to their political and economic risk levels (Nijaki and Worrel, 2012). In order to make sure the impact of other factors, the research can be developed to cover other elements and variables in future studies as a recommendation.

Among the findings of the study were the recognition that procurement planning was an integral element of the TechnipFMC procurement process, as well as the recognition that procurement planning had its own impact on the service quality. Procurement and quality management were found to have a positive correlation in the research. According to Brochner et al. (2016) and Camen, Eriksson and Garvare (2016), procurement planning favorably impacts quality of services provided which is in line with results of this study.

To guarantee excellent service levels, another important element is to include representatives from every division within the company in the budgeting process from the outset. This is due to the fact that procurement planning can only be successful if the components of items needed by each department are properly specified. It guarantees that the best products, facilities, and materials are procured to meet the needs of the consumer. Because it reduces the risk of not

being able to provide services and products to clients because they are not readily accessible in the market (Shin & Lee, 2016). In this manner, results of this study also lean in the same direction with the current literature considering the fact that most of respondent participated in the survey agree with the statement that procurement department takes comments from other divisions into consideration before making a decision about any purchase.

The study also found that procurement objectives at TechnipFMC take the human resources component into account by assuring that trained personnel were employed for procurement divisions. A successful service execution can be found in procurement planning that incorporates designing for human resources (Mahamadu et al., 2018). Service quality is improved when procurement processes are well understood by the company's personnel. Appropriate procurement planning is made possible thanks to the presence of people with procurement experience. When all items are handled correctly and delivered on time, you may increase your company's trustworthiness and ability to satisfy industry standards. Personnel that have a positive attitude toward their jobs and are accessible to provide service and attention to customers improve the perception of service delivery as compared to those who are inactive and disinterested from their jobs (Bontis, Richards & Serenko, 2011). This also leads to bad service delivery since demotivated personnel are unable to develop effective plans or relevant contractual arrangements that ensure vendors are completely obliged to offer high-quality consumables and therefore better service supply can be delivered (Sibonde & Dassah, 2021).

Last but not least, the investigation also found that TechnipFMC's sustainable procurement practices resulted in a high level of service. According to Dyllick and Hockerts (2002), sustainable procurement strategies contribute to increasing service quality. These conclusions are consistent with the conclusions of this study. The most significant aspect of sustainable procurement is that it assures that the products purchased will provide clients with top-notch service. It minimizes the acquisition of nonconforming units, hence improving the standard of the service delivery process. Similarly, environmentally conscious and sustainable purchase improves service delivery as well. According to Sharfman et al. (2009), consumers who care about the environment will be more satisfied if a company purchases its products from environmentally conscientious vendors. As a result, not only are the goods and services purchased more effective, but there is also less burden, which leads to better provision of services. It has been found that green procurement procedures

increase the value of materials procured since they are more ecologically friendly than products that are not ecologically sound. Furthermore, purchasing environmentally friendly items helps businesses saving money, which in turn allows them to provide clients with lower-cost goods and services, thus improving customer satisfaction as Hopkins, et al. (2009) and Montiel (2008) argue. On the other hand, procurement processes that are socially responsible also improve service quality. For example, having workers who are actively involved in their work and who come from the local population might improve service performance (Hoejmose et al., 2012). As a result of being socially sustainable, workers are motivated to provide excellent service to the company's clients. For example, educating personnel improves service delivery since trained staff are better able to provide better services than others who are not provided with improved skillset trainings or seminars.

6. Conclusion

Here you'll find a summary of the findings, as well as an evaluation of their relevance to the study's goals. The part also offers an assessment of the research's advantages and disadvantages. It contains further recommendations for the issues on which next empirical investigations should concentrate in order to improve the situation.

6.1.Summary of Findings

In this study the main purpose is to understand if there is any impact of procurement process on goods and services delivered by oil and gas companies and how it happens. In order to do that, case study analysis is organized, and a questionnaire-based survey is formed amongst employees of TechnipFMC, an oil and gas company operating in Azerbaijan. Procurement is considered as independent variable of the study while the quality-of-service delivery is the dependent one. In addition, procurement process is analyzed from three different perspectives such as procurement policy, procurement planning and procurement sustainability. The online survey is formed with questions which identify what TechnipFMC workers from supply chain and procurement department think about all these three dimensions of procurement, as well as service delivery. Data is formed with answers from 96 respondents and descriptive statistics and simple linear regression are both applied in order to understand opinion of the audience and correlations between dependent and independent variables. Thus, regression results of the study indicate that procurement elements have positive correlation with service delivery, especially procurement planning and sustainability

are both statistically significant factors of procurement process to have an impact on quality of service offered. This finding aligns with the current literature such as Rehmatulla, Smith, and Tibbles (2017). Therefore, the study rejects the following null hypothesis of the research since there is a clear relationship between procurement and service delivery:

Hypothesis 0: Procurement has no a direct influence on the quality of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

The next objective of the research, which was to investigate the procurement policies of TechnipFMC in Azerbaijan, and their impact on service delivery, was successfully accomplished by the research. The investigation determined that procurement procedures had a favorable impact on service delivery within the organization, despite the fact that the impact was not statistically significant. This is supported by Raymond (2008), who argues that public procurement policy has an impact on service delivery in a variety of ways, regarding the nature and type of public policy being implemented. Policy initiatives that encourage transparency ultimately result in improved service delivery. Additionally, having a team of professionals who are expert with procurement contracts and together with, competitive bidding are also inevitable parts of procurement policy of a company which make sure of high-level quality of services. Thus, the study findings approve the following hypothesis:

Hypothesis 1: Procurement policy has relation with the success of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

The following element of procurement which is considered in this study is procurement planning and the study obtained thoughts of employees in TechnipFMC about planning and budgeting processes in procurement cycle. The study found that procurement planning has a great and positive impact on the services delivered by an oil and gas company. This finding is supported by the current literature as well like Mullins (2003). It is proved that budgeting the purchases at the beginning of the year with involving all other divisions of the company and with help of a professional team who owns budgeting and planning skills and knowledge have a great impact on cost saving actions of the given company, and hereby, its competitive pricing strategy, which ends

up with customer satisfaction and increased service delivery quality. Therefore, the study approves the following hypothesis of the research:

Hypothesis 2: Procurement planning has relation with the success of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

The last but not least element which is used to identify procurement process of the study is the level of sustainability that the company possesses. The findings of the research show that sustainable procurement cycle has a positive correlation with service delivery in TechnipFMC, as a member of oil and gas industry. This result is also in the same direction with the findings of Hoejmose et al. (2012). The study argues that procurement team should always prefer to purchase from suppliers who are operating in a socially and environmentally friendly ecosystem. It will end up with less cost of production and more customer happiness which is end product of high quality of services offered. Finally, the last hypothesis is approved by this study according to the regression results of dataset:

Hypothesis 3: Procurement sustainability has relation with the success of the service delivery in TechnipFMC oil and gas company in Azerbaijan.

6.2.Weaknesses of Study

During the overall investigation process, the study has been challenged by specific limitations, considering which might be assistive for the further researchers. The first one is that respondents of the survey are all from the same departments which eliminates the chance of having more accurate conclusions for service delivery. Largely because, the quality level of service is better to be analyzed with responses from their real users, consumers. However, in this study it was difficult to find and contact with customers of TechnipFMC in order to ask them the relevant questions related with quality level of service they buy from this company, through which the higher objectivity rate might have been ensured in the research by maximum-level avoidance of biased or stereotypical responses. Therefore, to certain extent, the findings of the study can be evaluated as limited since workers of the company could not mention that the service quality is poor even if it is in reality. Thus, instead of referring to real costumers' opinion, the according reflection of the costumer profile should have been referred; however, this alternative has not been

realized, which is the second weakness of the study. Indeed, it was not possible to refer to costumer's profile considering the fact that TechnipFMC oil and gas company in Azerbaijan fully respects the ethical norms and rules regarding the preservation of the rights of the employees and consumers, it was not possible to maintain a relevant data which precisely describes the costumer's profile and the competitive environment that the company is engaged in. Namely, the company does not enable such information to be publicly available due to the preservation of the privacy and confidentiality, which obscured the research process by preventing to include such information. As the next limitation, it is essential to highlight the fact that the service delivery concept is a multidisciplinary phenomenon, which might be interpreted in a broader scope than it is mentioned in this study and there may be various factors which are able to explain changes in quality level of service delivered in an oil and gas company. Therefore, analyzing what can have an impact on service delivery only with procurement may result with unsatisfied conclusion since the quality level of service can be affected by different factors such pricing, market, economic and social indicators of country, and so on. Lastly, sample size of the study is not big enough to have an unbiased view on the topic. Generalization with a small sample of population is a limitation of the study which may lead individual opinions to be ignored and actions to be not fully discovered to certain extent.

6.3.Recommendations

This study has its own limitations and weaknesses, and avoidance of the aforementioned existing drawbacks may be converted into opportunities for the next investigations, through which the higher level of objectivity, and hereby, an increased reliability can be ensured. Thus, it is recommended for the further studies to conduct the data collection with an increased sampling size and within larger timeslot, through which the authors might attain higher response rate among the target population. Moreover, by including other variables such as pricing, market, economic and social indicators of the state, which are not analyzed in this study, relatively more accurate results can be maintained regarding the role of procurement to affect the quality of the service delivery in TechnipFMC oil and gas company. Moreover, in the next studies, conducting survey not only with participation of the procurement staff of the company, but also with engagement of the consumers of TechnipFMC might be handful on acquiring an objective data. Namely, while asking questions related with procurement department and its operations, the questions about evaluating the effectiveness of the service delivery of TechnipFMC company can be asked to the consumers of

those services in order to ensure that the responses of the survey are potentially more real and honest inside of the assumptions.

References

Acharya, A., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: why and how of it?. *Indian Journal Of Medical Specialities*, *4*(2). doi: 10.7713/ijms.2013.0032

Aila, Ototo. Sustainable procurement concept: Does it all add up? International Journal of Development and Sustainability. 2018; 7(2):448-457.

Aila, Ototo. Sustainable procurement concept: Does it all add up? International Journal of Development and Sustainability. 2018; 7(2):448-457.

Amann, M. Roehrich, J. Ebig, M. and Harland, C. 2014. Driving sustainable supply chain management in the public sector: The importance of public procurement in the European Union. Supply Chain Management: An International Journal, 19(3), pp. 74- 75.

Anane, Adoma and Awuah, A., Victor, and Gabriel. (2019). The Effect of Procurement Practices on Service Delivery: A Case Study of VRA, Ghana. Asian Journal of Economics, Business and Accounting.

Awasthy, R. (2015). Journey of Doing Quasi-ethnographic Study in Organizations. *Vision: The Journal Of Business Perspective*, *19*(3), 219-226. doi: 10.1177/0972262915593667

Azerbaijan Oil Reserves, Production and Consumption Statistics - Worldometer. (2022). Retrieved 7 April 2022, from https://www.worldometers.info/oil/azerbaijan-oil/

Bai, Chunguang, og Joseph Sarkis. 2010. «Integrating sustainability into supplier selection with grey system and rough set methodologies.» International Journal of Production Economics 252-264.

Bashina. (2018). Retrieved 8 April 2022, from http://www.ec.unipg.it/DEFS/uploads/aleksandra-public_procurement_system_in_russia_hse.pdf

Bastianoni, S., Campbell, D., Susani, L., & Tiezzi, E. (2005). The solar transformity of oil and petroleum natural gas. Ecological Modelling, 186(2), 212-220. doi: 10.1016/j.ecolmodel.2005.01.015

Batley, R. and Larbi, G. 2004. The changing role of government: The reform of public services in developing countries. Basingstoke: Palgrave Macmillan.

Batley, R. and Mcloughlin, C. 2014. The Politics of Public Services: A Service Characteristics Approach. World Development, 74(10), pp. 275–285.

Birkin, Frank, Polesie Thomas, og Linda Lewis. 2009b. «A new business model for sustainable development: an exploratory study using the theory of constraints in Nordic organizations.» Business Strategy and the Environment 18.5 277-290.

Bontis, N., Richards, D., & Serenko, A. (2011). Improving service delivery: Investigating the role of information sharing, job characteristics, and employee satisfaction. *The Learning Organization*, *18*(3), 239-250. doi: 10.1108/09696471111123289

Brewer, B. and Arnette, A. 2017. Design for procurement: What procurement driven design initiatives result in environmental and economic performance improvement?. Journal of Purchasing and Supply Management, 23(1), pp, 28-39.

Bröchner, B., Camén, C., Eriksson, H. and Garvare, R. 2016. Quality and legal aspects in public care procurement. The TQM Journal, 28(4), pp. 105- 110.

Brown B, Hyer N. Managing Projects: A Team-Based Approach, International Edition, Singapore, McGraw- Hill; 2010.

Brown, K., Ryan, N. and Parker, R. 2000. New modes of service delivery in the public sector – Commercialising government services. International Journal of Public Sector Management, 13(3), pp.206-221.

Burt, Dobler & Starling (2006) World Class Supply Management, 7 th Ed. Tata McGraw-Hill, New Delhi.

Burton, N. and Lanciault, D. (1999) Creating supply advantage for oil and gas companies with strategic procurement, Oil and Gas Journal, Nov. 1999, Tulsa

Carter, Craig R, og Dale S Rogers. 2008. «A framework of sustainable supply chain management: moving toward new theory.» International journal of physical distribution & logistics management 38.5 360-387

Chowdhury, M. (2014). Interpretivism in Aiding Our Understanding of the Contemporary Social World. *Open Journal Of Philosophy*, *04*(03), 432-438. doi: 10.4236/ojpp.2014.43047

Ciarreta, A., & Nasirov, S. (2012). Development trends in the Azerbaijan oil and gas sector: Achievements and challenges. Energy Policy, 40, 282-292. doi: 10.1016/j.enpol.2011.10.002

CIOB (2003) Code of Practice for Project Management for Construction and Development, Third Edition (Reprinted), Blackwell Publishing, UK, pp. 31-33

CIPS. 2012c. Context of procurement and supply (2012, *Supply Chain Diligence*. Lincolnshire: Profex Publishing; 2012a, *Sustainability in Supply*, Lincolnshire: Profex Publishing).

Comte, A. (2015). A General View of Positivism. doi: 10.4324/9781315645780

Crossan, F. (2003). Research philosophy: towards an understanding. *Nurse Researcher*, *11*(1), 46-55. doi: 10.7748/nr2003.10.11.1.46.c5914

DEPARTMENT OF OPERATIONAL SUPPORT OFFICE OF SUPPLY CHAIN MANAGEMENT PROCUREMENT DIVISION. (2020, June 30). United Nations Procurement Manual. UN Procurement Division. https://www.un.org/Depts/ptd/about-us/procurement-manual

Draugalis, J., & Plaza, C. (2009). Best Practices for Survey Research Reports Revisited: Implications of Target Population, Probability Sampling, and Response Rate. *American Journal Of Pharmaceutical Education*, *73*(8), 142. doi: 10.5688/aj7308142

Dyllick, Thomas, og Kai Hockerts. 2002. «Beyond the business case for corporate sustainability.» Business strategy and the environment 130-141.

Elkington, J. Partnerships from cannibals with forks: The triple bottom line of 21st-century business. Environ. Qual. Manag. 1998, 8, 37–51. Partnerships from cannibals with forks: The triple bottom line of 21st-century business - Elkington - 1998 - Environmental Quality Management - Wiley Online Library

Emmett and Crocker (2008) Excellence in Procurement. Cambridge Academic: Gt. Shelford, Cambridge.

Engineering, Procurement, Installation and Commissioning (EPIC) procurement system failures and why some major contractors are shying away from it (Halliburton, 2003; Stevenson et al, 2003);

FATIMAH BAHARI, S. (2010). View of Qualitative Versus Quantitative Research Strategies: Contrasting Epistemological And Ontological Assumptions. Retrieved from https://journals.utm.my/jurnalteknologi/article/view/134/124

Fiorino, Daniel J. 2010. «Sustainability as a conceptual focus for public administration.» Public Administration Review, 70(s1).

Fisher, E., and Corbalán, S. 2013. Fair trade and European public procurement: legal principles and governance dynamics. Social Enterprise Journal, 9(1), pp. 104-115.

Fukey, L., Issac, S., Balasubramanian, K. and Jaykumar, V. 2014. Service Delivery Quality Improvement Models: A Review. Procedia - Social and Behavioral Sciences, 144(20), pp. 343-359.

Gable, G. (1994). Integrating case study and survey research methods: an example in information systems. *European Journal Of Information Systems*, *3*(2), 112-126. doi: 10.1057/ejis.1994.12

Gao, Z. (1994) International Petroleum Contracts: Current Trends and New Directions, Graham and Trotman, London, pp. 221-242

Global Reporting Initiative, Sustainability reporting guidelines, Global Reporting Initiative, Amsterdam, June 2000, p 33.

Global Sustainability, 'Global sustainability: the history/time line of an idea', RMIT, Melbourne, 2001, p 4, at RMIT's Global Sustainability website, http://www.global.rmit.edu.au/resources/historyofanidea_25.07.01.pdf

Goodland, Robert. 1995. « The concept of environmental sustainability.» Annual review of ecology and systematics 1-24.

Government Accountability Office. “Framework for assessing the acquisition function at federal agencies” (GAO-05- 218G). Washington, DC: Author. Government of Uganda (2006). The Local Government (Amendments) Act, 2006. Kampala, Uganda: Author; 2005.

Gransberg, D.D. and Ellicot, M.A. (1997) Best-Value Contracting Criteria, Journal of Cost Engineering, June 1999,Vol. 39, No.6, pp. 31-34

Green, K.; Morton, B.; New, S. Purchasing and environmental management: Interactions, policies and opportunities. Bus. Strat. Environ. 1996, 5, 188–197.

Halfpenny, P. (1987). Laws, Causality and Statistics: Positivism, Interpretivism and Realism. *Sociological Theory*, *5*(1), 33. doi: 10.2307/201992

Hall, D and Lobina, E. (2006). Pipe Dreams: The Failure of the Private Sector to Invest in Water Services in Developing Countries. London.

Halliburton, (2002) Halliburton announces second quarter charges, 2002 Press Release, July 22, http://www.halliburton.com.

Halvorsrud, R., Kvale, K., & Følstad, A. (2016). Improving service quality through customer journey analysis. Journal of Service Theory and Practice, 26(6), 840–867. https://doi.org/10.1108/jstp-05-2015-0111Hammond, M., & Wellington, J. (2020). Research Methods: The Key Concepts (2nd Edition). Routledge. https://doi.org/10.4324/9780429058165

Hawkins, T., Gravier, M., Berkowitz, D. and Muir, W. 2015. Improving services supply management in the defense sector: How the procurement process affects B2B service quality. Journal of Purchasing and Supply Management, 21(2), pp. 81-94

Henry, K. (1992) Keynote Speech for the IOCE ’92 Conference on New Contract Strategies, Oct 1992, Aberdeen

Hoejmose, S.U.; Adrien-Kirby, A.J. Socially and environmentally responsible procurement: A literature review and future research agenda of a managerial issue in the 21st century. J. Purch. Supply Manag. 2012, 18, 232–242. Socially and environmentally responsible procurement: A literature review and future research agenda of a managerial issue in the 21st century - ScienceDirect

Hopkins, Michael , Khayat Townend, B Balagopal, M Reeves, og M Berns. 2009. «The business of sustainability: what it means to managers now.» MIT Sloan Management Review 20

Hsieh, Y. H., & Yuan, S. T. (2010). Modelling service experience design processes with customer expectation management. Kybernetes, 39(7), 1128–1144. https://doi.org/10.1108/03684921011062746

Huse, J.A. (2002) Understanding and Negotiating Turnkey and EPC Contracts, Second Edition, Sweet and Maxwell, London IQPC Oil and Gas, (2003) Contract Risk Management for Oil and Gas: How to Avoid Contractual Hazards to Protect Your Business from Financial Damage, Pre-Conference Overview, June 2003, Texas, http://www.iqpc.com/cgi-bin/template

Irshaidat, R. (2019). Interpretivism vs. Positivism in Political Marketing Research. *Journal Of Political Marketing*, 1-35. doi: 10.1080/15377857.2019.1624286

J Elkington, 'Triple bottom line revolution: reporting for the third millennium', Australian CPA, vol 69, 1999, p 75.

Johnson, S. 2011. Improving Service Delivery in Public Sector Organizations. Available at: http://www.socialsolutions.com/blog/improving-service-delivery-in-public-sectororganizations/ (Accessed 15 February 2018).

Kashiwagi, D.T. and Al-Sharmani, Z. (1997) A Performance-Based Procurement System Used by the State of Wyoming, Journal of Cost Engineering, Dec. 1997, Vol. 39, No.12, pp. 37-41

Keselman, H., Huberty, C., Lix, L., Olejnik, S., Cribbie, R., & Donahue, B. et al. (1998). Statistical Practices of Educational Researchers: An Analysis of their ANOVA, MANOVA, and ANCOVA Analyses. Review Of Educational Research, 68(3), 350-386. doi: 10.3102/00346543068003350

Kim, H., & Yoon, B. (2016). A Qualitative Analysis of the qualitative researches published papers in The Journal of Curriculum Studies. *The Journal Of Educational Principles*, *21*(2), 1-34. doi: 10.19118//edp.2016.21.2.1

Krause, Daniel R, Stephan Vachon, og Robert D Klassen. 2009. «Special topic forum on sustainable supply chain management: introduction and reflections on the role of purchasing management.» Journal of Supply Chain Management 45.4 18-25.

Kumaraswamy, M. and Dulaimi, M. (2001) Empowering innovative improvements through creative construction procurement, Journal of Engineering, Construction and Architectural Management, Aug. 2001, Vol. 5/6, pp. 325- 334.

Lang, Achim, og Hannah Murphy. 2014. «Business and Sustainability: An Introduction.» In Business and Sustainability 3-19.

Leanne Barron and Erin Gauntlet (WACOSS), 'Housing and Sustainable Communities Indicators Project', paper presented at 'Sustaining our Communities' International Local Agenda 21 Conference, Adelaide, 3–6 March 2002, p 4, http://www.adelaide.sa.gov.au/soc/pdf/barron_gauntlett.pdf.

Leavitt, H., & Pondy, L. (1964). *Readings in managerial psychology*. Chicago: University of Chicago Press.

Love, P., Davis, P., Edwards, D. and Baccarini, D. 2008. Uncertainty avoidance: public sector clients and procurement selection. International Journal of Public Sector Management, 21(7), pp. 99-101.

Lynn Shostack, G. (1982). How to Design a Service. European Journal of Marketing, 16(1), 49–63. https://doi.org/10.1108/eum0000000004799

Lysons, Kenneth, og Brian Farrington. 2006. Purchasing and supply chain management. Pearson Education.

Mahamadu, A., Manu, P., Booth, C., Olomolaiye, P., Coker, A., Ibrahim, A., & Lamond, J. (2018). Infrastructure procurement skills gap amongst procurement personnel in Nigeria's public sector. *Journal Of Engineering, Design And Technology*, *16*(1), 2-24. doi: 10.1108/jedt-09-2017-0089

Mansaray, A., Lapkoff, D., & Little, A. (2021). CUSTOMER PERCEPTION ON THE OVERALL QUALITY OF SERVICE DELIVERED A CASE STUDY OF THE ELECTRICITY COMPANY OF GHANA (ECG). *American Journal Of Supply Chain Management*, *3*(1), 16-25. doi: 10.47672/ajscm.374

Manso, P. and Nikas, A. 2015. Examining the Effects of Post Tender Negotiation in UK's Public Sector Procurements: An Empirical Study. Procedia Computer Science, 64(1), pp. 457-465.

Mapulanga, P. 2015. Public procurement legislation and the acquisition of library materials in academic libraries in Malawi. Library Review, 64(2), pp. 24- 45.

Marshall, G. (2005). The purpose, design and administration of a questionnaire for data collection. *Radiography*, *11*(2), 131-136. doi: 10.1016/j.radi.2004.09.002

Martemyanova, L. (2018). Procurement practices influencing service delivery: a case of TNK-BP Oil & Gas Company in Russia. *Jamk.Fi*, 11.

McCusker, K., & Gunaydin, S. (2014). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, *30*(7), 537-542. doi: 10.1177/0267659114559116

McHaffie, E.R., Jarvis, M.G. and Barber, S.A. (1993) Governments, Contractors seen headed for era of cooperation, Oil and Gas Journal, Apr., Vol. 91(17), pp. 54-59.

McKenzie, S. (2004). SOCIAL SUSTAINABILITY: TOWARDS SOME DEFINITIONS (Issue 27). Hawke Research Institute University of South Australia Magill, South Australia .

McKevitt, M. and Davis, P. 2014. Supplier development and public procurement: allies, coaches and bedfellows. International Journal of Public Sector Management, 27(7), pp. 132- 135.

Meehan, J., Ludbrook, M. and Mason, C. 2016. Collaborative public procurement: Institutional explanations of legitimised resistance. Journal of Purchasing and Supply Management, 22(3), pp. 160-170.

Mohsin, A. (2016). A Manual for Selecting Sampling Techniques in Research Munich Personal RePEc Archive. Retrieved from https://mpra.ub.uni-muenchen.de/70218/

Monczka, Trent and Hanfield (2002) Purchasing and Supply Chain Management. 2nd Edition, Thomson Learning, USA

Montiel, Ivan. 2008. «Corporate social responsibility and corporate sustainability: Separate pasts, common futures.» Organization & Environment 245-269

Mullins DR. Accountability and coordination in a decentralized context: Institutional, fiscal and governance issues. Washington, DC: American University; 2003.

Newman, I., & Benz, C. (2006). *Qualitative-quantitative research methodology* (pp. 13-27). Carbondale, Ill: Southern Illinois Univ. Press.

Niboi, E. (2018). Sustainable Procurement in the Ghana Oil and Gas Industry. *Molde University College*.

Nijaki, L., and Worrel, G. 2012. Procurement for sustainable local economic development. International Journal of Public Sector Management, 25(2) pp. 12-21.

Norwegianpetroleum.no - facts about Norwegian petroleum activites. (2022). Retrieved 6 April 2022, from https://www.norskpetroleum.no/en/

Nyoike, Ismail, Effects of sustainable procurement practices on service delivery in the manufacturing sector in Kenya: A case of Unilever Kenya Limited. International Journal of Social Science and Humanities Research. 2017; 5(2): 298- 306.

Odaro, E. D. (2012, 0 0). Causes of Poor Service Delivery in Africa and Their Impact on Development. Jstore. https://www.jstor.org/stable/26167834?seq=1

Oil and gas production (ILO Library). (2022). Retrieved 8 April 2022, from http://www.ilo.org/inform/online-information-resources/research-guides/economic-and-social-sectors/energy-mining/oil-gas-production/lang--en/index.htm.

Organization Economy Corporation Development-development assistance commission. Methodology for assessment of national procurement systems. Paris, France: OECD; 2006.

Park, Y., Konge, L., & Artino, A. (2020). The Positivism Paradigm of Research. *Academic Medicine*, *95*(5), 690-694. doi: 10.1097/acm.0000000000003093

Parylo, O. (2012). Qualitative, quantitative, or mixed methods: An analysis of research design in articles on principal professional development (1998–2008). *International Journal Of Multiple Research Approaches*, *6*(3), 297-313. doi: 10.5172/mra.2012.6.3.297

Paul, F. (2020), "ASSESSMENT OF FACTORS AFFECTING PROCUREMENT PROCESS IN PUBLIC SECTOR A CASE OF ARUSHA CITY COUNCIL". A Dissertation Report Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Business Administration - Procurement and Supplies Management (MBA-PSM) of the Institute of Accountancy Arusha.

Pedwell, K., Hartman, F.T. and Jergeas, G.F. (1998) Project Capital Cost Risks and Contracting Strategies, Journal of Cost Engineering, Vol. 40/No. 1, pp. 37-41.

Percival, D.R., London, C.J. and Westly, D. (1992) Partnering – Not For The Faint-Hearted, Proceedings of IOCE 92 Conference on New Contracting Strategies, Oct 1992, Aberdeen

Pettigrew, A.M. What is processual analysis? Scandinavian. J. Manag. 1997, 13, 337–348

Polaine, A., Lavrans, L., & Reason, B. (2013). Service Design: From insight to implementation. Rosenfeld Media, New York.

PWC. 2011. The road ahead for public service delivery: Delivering on the customer promise. Available at: https://www.pwc.com/gx/en/psrc/pdf/the_road_ahead_for_public_service_delivery .pdf (Accessed 20 March 2018).

Raymond J. Benchmarking in public Procurement. Benchmarking: An International Journal. 2008; 15(6):782-793.

Regmi, P., Waithaka, E., Paudyal, A., Simkhada, P., & Van Teijlingen, E. (2017). Guide to the design and application of online questionnaire surveys. *Nepal Journal Of Epidemiology*, *6*(4), 640-644. doi: 10.3126/nje.v6i4.17258

Rehmatulla, N., Smith, T., and Tibbles, L. 2017. The relationship between EU's public procurement policies and energy efficiency of ferries in the EU. Marine Policy, 75(1), pp. 278-289.

Rice, S. (2017). Retrieved 3 April 2022, from https://www.forumforthefuture.org/sustainable-procurement-oil-and-gas-industry

Rönnbäck, A. 2012. Quality in the public procurement processes. The TQM Journal, 24(5), pp. 23-24.

Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, *25*(4), 14-20. doi: 10.7748/nr.2018.e1466

Sayer, A. (2010). *Method in social science* (pp. 242-244). London: Routledge.

Schooner S, Whiteman N. Purchase cards and micro purchases. Public Procurement Law Review. 2000; 9(4):148-170.

Service Futures. 2015. Four Key Elements of a Service Delivery System. Available at: http://servicefutures.com/service-management/four-key-elements-service-deliverysystem/ (Accessed 1 March 2018).

Shakulikova, G. (2021). New challenges in oil education. Kazakhstan Journal For Oil &Amp; Gas Industry, 3(1), 99-107. doi: 10.54859/kjogi88924

Sharfman, Mark P, Teresa M Shaft, og Robert P Anex. 2009. «The road to cooperative supply-chain environmental management: trust and uncertainty among pro-active firms.» Business Strategy and the Environment 1-13.

ShieldSquare Captcha. (2022). Retrieved 3 April 2022, from https://iopscience.iop.org/article/10.1088/1755-1315/189/5/052004/pdf

Shin, J., & Lee, J. (2016). Multi-time scale procurement planning considering multiple suppliers and uncertainty in supply and demand. *Computers &Amp; Chemical Engineering*, *91*, 114-126. doi: 10.1016/j.compchemeng.2016.03.024

Sibonde, A., & Dassah, M. (2021). The relationship between employee motivation and service quality: Case study of a selected municipality in the Western Cape province, South Africa. *Africa'S Public Service Delivery And Performance Review*, *9*(1). doi: 10.4102/apsdpr.v9i1.499

Singh, G., Pathak, R.., Naz, R. and Belwal, R. 2010. E-governance for improved public sector service delivery in India, Ethiopia and Fiji. International Journal of Public Sector Management, 23(3), pp.254-275.

Sollish F.B & Semanik Jone (2007) Procurement and Supply Manager's Desk Reference: John Wiley & Sons Inc, New Jersey.

Stickdorn, M., Schneider, J. (2011). This is service design thinking: basics, tools, cases. Hoboken, N. J: Wiley

TAFAMEL, A. (2015). Cost Efficiency of the oil and gas industry in nigeria: Data Envelopment Analysis. Archives Of Business Research, 3(6). doi: 10.14738/abr.36.1656

The Independent Azerbaijan's Oil Policy. (2022). Retrieved 26 March 2022, from http://www.zerbaijan.com/azeri/nasibzade1.html

Thompson, J.D. Organizations in Action; McGraw Hill: New York, NY, USA, 1967. 15.

Tkachenko, A., Yakovlev, A. and Kuznetsova, A. 2017. "Sweet deals": State-owned enterprises, corruption and repeated contracts in public procurement. Economic Systems, 3(1), pp.33-44.

Tsang, E. (2013). Generalizing from Research Findings: The Merits of Case Studies. *International Journal Of Management Reviews*, *16*(4), 369-383. doi: 10.1111/ijmr.12024

Tumuhairwe, R. and Ahimbisibwe, A. 2016. Procurement records compliance, effective risk management and records management performance: Evidence from Ugandan public procuring and disposing entities. Records Management Journal, 26(1), pp. 21-24.

Walsham, G. (1995). The Emergence of Interpretivism in IS Research. *Information Systems Research*, *6*(4), 376-394. doi: 10.1287/isre.6.4.376

Weele Van J.A (2010) Purchasing and Supply Chain Management. 5th Edition Cengage: Learning, Singapore.

Weele, Arjan Van, og John van der Puil. 2014. International Contracting: Contract Management in Complex Construction Projects. London: Imperial College Press.

Williams, M. (2000). Interpretivism and Generalisation. *Sociology*, *34*(2), 209-224. doi: 10.1017/s0038038500000146

WORLD OUTLOOK. (1995). Economic Outlook, 19(4), 20-29. doi: 10.1111/j.1468-0319.1995.tb00037.x

Wright, P.J.C. (1996) The North Sea Contracting Industry – Key Issues and Companies, Pearson Professional Limited, London

Yenkeff. (2011). Retrieved 5 April 2022, from https://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf

Yeo, K.T. and Ning, J.H. (2002) Integrating supply chain and critical chain concepts in engineer-procure-construct (EPC) projects, International Journal of Project Management, Vol. 20 (2002), pp. 253-262

(2022). Retrieved 2 April 2022, from http://www.investment-hr.com/oil_gas_docs/azerbaijan%20oil%20gas%20sector%20report.pdf

(2022). Retrieved 5 April 2022, from https://cesd.az/new/wp-content/uploads/2011/05/Azerbaijan_Economy_in_2011.pdf

2021 oil and gas industry outlook. (2022). Retrieved 3 April 2022, from https://www2.deloitte.com/ch/en/pages/energy-and-resources/articles/oil-and-gas-industry-outlook.html

Appendices

Appendix A

Survey Questions:

This survey aims to examine the role of the procurement process including the procurement planning, procurement policies, and sustainable procurement practices of TechnipFMC Company, as in relation to its role in having effective service delivery in the company. The participation of respondents in the survey is voluntary. The survey is conducted by prioritizing the confidentiality of the respondents within the ethical norms, and the anonymity of the survey participants is fully ensured.

1. Corporate social responsibility is considered while making decision related with procurement?
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
2. Local Society is given attention to before any action with procurement cycle
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
3. What is your age interval?
    a. 20-25
    b. 26-30
    c. 31-35
    d. 36-40
    e. 40+
4. What is your gender?
    a. Male
    b. Female
5. The period you have been working at the company
    a. 1-3 years
    b. 4-6 years

c. 6+ years

6. Rate the customer feedback for the service delivery
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5
7. Transparency in procurement process is in high level
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
8. A competitive bidding is allowed within procurement process
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
9. There is a team of specialist who is responsible for tender contracts
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
10. Mutual ties are considered while tendering
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
11. Special budget is formed for procurement department before the year starts
    a. Strongly agree
    b. Agree

c. Neither agree nor disagree
d. Disagree
e. Strongly disagree

12. Planning process includes other department within the process
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
13. Future purchases are considered inside of the budgeting
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
14. There are enough specialists skilled with budgeting and planning in procurement department
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
15. Correct value of services compared to market prices are provided by the firm
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree
16. Ethic norm are met within the procurement processes
    a. Strongly agree
    b. Agree
    c. Neither agree nor disagree
    d. Disagree
    e. Strongly disagree