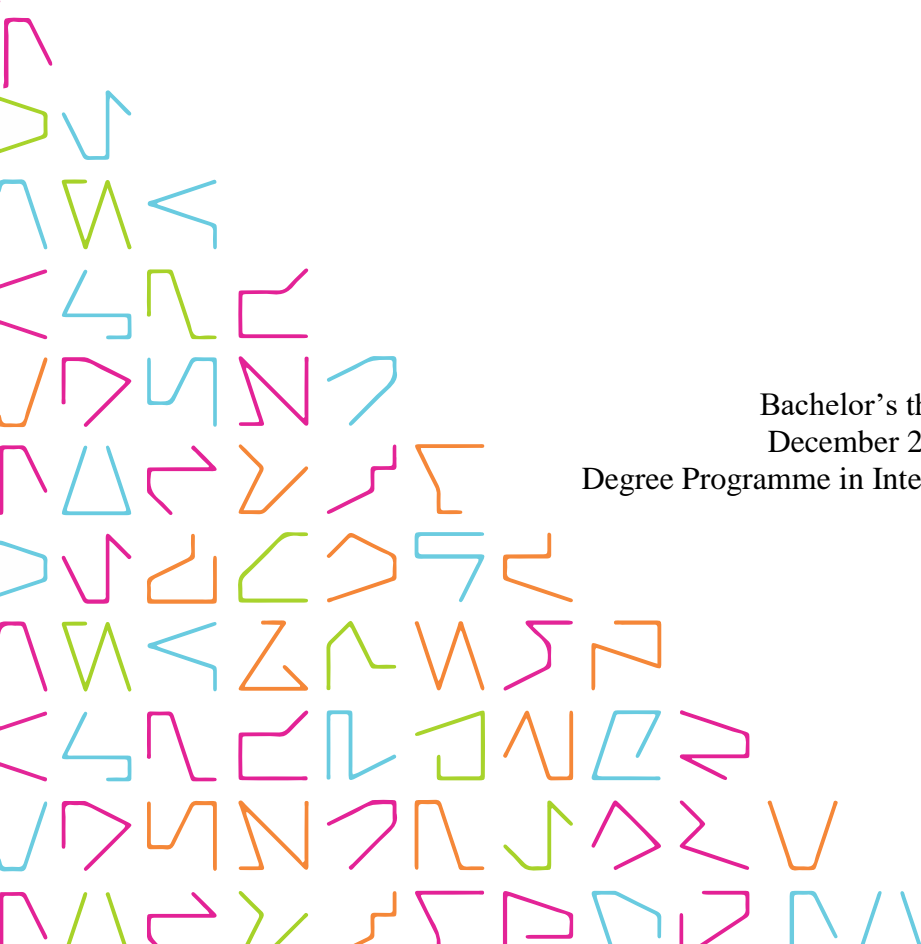


OPTIMIZATION OF THE PROCUREMENT PROCESS

A Case Study for the University of Bristol

Benjamin Sewell



Bachelor's thesis
December 2017
Degree Programme in International Business

ABSTRACT

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Optimization of the Procurement Process
A Case Study for the University of Bristol

Bachelor's thesis 59 pages, appendices 16 pages
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This thesis was commissioned by The University of Bristol for the research of its procurement process.

The main purpose of this thesis was to research procurement methods, principles and procedures that would support the development proposals for the optimisation of specific areas for the case institution's procurement process. The following points that needed addressing were the importance of the procurement function amongst the university's stakeholders, supplier management, department integration and the use of procurement methods within the department.

Through the research of academic literature, online sources and the issues presented by the case institution, a framework was created and with its support, 17 questions for the qualitative method (semi-structured interviews) were formed. The interview participants were made up of 3 professionals from the University of Bristol's procurement department.

The results discovered the need for development in specific areas of the procurement process for the case institution. The respondents stated that there was a requisite to improve how KPI's were monitored regarding supplier management. In addition, it was stated that there was a need to provide more available information for the stakeholders regarding purchases and the use of other procurement methods for supplier relationship improvement.

It is proposed that more informative material regarding the procurement function be available for the stakeholders in the university's internal network, an added focus on KPI's for the improvement of the activities relating to supplier operations and an integration of a new procurement method to optimise the function. A follow up of this study is recommended to measure the success of the suggested improvements. It would be interesting to compare the results if a similar research would be conducted on an annual basis.

Key words: procurement, optimization, procurement methods, supplier management

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1 INTRODUCTION

1.1 Thesis topic

The focus of this thesis is to understand and research key stages of the procurement process, on a general basis, but mainly for the case institute. The author of this thesis has a strong interest in the procurement sector and was looking for opportunities to work / provide assistance for a case company. An opportunity arose to coordinate with one of the procurement managers at the University of Bristol. The author will work closely with the manager, executing the development of this project. The research problem, and urgency for this thesis unfolded when the procurement department saw the need to assess their procurement process to identify ways to develop and optimise key functions within its structure.

This study will be focused specifically for the University of Bristol's procurement department, but the principles and methods could potentially be applied to similar educational institutions. The procurement function is an essential part of the institution's operations so it can operate on a professional level daily. Development proposals will be assembled from the author's research and will be presented to the case institute for potential implementation for future use if successful.

Until recently, procurement was a necessary, but seldom celebrated, component of multinational corporations. But times have changed: These days, Procurement organizations within companies are playing pivotal roles in the success of global firms in ways that old-fashioned purchasing managers could never have imagined. (Wharton 2008.)

The research methods will consist of procurement techniques as well as a qualitative method such as semi-structured interviews. These interviews will give support and deepen the research, providing critical information for improvement and new insight. Due to the distance, the interviews maybe carried out through email or by video software applications such as Skype or other video conferencing tools.

1.2 University of Bristol, background information

The University of Bristol has over 100 years of rich history that has attracted hundreds of thousands of students to its doors. It is one of the most popular universities in the UK and ranked amongst the top universities in the world (University of Bristol 2017). It is a university with a focus on sustainability in every aspect of what they do and incorporated within their cutting edge innovative research.

A key department of The University of Bristol is its procurement team. The procurement team is a professionally qualified and experienced team that work to ensure the University obtains value for money in all the goods and services it purchases, in line with the University's Financial Regulations. The Procurement team works with colleagues and suppliers alike to drive value and reduce risk across supply chains that serve the University. (University of Bristol 2017.)

1.3 Objectives and purpose

The key objectives of this research are to identify the current procurement process of the University of Bristol, gain a deeper understanding of procurement methods and ideas as a whole and then implement the needed developments for optimization. The main questions that will be analysed are as follows:

- How key is the procurement function within the university for its stakeholders?
- How to manage suppliers in the most effective way?
- How to integrate other departments with the procurement department?
- How to use different procurement methods for the university's advantage?

The purpose therefore is to give added support and guidance to the procurement team when dealing with suppliers as well as other activities regarding procuring. A qualitative approach will be carried out, so the interviewees can express their thoughts freely about the questions at hand. In addition, the interviews of the selected candidates will provide added support and insight in the development process of key issues that need to be optimized. Certain candidates will be selected within the Procurement Department that will have the competence to answer the questions.

1.4 Methods and framework

The framework of this thesis is focused on the integrated procurement process shown in figure 1. There are many points that this framework touches on and due to the extent of this thesis just a portion will be researched and analysed. The topics that will be analysed to provide assistance to the objectives for the case company are as follows, Fundamentals of purchasing with the sub-categories, Procurement methods and supplier management with their sub-categories.

Analysing these factors will strengthen the theory of this thesis and back up the research as a support to the forming of the questions for the semi-structured interviews. The framework also provides a sturdy structure for the thesis and offers the case institute a clear perspective on how to optimise their process for the future. The case institution's procurement process will be identified in the third section of this thesis.

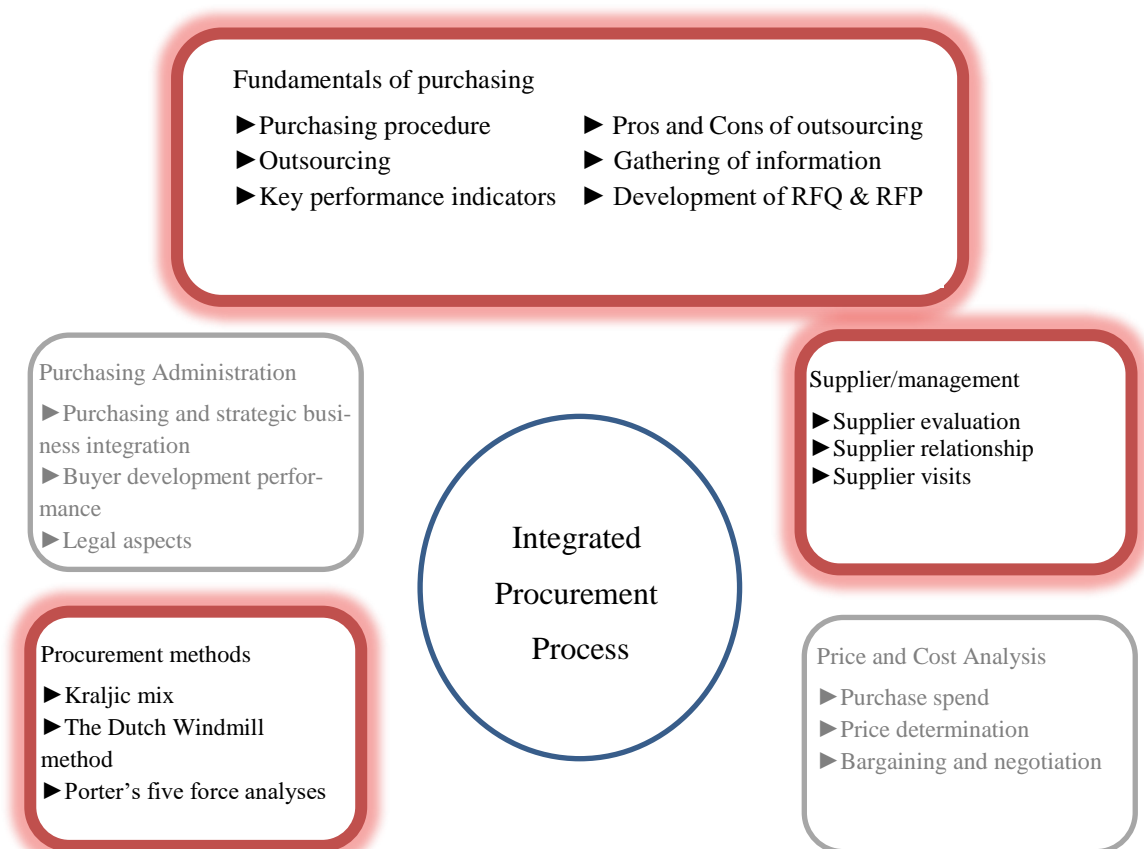


FIGURE 1. Framework Procurement process

1.5 Thesis structure

The thesis is introduced helping the reader to understand the need of research and for whom the research is intended for. The case institution is identified and emphasis on the challenges and necessity is brought forward. The research purpose and objectives are clarified with possible approaches for optimization and development acknowledged for the procurement plan.

After the introductions of these points, research from different sources such as books, journals and internet pages will be studied and highlighted to create a backbone of this paper. The following chapter, procurement principals and processes, will include the findings from the sources with a focus on supporting improvement for the case institution. The framework acts as a guide as the thesis goes through the purchasing steps, methods and supplier management. These points will provide valuable information for improvement for the procurement department.

The following section concentrates on the case institution and identifying its procurement process. The focus will then turn to the qualitative analysis using semi-structured interviews, where the interview questions will be put into categories for further breakdown. The results of the interviews will be analysed and highlighted for future strategies. The thesis will close with the development proposals and discussion.

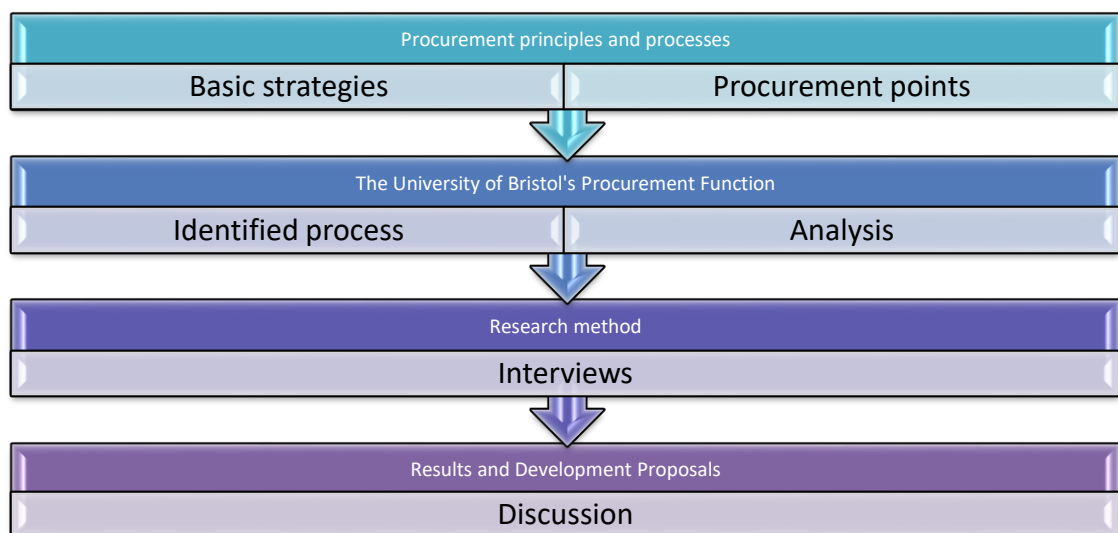


FIGURE 2. Thesis guide

2 PROCUREMENT PRINCIPLES AND PROCESSES

As the competition in business is becoming extremely more prominent, the procurement function is progressively being recognised by top leaders as a key business driver. Repeatedly it seems that buying experts can influence not only the firm's bottom line, but also the top line. These days companies invest extravagant sums of money, as much as 50 percent of their annual turnover on procured parts and services, that is why strong relationships with suppliers and vendors are expedient for a sturdy short-term financial stance as well as long-term competitive supremacy. (Weele 2010, 3.)

2.1 Basics of procurement

To identify the basics of procurement, we need to understand where it fits in the value chain or the overall picture. Below in figure 3 shows the support and primary activities for a typical value chain. It is key to recognize that procurement is a support activity in the chain. The primary activities state the supply chain from the start to the end user, where the support activities back these stages.

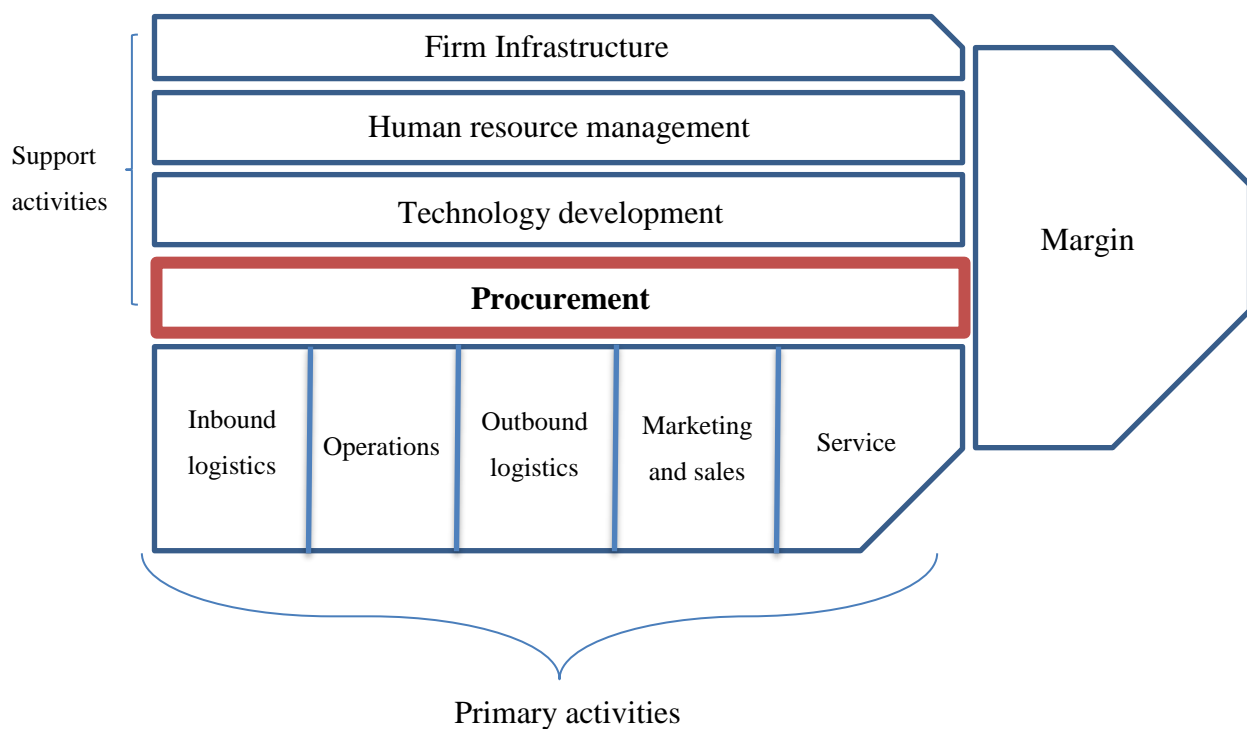


FIGURE 3. Business activities, redrawn (Weele 2010, 6)

Procurement

The procurement function's main objective is to acquire a product from any given supplier to the end user or destination. The activities of purchasing are a big part of it which includes stores, logistics, quality checks and guarantees, leading to businesses to decide on supplier selection hinged upon total cost of ownership, instead of price. *"Procurement is used when relating to buying based upon total cost of ownership in a project environment"*. (Weele 2010, 6.)

Another way of looking at the procurement function, is it relates to purchasing inputs in a value chain which may include raw materials or other items that are considered as assets such as machinery, equipment of different kinds for the office, laboratory and structures. The examples suggest that the purchased inputs influence the primary activities and the support activities as shown in figure 3. (Weele 2010, 6.)

For a company to be profitable the value chain must generate more than the sum of costs. The purchasing function diagram figure 4 shows the tactical purchasing and order functions in procurement. It also outlays a clear picture regarding each step of the process and the importance thereof.

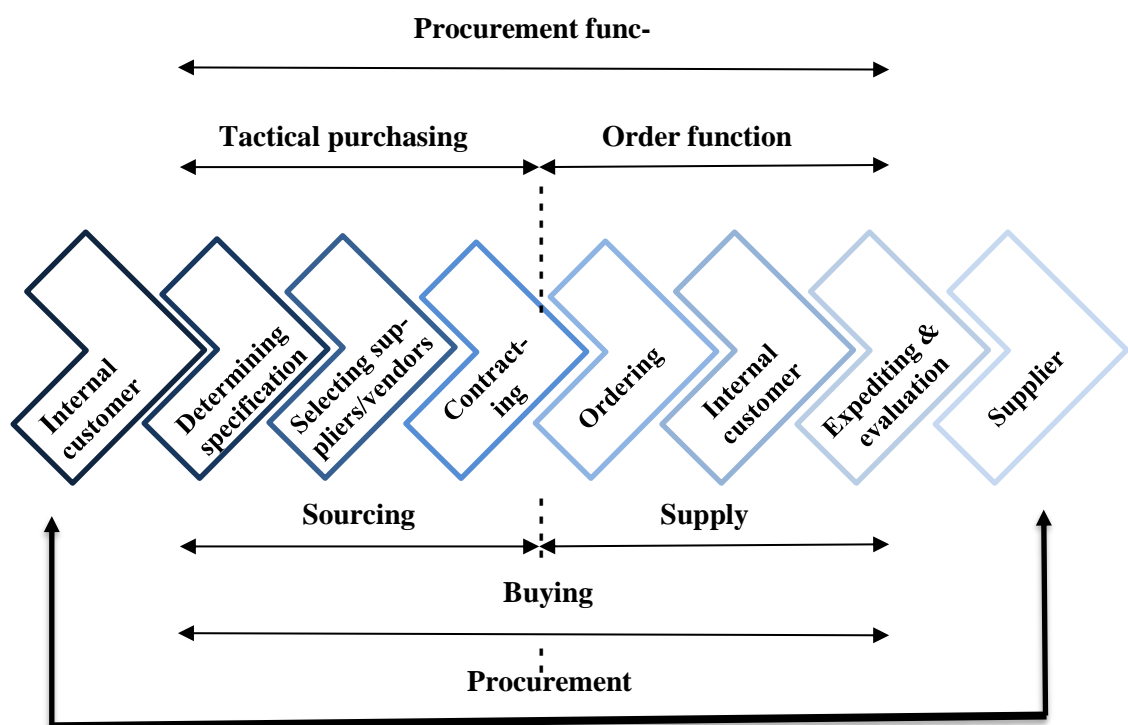


FIGURE 4. Procurement function. Redrawn (Weele 2010, 9)

2.1.1 Outsourcing process

A big part of the purchasing process is outsourcing. Outsourcing is a practice used by different companies to reduce costs by transferring portions of work to outside suppliers rather than completing it internally. Outsourcing is an effective cost-saving strategy when used properly. It is sometimes more affordable to purchase a good or service from a company than it is to produce the good internally. (Investo 2017.)

Outsourcing is very common with manufacturing companies and especially with companies that are producing in high amounts of goods and are cost sensitive. Through an outsourcing supply chain strategy, a company can reduce costs and increase investments in other areas of their business.

Figure 5 illustrates different models of outsourcing from a vendor's point of view as well as the host company and reveals that there is not just one outsourcing model available.

	<i>Work force outsourcing</i>	<i>Mixed outsourcing</i>	<i>Complete outsourcing</i>
<i>Vendors Provides</i>	<ul style="list-style-type: none"> ○ Some employees 	Few or all below <ul style="list-style-type: none"> ○ Employees ○ Materials ○ Process and systems 	<ul style="list-style-type: none"> ○ Employees ○ Materials ○ Process & Systems ○ Technology & Equipment ○ Facilities ○ Management/supervision
<i>Host company Provides</i>	<ul style="list-style-type: none"> ○ Some employees ○ Materials ○ Process & Systems ○ Technology & Equipment ○ Facilities ○ Management/Supervision 	Few or all of below <ul style="list-style-type: none"> ○ Employees ○ Materials ○ Process & Systems ○ Tech & Equipment ○ Facilities ○ Management/Supervision 	<ul style="list-style-type: none"> ○ Programme management

FIGURE 5. Forms of outsourcing modified (Weele 2010, 163)

There are a lot of positives from outsourcing mainly to do with cost efficiency and investment distribution but with these positives there are negatives and in figure 6 the pros & cons are listed, to identify and separate the outcomes. When any given company is thinking weather to implement an outsourcing model they should analysis the pros and cons according to their business structure, this could be a game changer in how efficient and profitable their business activities will be.

Advantages	Disadvantages
Increase of cash flow: More investments on core activities.	Increased independence on suppliers
Optimal usage of Knowledge, equipment and experience of third party.	Continuous follow-up and monitoring of the supplier relationship is necessary.
Increased flexibility: fluctuations in the workload can more easily be absorbed.	Risks of communication and organisational problems during the transfer activities to a third party.
Outsourcing leads to easier and more focused primary processes in the organisation.	Risk of leakage of confidential information. Risk of essential strategic knowledge.
Input through independent party's point of view which reduce the risks of introvert short-sightedness in the organisation.	Depending on balance of power between parties: inability to execute contractual performance incentives and penalties

FIGURE 6. Outsourcing Advantages / Disadvantages (Weele 2010, 166)

According to Arjan J. Van Weele when implementing the outsourcing process from a strategic phase to transitional and then finally to the operational phase, there are three key points that need to be considered 1) What goal does the firm have relating to the outsource of a certain activity? 2) What actions does a firm need to take, to get the process in motion? 3) What qualities or qualifications does a supplier need to meet to become a future partner?

These are a few questions that any firm should consider while putting into motion the outsourcing process. To understand this process better figure 7 will outline the different phases.

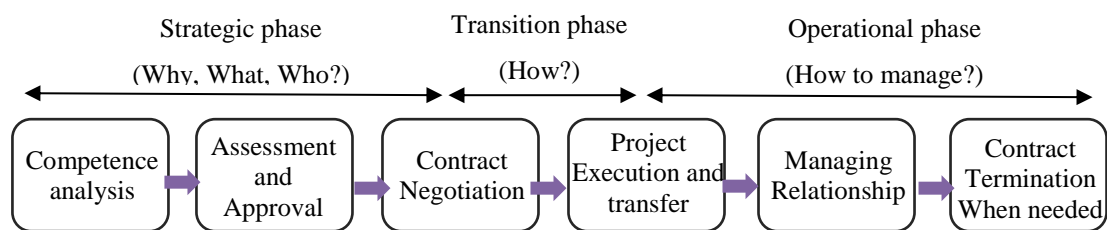


FIGURE 7. The outsourcing process, modified (Weele 2010, 167)

The strategic phase is made up of the competence analysis, assessment and approval. Competence analysis helps the firm to consider different approaches on what will be their key focus, for example transaction cost approach goes off the idea of finding the lowest cost possible of each individual transaction and then comparing these with the internal activity costs and what it would cost if outsourced in the market. Another approach which an outsourcing decision can be based on is the core-competence approach. This approach goes off of the assumption that, in order to create a sustainable competitive advantage, a

company must focus its resources on a set of core competencies (skills or knowledge, unique sources of leverage in the value chain or future benefits for the customer) where it can achieve definable incomparability and provide a unique value for the client. Therefore, it should outsource all other activities. (*Weele 2010, 167.*)

Once the competence analysis has been carried out, assessing, approval and contract negotiations make up the rest of the strategic phase. When contracts have been signed and approved the execution of the project can proceed. This may take time to perfect especially when dealing with a complete new supplier, but overtime with efficient managing the process will ease into a finely tuned machine.

When the demand or need for the sourced part diminishes and therefore there is not a requirement to source it anymore, the contract is terminated with the supplier until further demand is apparent. If there is a continuous demand then the focus will turn to the supplier management and one way to keep the relationship running smoothly is through key performance indicators which will be explained in the following section.

2.1.2 Key Performance Indicators (KPI's)

Key Performance Indicators express abstract supply chain objectives in financial or physical units for comparison (Lysons & Farrington 2006). Collecting of data through different means and implementation thereof into financial information can ultimately motivate to achieving more or enhancing the specified performance.

There are limitless numbers of KPI's that could potentially be introduced but some traditional points are as follows: price, quality and delivery. These performances can be easily measured and enhanced through continuous analysis of the end to end process within a company or shared with a supplier to increase collaboration interests. A constant measurement of supplier performance is very important because it allows the company to react to problems, prevent disasters, and enables then to set new goals (Griso 2012). Some examples of questions a buyer could ask themselves could be:

- Would shortening our lead time for key products increase our customer base?

- If we improve quality how will it affect customer satisfaction, cost of quality controls, or purchasing price? (Griso 2012.)

These would be measured over a period, then analysed to see the outcome and expectantly as a result optimize the process for the benefit of the buyer and supplier.

2.1.3 Understanding of RFQ & RFP

Within the procurement lingo, abbreviations are used daily and speaking about RFQ and RFP are very common. These processes have grown popular and can be key in gaining negotiation advantages when used properly.

RFQ – Request for Quotation

An opportunity for potential suppliers to **competitively cost** the final chosen solution(s). (Negotiation experts 2017).

RFQ is implemented in situations when the buyer knows precisely what they need and the price of the product is the key aspect that the buyer requires from the supplier. This process is done daily by purchasers and is an effective way in receiving reductions from costs. Key points that are listed in the RFQ or are as follows (also see Appendix 1):

- | | |
|------------------------------------|---|
| ▶ Part descriptions/specifications | ▶ Quantities/Volumes/costs |
| ▶ Description or drawings | ▶ Quality levels |
| ▶ Delivery requirements | ▶ Term of contract |
| ▶ Terms and conditions | ▶ Other value-added requirements or terms |

(Negotiation experts, 2017.)

RFP – Request for Proposal

This differs from the RFQ in the sense that the buyer is looking for solution from the supplier in solving a problem. The supplier may provide multiple solutions or proposals which would also include the costs. This potentially can be a lengthy process but could result in an effective long-standing relationship with the supplier. Key points that are listed in the RFP or are as follows:

- ▶ Business requirements
- ▶ Performance measures
- ▶ Due date
- ▶ Who to contact with questions
- ▶ The specific items the suppliers are proposing
- ▶ Information/Ideas
- ▶ Request for cost breakdown
- ▶ How will we evaluate how feedback will work

(Negotiation experts 2017.)

2.2 Procurement methods

In this section of the thesis the aim will be to take a deeper look into different procurement methods and tools such as the Kraljic mix, the Dutch Windmill method and Porter's five forces analysis which are highly appreciated and used in practise across the world. These methods have helped and supported purchasing professionals make important decisions regarding to what suppliers would be suitable for a certain business structure and especially in relation to reducing costs and risk.

2.2.1 The Kraljic mix

The Kraljic Portfolio Purchasing Model was created by Peter Kraljic and it first appeared in the Harvard Business Review in 1983. Despite its age, it is a popular and useful model used in companies worldwide. Its purpose is to help purchasers maximize supply security and reduce costs, by making the most of their purchasing power. In doing so, procurement moves from being a transactional activity to a strategic activity – because, as Kraljic said, "purchasing must become supply management." (Mind Tools editorial team 2016.) Figure 8 visualizes the profit and supply risk effects for the purchaser according to where an item fits in the table.

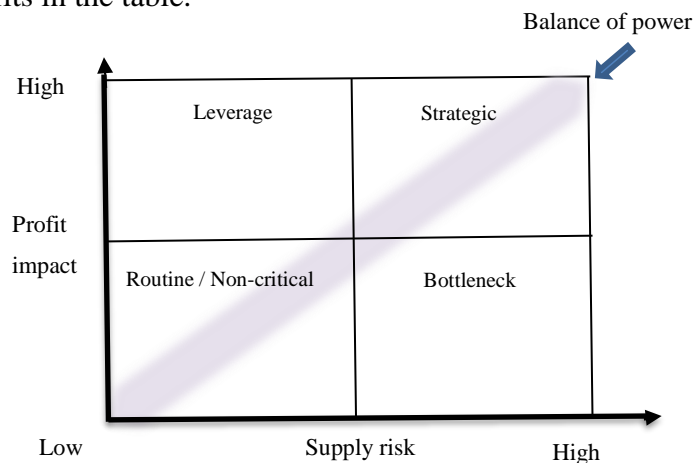


FIGURE 8. The Kraljic Matrix, redrawn Kraljic 1983

The steps of Kraljic's matrix are as follows

1. Routine products: Low profit impact – low supply risk
2. Bottleneck products: Low profit impact – high supply risk
3. Leverage products: High profit impact – low supply risk
4. Strategic products: High profit impact – High supply risk

(Jakobsson 2016, 14.)

In figure 8, there are two variables that are analysed, the profit impact and the supply risk regarding items bought in each of the sections.

Profit impact is analysed when an item that is supplied is measured according to the cost of materials, total costs, the amount purchased and the percentage of total buying cost or the growth of the company.

The supply risk is measured according to the number of potential suppliers available, short-term and long-term product availability, change of supplier costs, inventory risks, purchasing items that only one supplier can supply will be classed as high supply risk and on the other side of the spectrum if items are easily purchased or sourced from multiple suppliers the supply risk is low. (Weele 2010, 163.)

Figure 9 introduces a scenario on the purchasing's impact on financial results.

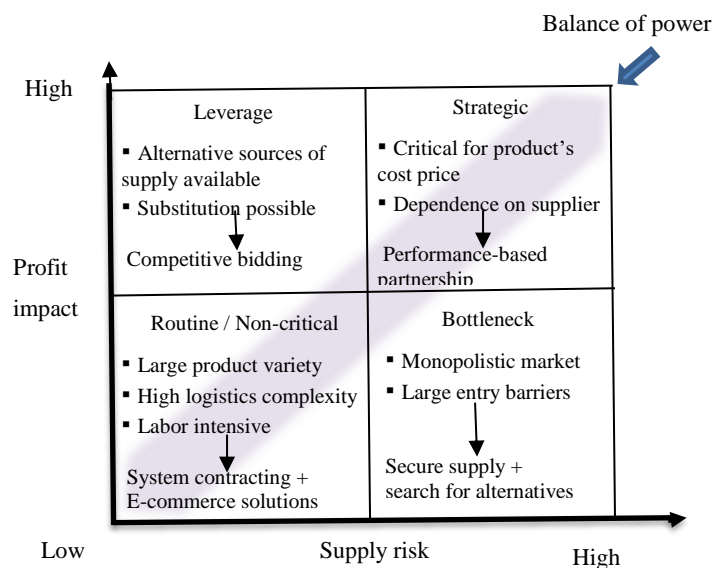


FIGURE 9. Purchasing product portfolio. Redrawn (Weele 2010)

For each section of the Kraljic figure there are individual strategies which are:

- Performance-based partnership
- Competitive bidding – Leverage products
- Securing continuity of supply - Bottle neck products require this.
- Category management

With all the added insight, the Kraljic method brings for the purchaser, it is limited in shedding light on the supplier's point of view and if the decision is beneficial for them. The Dutch windmill method helps the purchaser and supplier to collaborate on a clearer level.

2.2.2 The Dutch Windmill method

The Dutch Windmill method is an extension from Kraljic's model. It helps both parties (buyer and supplier) to understand each other's strategies and points of view. This collaboration will also improve transparency and help towards making more realistic expectations and future planning a success. Figure 10 shows the Dutch Windmill concept.

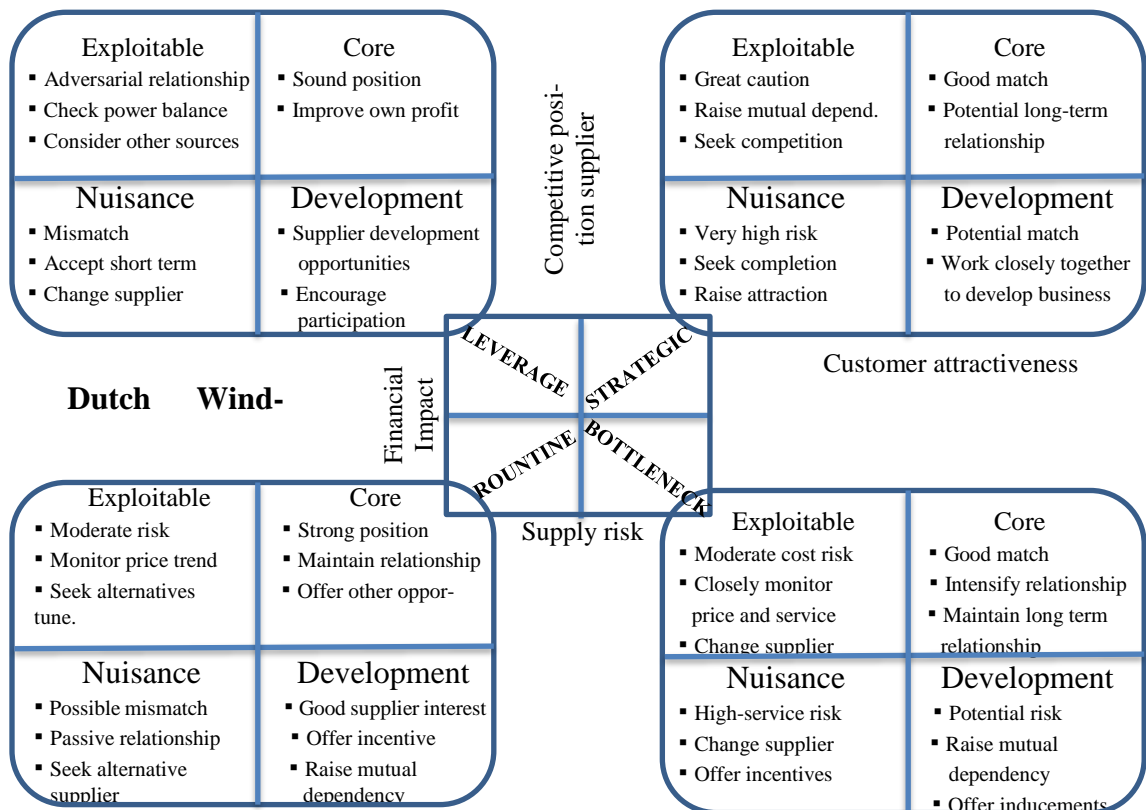


FIGURE 10. “Dutch Windmill”: Analysing the purchaser-seller interdependence (Weele 2010, 202)

When looking at the importance of a certain product or item and considering the market as well as the customers, mapping the turnover of the item helps to classify it which provides added information to the sales company.

- High attractiveness and low turnover – a development item.
- High attractiveness and high turnover – a core item.
- Low attractiveness and low turnover – a nuisance item.
- Low attractiveness and high turnover – an exploitable item. (Cheverton, Velde & Paul 2010, 94.)

When this approach is implemented the final decision will have an essential attractiveness for the customer. This reveals that the key elements or classifications from the purchaser (routine, leverage, bottleneck, strategic) can be compared to the four classifications from the sales analysis (development, nuisance, core, exploitable). During the following analysis refer to figure 10.

The Purchaser's View

Routine items: There will be limited time and spend for the purchaser. Purchasers will look for suppliers that can reduce the aggravation and maintain the production without bother.

Sales key areas

- a) Essential sales item (Core): A potential strong relationship if sales have the ability manage the purchaser's demand.
- b) Development sales item: The success of this is resting upon the seller to maintain the development process.
- c) Sales nuisance item: Most likely won't go through. Neither Seller nor purchaser are excited to continue the product.
- d) Exploitable sales item: Supplier keen to supply and develop the item in the early stages, but the need to develop in later stages is not required. (Cheverton, Velde, & Paul 2010 97.)

The purchaser's view

Leverage item: The purchaser has many sourcing options like the routine items but in this case, is more willing to spend time on these items as the returns are greater.

Seller's perspective:

- a) Essential sales item (Core): The pressure is remotely on the seller to sell the items, so the purchaser will have less risk. The outcome would be that the relationship would be somewhat unstable.
- b) Development sales item: This would be a rare situation due to the purchaser's lack of desire to innovate a product that already exists in the market place with over excess of supplier options. If so, the purchaser is in a solid position to establish themselves in this certain market.
- c) Sales nuisance item: Another situation that is very unlikely. With all the competition and pressure from the purchasers, the seller is seeking an exit from the market
- d) Exploitable sales item: A strategized contract can potentially be agreed, but the environment would be rather harsh and ultimately leading the purchaser to other suppliers. (Cheverton, Velde & Paul 2010, 97.)

The purchaser's view

Bottleneck item: The purchaser will focus on supply risk reduction. The purchaser also has less impact, so ultimately their focus will not be as strong in this category, but this allows the seller to penetrate the margins.

- a) Essential sales item (Core): Reduced strain on the purchaser. Items are priced higher, but the seller can exceed the average margins and build broader connections.
- b) Development sales item: A strong interest from the buyer and seller creates a lasting cooperation to developing this item. The dependency on each other is reciprocated.
- c) Sales nuisance item: This situation can bring problems for the purchaser because there is demand for the item while for the seller they may reframe from selling it, but if it is continued they can receive good margins and potentially could be moved to the exploitable section.
- d) Exploitable sales item: The purchaser has a promised secured supply but could possibly search elsewhere, while the seller has established very profitable returns. (Cheverton, Velde & Paul 2010, 98.)

The purchaser's view

Strategic items: These items are extremely vital for good profitability for the purchaser's firm, resulting them to seek strong ties.

- a) Essential sales item (Core): A secure base to build a strong relationship and a possibility to implement a key account management structure.
- b) Development sales item: Parallel to the essential sales item, but the purchaser will be somewhat vulnerable, resulting to the purchaser being more willing support the supplier developments.
- c) Sales nuisance item: Like the bottleneck nuisance items, these tend to be high risk for the purchaser. The seller has the task to make the item desirable.
- d) Exploitable sales item: If handled correctly a stable relationship can be established. The seller is gaining high returns without investing too much while on the other hand purchasers feel that they are not getting what they need, so will form new ties with other suppliers. (Cheverton, Velde & Paul 2010, 99.)

2.2.3 Porter's Five Forces analysis

Porter's analysis was developed in 1979 by Michael E Porter a professor at Harvard Business School. It assesses and evaluates the competitive strength and position of a business organisation. The five forces below determine the competitive intensity and attractiveness of the market as well as identifies where the power lies in different business situations. (CGMA 2013.)

Business professionals usually implement Porter's analysis when considering the profitability of a new product or service by recognising where the power lies. The method also can show where the strong and weak points are and how to avoid serious mistakes. The analysis can be used in different business situations, the example figure 11 is focused on the competitive position.

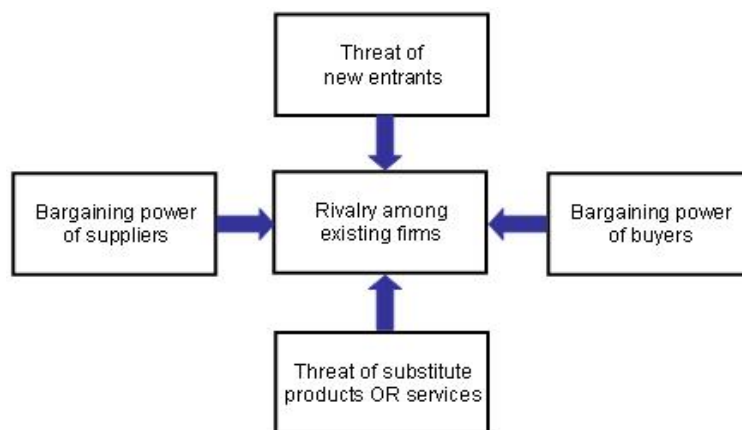


FIGURE 11. Porter's five forces of competitive position analysis (Strategy train 2009)

Below each force will be explained in more detail:

Supplier's bargaining power: How easily can suppliers raise the prices?

- The impact of each supplier
- Exclusivity of the product
- Cost of changing the supplier

Buyer's bargaining power: How easy can buyers push the prices down?

- The number of buyers in the market
- Significance of each purchaser
- Cost of changing the supplier for the buyer

Competitive rivalry

- Are there a lot of competitors in the market?
- Does the product or service contain unique features?

Threat of substitute

- Are customers able to substitute the product or service through other means?

Threat of new entry: How easy is it to enter the market?

- Are there strong barriers for entry? E.G. patents, government legislations etc....
- Is it easy to invest and develop a product from scratch to get into the market?

(CGMA 2013.)

2.3 Supplier management

In this section, the focus will be on supplier management. One of the key duties that procurement must deal with is managing and maintaining a good relationship with each of their suppliers. Long before the relationship starts, suppliers need to be sourced and evaluated to see if they would be a suitable partner. Once the relationship is established an essential part is making sure the quality of the service is maintained and even improved overtime. Through supplier visits and considering risks that may occur, procurement has an opportunity to have a healthy and productive relationship with their suppliers.

2.3.1 Recognition of the need and Supplier evaluation

When a company is in the development stage of a product and then recognises there is a need for a part to complete the product and the company themselves realise that it would not be profitable to produce this part, they would consider sourcing it from a supplier or multiple suppliers depending on the requirements. The right product is critical for the company (Nathan 2011). With the right product, also must come the right supplier and through the specific requirements of the company an evaluation of suppliers will be implemented to find the suitable ones.

Once a list of suppliers has been put together through searching local newspapers, the internet and other sources, the company matches their requirements and ethical aspects with the suppliers, from the select few, determine who offers the best prices in relation to quality, reliability promises and lead time. From these points evaluate the select suppliers and negotiate the terms that both parties can feel happy about. After the negotiations both parties enter in to a contract and then the performance is monitored from both sides.

2.3.2 Supplier relationship management

There is an ever-growing change with how the relationship between the buyer and the supplier is handled. Times have changed and buying according to the best prices is not always the most important element to being a successful and profitable company. There are many different factors that play their part in this relationship. First and foremost is gaining the trust of the supplier.

According to Mickey North Rizza (2015) in today's world, managing the supply base is about strengthening relationships that can make or break your business. Earning your suppliers' trust with honest communication, listening to their concerns and involving them in your processes ultimately makes them a vested partner in your business.

It is important to treat the suppliers as equal partners and lean on each other, the results of this will show a stronger success output, risks will be reduced and the collaboration will be boosted for a steadier relationship. When relationships are strong products can get to market quicker putting the company ahead of the competition and reducing risk for failure. Another key part is effective communication from both sides and through the help

of innovated technology the process can be simplified. Risks can be looked at and analysed from a buyer's perspective with the technology providing visible and detailed aspects that are impacting the supply chain and diminish these risks.

Studies have found the top procurement teams that have successfully aligned with their key suppliers have improved supplier capabilities of innovation, quality, reliability and costs/price reductions and agility to reduce risk factors. Greater value can be achieved for both businesses, something that would be difficult to achieve if operated independently. (Rizza 2011.)

2.3.3 Supplier visits

Visiting Suppliers is to be done before a contract is in place to make sure that the supplier is legit in what they can supply as well as observe what the supplier is capable of doing. In addition, as a buyer it will become clear how the supplier works and how they are able to provide the buyer with the desired product / products. According to William L. Michels, CEO of ADR North America (2008) many supply managers take the supplier visit for granted. If used effectively it can provide intelligence about the process, supplier, market, cost, supply chain and industry. If done incorrectly it can be an opportunity for the supplier to manipulate the visit to hide opportunities for cost and value improvement and process flaws.

It is very important to take the supplier visits seriously and preparing for it should be done well in advance. Visits to suppliers 50 years ago were mainly focused on problems that had occurred, agreement disputes, strengthening collaboration, quality issues and annual checks. An opportunity to collect essential data had been missed that would potentially help to optimize the buyer's purchasing process more than ever before.

Some key topics or points that should be discussed before a potential visit are listed in figure 12 which was compiled by Bill Michels (2008) who conducted a study "Optimising the supplier visits" for the 93rd Annual International Supply Management Conference in May 2008.

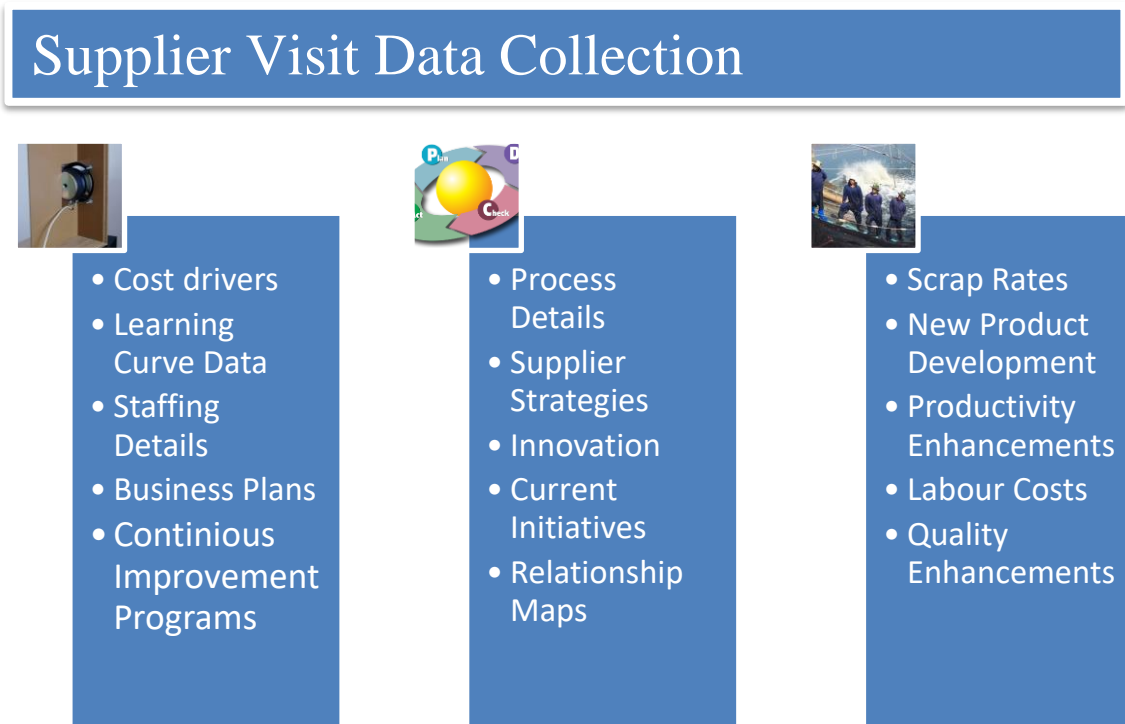


FIGURE 12. Supplier Visit Data Collection. Redrawn (Michels 2008)

As the Procurement director focuses on these key points during the supplier visit, effective knowledge and understanding as well as key data regarding the supplier's business will be revealed. Most often cost aspects are crucial for the Procurement director to know and a deeper view on this can be analysed through the cost driver check list which is visualised in figure 13. The list supports the procurement manager and helps with precise decision making regarding to the value of profitability of the contract with the supplier.

Cost Driver	
Materials	Labour
Check costs	Reasonable rates
Supplier differences	Productivity initiatives
Supply the supplier	Learning curve
Overhead	Profit
% of business	Reasonable
Fair to you	Sector comparison
Apportionment	Investment Policy

FIGURE 13. Cost Drivers. Redrawn (Michels 2008)

When this data and information is requested and then provided it can make way for an effective sourcing strategy, risk and vulnerability strategy, and the strategic direction for future years. (Michels 2008.)

This section has provided key information on the procurement principles, methods and supplier management aspects that has opened the channel to understanding the case study institution “University of Bristol” better, in relation to what their needs are and where they could potentially improve. The following section identifies the University of Bristol’s procurement function and how it operates. Through understanding this process, proposals for development can be made and introduced for further enhancement.

3 THE UNIVERSITY OF BRISTOL'S PROCUREMENT FUNCTION

In this section, the procurement process will be identified with the key parts thereof analysed, so to determine where the need for improvement and optimization are.

3.1 Identified process

In the University of Bristol purchasing activities are performed by two separate functions:

- The Procurement Department
- The Estates Contracting Group

The Procurement Department oversees the purchasing activities of the university regarding office supplies, traveling, equipment for research and other services. It is also responsible for making sure that all regulations are upheld. They also make sure that there is no foul play in terms with contracts.

The Estates Contracting Group on the other hand takes care of procurement activities related to the upkeep of the University such as maintenance, refurbishments on the building and so forth. This thesis will not elaborate further on this part of the procurement.

3.2 Main purpose and procurement team setup

The Procurement Department's main purpose is to support the values of the university, working side by side with the staff and suppliers to improve and develop the purchasing of goods and services. Some of the values that are considered when sourcing the goods and services are as follows:

- ▶ Value for Money ▶ Whole Life Costs ▶ Sustainable environmental considerations
- ▶ Ethical considerations ▶ Transparency
- ▶ Contractual compliance to; UK Laws and Regulations EU Public Procurement Regulations University's financial regulations. (University of Bristol 2015.)

The Procurement department consists of the Head of Procurement with six procurement managers, who oversee their commodity area. For example, a procurement manager may

oversee laboratory equipment and consumables. There are also three Assistant Procurement Managers that assist the managers as well as supplier admin who deals with all the purchase orders and supplier requests. Purchasing card support deal with small purchases under one thousand pounds. (Refer to appendix 2 Procurement Team Diagram)

All the members of the team are qualified to perform their allocated areas of responsibilities and apply to the industry's standards. Improvements of quality are implemented when required through close monitoring and naturally is optimized due to the culture and mission of the University.

3.3 Sustainability and supplier management

Sustainable Sourcing is a major part of the process with key aspects taken into consideration such as value for money, social, ethical, environmental and economic impacts. The University looks always first to purchase Fairtrade or similar ethically sourced products as well as working with diverse suppliers, large and small. An added emphasis on industry standards and sustainability are in most cases on the priority list. The minimal negative environmental effects are looked upon as very important when buying products considering the life cycle and duration of goods.

A part of the procurement's strategic plan is to cultivate close and cooperative functioning relationships with suppliers. By having this close-knit collaboration, the University can be more efficient and effective in producing key services for its internal and external customers. Suppliers are maintained according to their contracts and key performance indicators (KPIs). If they perform well according to the KPI structure they could be offered a bigger part of the given commodity area that they supply.

3.4 Procurement procedures

Within the university there are different types of procurement procedures depending on the value of the purchase and from where it is being sourced (Is it a contracted supplier). Staff and students of the university must check if there are sufficient funds available, correct budget codes and appropriate lead times before starting a procurement activity. Procurement has the task first to make sure there is a standing agreement with suppliers, so the purchase request can go through.

Figure 14 shows the process when there is no frame agreement. The thresholds are shown for the spend activity.

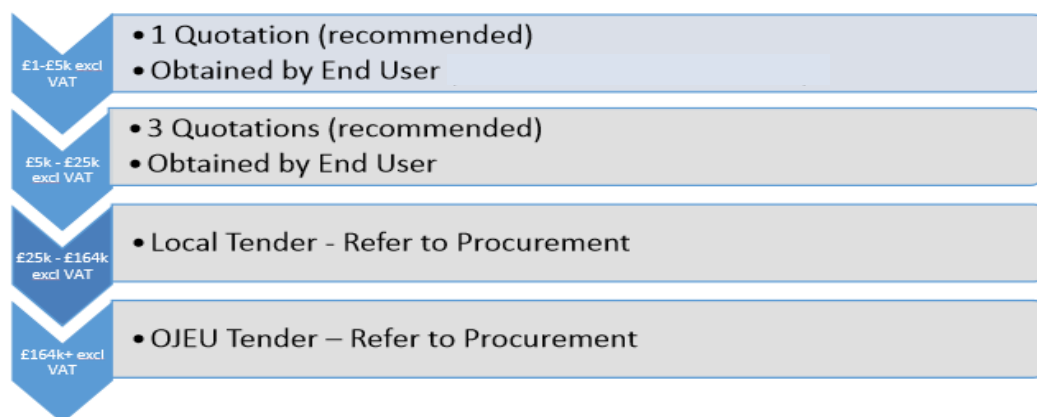


FIGURE 14. Purchasing value steps (UOB, Procurement Procedures 2015)

Purchases £1 – £5,000

For a purchase orders under a thousand pound the corporate credit card is used. This process is easy and reduces paper work as well as transaction costs.

Purchases £5,000 – £25,000

These are usually carried out with a purchasing card or in the Purchase to Pay (P2P) Process which will be explained later in this chapter. The Procurement department will provide support to staff or students with purchases in this category, also refer to the flow chart “How to Order Goods and/or Services” (Appendix 5.). The RFQ (Appendix 1.) is provided for staff to fill in for purchases below £25k.

Purchases £25,000 – £164,176

Any purchases in this category are formally dealt with in collaboration with the Procurement Department. Refer to the process flow chart (Appendix 3.) All purchases above £25k are required to be approved by the Procurement Department. Refer to the “Delegation and Approval steps” flow chart (Appendix 4.)

Purchases £164,176 and above

Purchases involving supplies, services and works exceeding the £164,176 threshold. This threshold is set in accordance with the EU and is subject to change every two years. The Procurement Department will handle these purchases and must coincide with the OJEU

(Official Journal of the European Union) timelines. (University of Bristol 2015.) The OJEU is a publication where all tenders from the public sector which are valued above a set threshold, must be published (OJEU 2017). Refer to “Local and EU Tender Flow” (appendix 3.)

Purchase to Pay (P2P) Process

The Procurement Department manages an online catalogue database that provides information of goods and services which are offered and vended by the University’s suppliers. In addition, payments can be processed through the system. The system is named “Marketplace” hosted by Science Warehouse and staff or students from the University can purchase goods under £25k safely and securely. Refer to the process flow for ordering from E-catalogues (Appendix 6.). The categories of products are IT, audio/visual equipment, electrical components, office supplies and laboratory consumables. All products in the Marketplace are supplied by suppliers that have already been endorsed and have valid agreements in place. (University of Bristol 2015.)

Suppliers that are seeking to be selected for the providing of goods or services on the Marketplace have to go through the process displayed in figure 15:



FIGURE 15. Supplier selection process (UOB, Procurement procedures 2015)

3.5 Supplier management

If the supplier isn’t already in the Marketplace then the steps in “New supplier request flow chart” will support the implementation of this activity (Appendix7.) with the support of the Procurement Department. Payments are made according to the contract that has been prior agreed between the University and the supplier which would usually entail the standard payment terms of 30 days from the date of a valid invoice.

Disputes may arise relating to the performance of suppliers such as delay of goods or services, non-payments or a supplier not fulfilling the contract, Procurement will deal with these issues in collaboration with the stakeholders that are involved.

3.6 ERP system

ERP stands for Enterprise Resource Planning. This system provides a way to integrate departments so that they can be intertwined with one another increasing performance and collaboration. Departments such as procurement, finance, sales, marketing, human resources and production would normally have an ERP system implemented. With the support of this system data can be transferred from one department to the other in an instance bringing better communication and efficiency.

There are different types of ERP systems that are specified for different types of businesses and sizes. Some common ERP providers are SAP, Oracle, and Apprise etc... It is important to choose the right ERP provider from the start and it is always worth spending more time on this part of the process, as changing to a new provider later could cause problems regarding training of personnel and initial costs.

The University of Bristol is currently going through a transition phase, where they are changing their current ERP system “Practis” to a new system called “Aggresso”. The implementation of any ERP system takes time and patience. After the implementation of the new ERP system “Aggresso” is completed, it will offer a smoother functionality platform for the users at the University of Bristol. In addition, it will enable its users to communicate better within its interconnected system.

The University of Bristol’s procurement function has a very strong foundation to build off and upwards, in regard to vital experience with suppliers, regulated procedures and ERP system use, but with all these strong aspects, the interviews in the next section will provide more light on how to continue the improvements in these areas according to the selected professionals from the procurement department.

4 INTERVIEWS

This part of the thesis is crucial in understanding the perspectives and thoughts from chosen individuals from the University of Bristol's Procurement Department. Through the results of the semi-structured interviews the researcher will have the necessary information to propose developments for optimization. The questions have been formed according to the theory in the previous sections as well as from feedback provided by the procurement management team.

4.1 Semi-structured Interviews

Semi-structured interviews comprise of an interviewer and interviewee. The interviewer will follow a prepared set of questions that he will ask the interviewee in a particular order and will only have one opportunity to conduct the interview. The benefits of semi-structured interviews are as follows:

- Freedom of expression for the interviewee.
- Reliable and comparable qualitative data.
- Prepared questions, so interviewer appears competent during the interview. (Cohen 2006.)

The interviews will be recorded and then written down afterwards, so that the interviewer is able to focus better during the interview. This process will make the interview more fluent and smooth for both parties. There is no set time but each interview will approximately last for 30 minutes. The number of interviews that will be conducted will be three.

4.2 Interviewee's

The interviewees comprise of the University of Bristol's procurement department which may include procurement managers or assistant procurement managers. Due to confidential issues two of the interviewees wanted to keep their names anonymous but this will not affect the results in anyway.

1. Mark Holness (Procurement manager)
2. Anonymous
3. Anonymous

All the interviewees had the required expertise and know-how to participate in this research. The interviews took place through Skype during the months of September and October 2017.

4.3 Interview questions analysis

The interview questions were formed according to the theory of this thesis and the development needs for the case institution. There are seventeen questions (Appendix 8.) which are categorized into four sections striving to answer the key questions regarding the procurement function, supplier management, department integration and procurement methods.

Questions 1 – 5

These questions are looking to reveal what are the roles and responsibilities of the Procurement function and does the leadership of the university see the function key to its success. It is also important to understand in what ways the procurement function benefits the University as a whole, is the department included in the overall business strategy and what the major challenges that procurement face in regard to internal use of the function. The outcome of these answers could provide supportive information for development.

Questions 6 – 12

The focus on these questions help to identify essential information regarding the management of the university's suppliers. With the support of the questions, insight into developing the supplier's process relate to key topics such as the current method for finding suppliers, how to select suppliers and supplier maintenance. In addition, a focal point will be the management of key performance indicators and the importance thereof. Some of the questions will reveal information about the supplier visits and risk avoidance.

The results of the interview will shed light on what areas need to be improved regarding supplier management.

Questions 13 – 14

One of the development areas the university wanted to touch upon was the integration of the departments and how to make this a smoother process. Even though the university have already taken the initiative in improving this issue by implementation of a new ERP system, further research would back up this decision and support the funding of this project. Questions relating to the ERP system and benefits of integration will be emphasized. The questions will help to identify ways of optimization.

Questions 15 – 17

The final three questions highlight procurement methods such as The Kraljic Mix, The Dutch Windmill and Porter's Five Forces. Through these questions the author will learn to what degree the mentioned methods are implemented if at all in the University of Bristol's procurement function. When this information is clarified proposals can be made for development.

5 RESULTS AND DEVELOPMENT PROPOSALS

In this chapter, the results will be analysed from the interviews in order to gain a deeper understanding, on where, in the interviewee's opinions, the procurement department needs to develop as well as comprehend the process. Solutions will be proposed according to the results and the researched theory. The questions will be categorized into four tables with the shortened version of the answers (Complete answers, refer to appendices 8 – 11). This will make this part of the thesis more reader friendly. The first table will refer to the procurement function, questions 1 – 5, table two to the supplier management questions 6 – 12, table three to the department integration questions 13 – 14 and table four to the procurement method questions 15 – 17.

TABLE 1. Questions & Answers 1 – 5, refer to appendices 8 – 11

Questions	Answers (Shortened)
1, In your view, what is the role & responsibility of the Procurement function? As compared to other roles/functions?	To deliver value for money.
	Operate a fair and transparent process.
	Strong ties with intern. & external entities.
2, Does the management of the company look at the procurement department as key to it being successful and profitable?	It is seen as a key function.
	It plays a key role.
	It has a huge effect on the profitability.
3, What are the other benefits (other than financial) brought by the Procurement function?	Category experts and added value.
	Inter. & external relationships improved.
	Expertise in supplier management.
4, How do you see that the procurement activities within the company fit in with the general business strategy of the company and why?	Linked with meeting financial targets.
	Cost savings, targets & category plans.
	Achieving goals and targets.
5, What are key challenges (if any) the organization faces regarding procurement?	That others understand how we operate.
	Timeframes for certain projects met.
	Staying on schedule.

The questions of table 1 helps answer the main question:

“How key is the procurement function within the university?”

From the results, they show that it is a key function and a source of high expertise that keeps the university working on a profitable level. A proposal for the university is, as the Procurement Department is very important, a stronger push towards improvement of helping the stakeholders understand clearer how the activities of the procurement process work on a deeper level. This could be achieved by providing more adequate information through the university's internal system, resulting to the department's shift to becoming more transparent and user friendly.

TABLE 2. Questions & Answers 6 – 12, refer to appendices 8 – 11

Questions	Answers (Shortened)
6, What methods are being used for finding suppliers? Who should be talking to supplier candidates and screening them?	Pre-qualification process.
	Market research & attending events.
	Through the history list of suppliers.
7, What are the driving factors for supplier selection?	Suppliers meeting our required standards.
	Relevant accreditations/qualifications.
	Quality, costs and qualifications.
8, Who should be involved in the phases of supplier relationship (selection, agreement negotiations and managing the relationship?)	Stakeholders & category managers.
	Procurement, end users & tech experts.
	Procurement & stakeholders.
9, How is the relationship with the organization's suppliers and how are they maintained?	Contract review meetings.
	Contract review & regular informal contact.
	Annual meetings. Regular contact.
10, How are the procurement / supplier management risks avoided?	Contingency plans & regular reviewing.
	Category strategy "What if Scenarios".
	Quality risks, time management risks.
11, How often do you visit your suppliers? Is there a prepared agenda?	Once a year to once a month depending.
	Once a month upwards, yes agenda sample.
	There is an agenda, 1 – 4 times a year.
12, Is there a Key Performance Indicator (KPI) strategy in place regarding suppliers? How has /would this be beneficial?	Yes, but needs addressing. Essential.
	Yes, needs improving to optimize output.
	Yes, an overlook is required.

Table 2 questions focus on supplier management and look to answer the question:

“How to manage suppliers in the most effective way?”

The results suggest that following a specific process such as the new supplier request flow chart (Appendix 7.) will help to ensure the supplier has the correct qualifications to be classed as one of the university’s providers. In all the phases of supplier relationship the interviewees mentioned that procurement, stakeholders and technical support should be involved to provide a healthy relationship with regular contact and a supplier visit at least once a year. Supplier visits should also be well prepared in advance with an agenda. According to the results of the interviews a crucial area that needs addressing was how key performance indicator strategies were being carried out or the lack thereof. A proposal for development would focus on this issue such as creating a new KPI strategy that would be monitored for example, over a period of 12 months. Points such as delivery timescale, prices and quality would be monitored and after this period analysis the results and offer the highest performing suppliers the tender. This process would optimize and improve the quality, prices and delivery time scales over time.

TABLE 3. Questions & Answers 13 – 14, refer to appendices 8 – 11

Questions	Answers (Shortened)
13, Would it be beneficial to align the procurement process with other departments?	Currently in process, new ERP system.
	Currently arches with finance, ERP.
	It would improve communication.
14, Will the new ERP system help to optimize the integration of the departments of the University?	Yes, it will be a positive aspect.
	Yes, indeed.
	It will bring a clearer user interface.

The questions in table 3 apply to the question

“How to integrate other departments with the procurement department?”

The results imply that the procurement department has a strong working relationship with the finance division. When the new ERP system is fully integrated in the university it will optimize and develop the line of communication as well as the swiftness of information transacted from one department to the other again improving overall productivity. A proposal would be to try and implement the ERP system as efficiently as possible by training

the necessary stakeholders so the implementation time would be shortened. On the basis of the results the investment of the new ERP system was a positive decision.

TABLE 4. Questions & Answers 15 – 17, refer to appendices 8 – 11

Questions	Answers (Shortened)
15, What procurement methods are being used at the university?	RFQ, open, restricted & competitive etc.
	Processes aligned with PCR 2015.
	RFQ, RFP, Kraljic & competitive etc.
16, Have you heard of the Kraljic, Dutch windmill or Porter's five forces methods? Are they optimizing the process? In what way?	Yes, Kraljic is typically used here.
	Kraljic helps form all category plans.
	Kraljic reduces costs and increases security.
17, What works well currently?	The general function works well.
	Overall process runs smoothly.
	The general function is operating efficiently.

The questions in table 4 denote to the question:

“How to use different procurement methods for the University's advantage?”

The results identified what methods are currently in use such as RFQ, RFP etc... with the Kraljic mix being centre to their purchasing strategy at buying cost effectively and securely. The interviewees all expressed the general function was operating well, but through the research of this thesis the function could work even better with the support of other procurement methods such as The Dutch Windmill and Porter's Five Forces. A proposal for development would be to implement one of these methods. For example, The Dutch Windmill would improve the collaboration between the university and the suppliers by optimizing the understanding of each other's strategies and points of view. In addition, collaboration would also progress transparency and assist towards making more realistic expectations and future planning a success. This will result in a more profitable future for the university and suppliers, taking full advantage of the procurement methods available.

6 DISCUSSION

This thesis was specified for The University of Bristol for the purpose of researching for areas of development within their procurement process. With the support of the commissioner suggestions for development were analysed which created four areas to focus on including the importance of the procurement function, supplier management, department integration and the use of procurement methods within the department. From these areas 17 sub-questions were formed for the qualitative study, comprising of the semi-structured interviews established for the three selected participants.

The questions for the interviews were carefully created from theoretical research from academic literature, online sources and feedback from the commissioner. The framework provided a basis for key research areas to be studied regarding procurement.

The outcome of the results suggested important aspects where the procurement process could be optimized. The first point focused on the importance of the procurement function within the university. The participants stated that the procurement function played a key part of the universities success but that there is a need for the stakeholders to understand it better. A proposal for the university would be to make procurement related activities more transparent and an increase of information made available on the internal system.

The second point was the management of suppliers. The interviewees mentioned that there was a need to improve how the KPI's were maintained. A proposal for development to create a new KPI strategy that would be monitored for example, over a period of 12 months. Points such as delivery timescale, prices and quality would be monitored and after this period, analysis the results and offer the highest performing suppliers the tender. This process would optimize and improve the quality, prices and delivery time scales over time.

The third point looked at department integration especially regarding procurement. The answers suggest that this was an ongoing process and that with the help of the new ERP system this issue would be solved. Even though this research did not bring any improvement factors, a suggestion for a development proposal would be for a quick and efficient

implementation of the system be achieved by training the key staff and stakeholders that would use it on a regular basis.

The final point touched upon the use of procurement methods. The participants stated that the Kraljic mix was used as the backbone of purchasing strategy. Although this is an effective method, implementation of the Dutch Windmill method would improve the collaboration between the university and the suppliers, ultimately improving performance and productivity.

The objectives have been overall accomplished providing proposals for development to the procurement function. After the application of these proposals the procurement activities could potentially run smoother bringing more value for money to the university on a whole.

Due to the lack of participants, the results of the interviews are to some extent limited, but at the same time they still provide valuable information for the commissioner. A future study is suggested in order to follow up on the development proposals and measure the success of their implementation. A study that focused on the analysis of supplier KPI measurements would be useful, to understand if there has been any improvement with supplier relationship and supplier performance. In addition, further studies regarding the effectiveness of the use of the Dutch Windmill as the central focus of the procurement department's supplier strategy plan. This would be interesting to see how it compares with the current strategy with the Kraljic mix at the centre.

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APPENDICES

Appendix 1. Request for Quotation



INSERT ADDRESS

INSERT DATE

INSERT NAME
POSITION
PHONE NO.

INSERT EMAIL

Dear Sir / Madam

REQUEST FOR QUOTATION

For the Supply of INSERT TITLE OF GOODS OR SERVICE REQUIRED

YELLOW HIGHLIGHTED FIELDS = UOB USERS TO INPUT INFORMATION AND DELETE INSTRUCTIONS WHEN COMPLETE

GREEN HIGHLIGHTED FIELDS = SUPPLIERS TO INPUT INFORMATION

Appendix 1: Specification of Requirement

Appendix 2: UoB Standard Terms and Conditions

Appendix 3: Quote Certificate and Compliance Statement

Appendix 4: Evidence of Previous Experience in Supply of same or Similar Products

1. The University of Bristol has a requirement for the provision of **INSERT TITLE OF GOODS OR SERVICE REQUIRED** and we understand you are a supplier of such equipment. Without commitment or prejudice to any previous or future requirements, we would like to request a quotation from you. Please return your quotation to the undersigned by the 18.00 of the **DAY of MONTH of YEAR**.
2. You are requested to quote against the attached specification document at Annex A but before submitting any information, please ensure you have read the attached instructions carefully.
3. Any quote that is accepted will be awarded to the most economically advantageous quote in accordance with the following award criteria in descending order of importance:
 - Unqualified compliance with the specification
 - Unqualified Acceptance of the University's Terms and Conditions
 - Price

- Evidence of previous experience of supplying the same or similar products
4. Please see Appendix 1 Specification and Appendix 2 our Terms and Conditions of purchase. Should your quotation be acceptable to us, any awarded Contract will be based on these documents.

Please note the University of Bristol does not bind itself to accept the lowest or any Offer and reserves the right to accept an Offer either in whole or in part, each item being for this purpose treated as offered separately unless this is specifically disallowed by the supplier.

5. All applicants shall be notified of the outcome. Acceptance of any Quotation and a binding Contract shall only occur once;
1. a written Acceptance has been provided by the undersigned,
 2. AND a Purchase Order containing the winning Supplier's details and Quotation value has been sent
 3. AND the Supplier has acknowledged receipt of both the Acceptance of Quotation and Purchase Order to the undersigned in writing.
- Any other form of agreement, whether formal or in part, will not constitute a binding Contract between Parties. Suppliers must not undertake work until or unless all 3 steps as above have been completed; the University will not be responsible for any costs the Supplier may incur for work undertaken at their own risk.

We look to your response.

Yours faithfully

INSERT NAME
JOB POSITION

Request for Quote- Instructions to Suppliers

- This request for quotation does not constitute an offer and the University does not undertake to accept any quote or offer.
- The University reserves the right to accept any part of any quote or offer. The University will not reimburse any of the Supplier's cost in relation to submitting this Quotation.
- Suppliers shall not discuss the quote they intend to make other than with professional advisers or joint bidders who need to be consulted.
- Quotes shall not be canvassed for acceptance or discussed with the media or any other supplier or member or officer of the University.
- All quotes received shall be unconditional offers, and will be firm priced for the duration of the Contract
- The Price breakdown does not represent rates where by the price can be varied at a later date; the breakdown is to support transparency of pricing to the University only, and the total firm price will be the total value paid on satisfactory completion of the contract. No variation from this price will be accepted.

- Suppliers are responsible for all information necessary for the preparation of their quotation.
- Information supplied to suppliers by the University's staff or contained in the University's publications is supplied only for general guidance in the preparation of the RFQ.
- Suppliers must satisfy themselves as to the accuracy of any such information and no responsibility is accepted by the University for any loss or damage of whatever kind and howsoever caused arising from the use by suppliers of such information.
- Suppliers should ensure that their quotation arrives on time; No quotation will be accepted after the deadline for submission.
- Suppliers should hold their quotation open without variation for 90 days after the submission deadline date.
- Please ensure all necessary documents are enclosed; the University reserves the right incomplete responses will not be considered:
 - Appendix 3 - Quote Certificate and Compliance Statement
 - Appendix 4 – Evidence of Previous or Similar Supplier

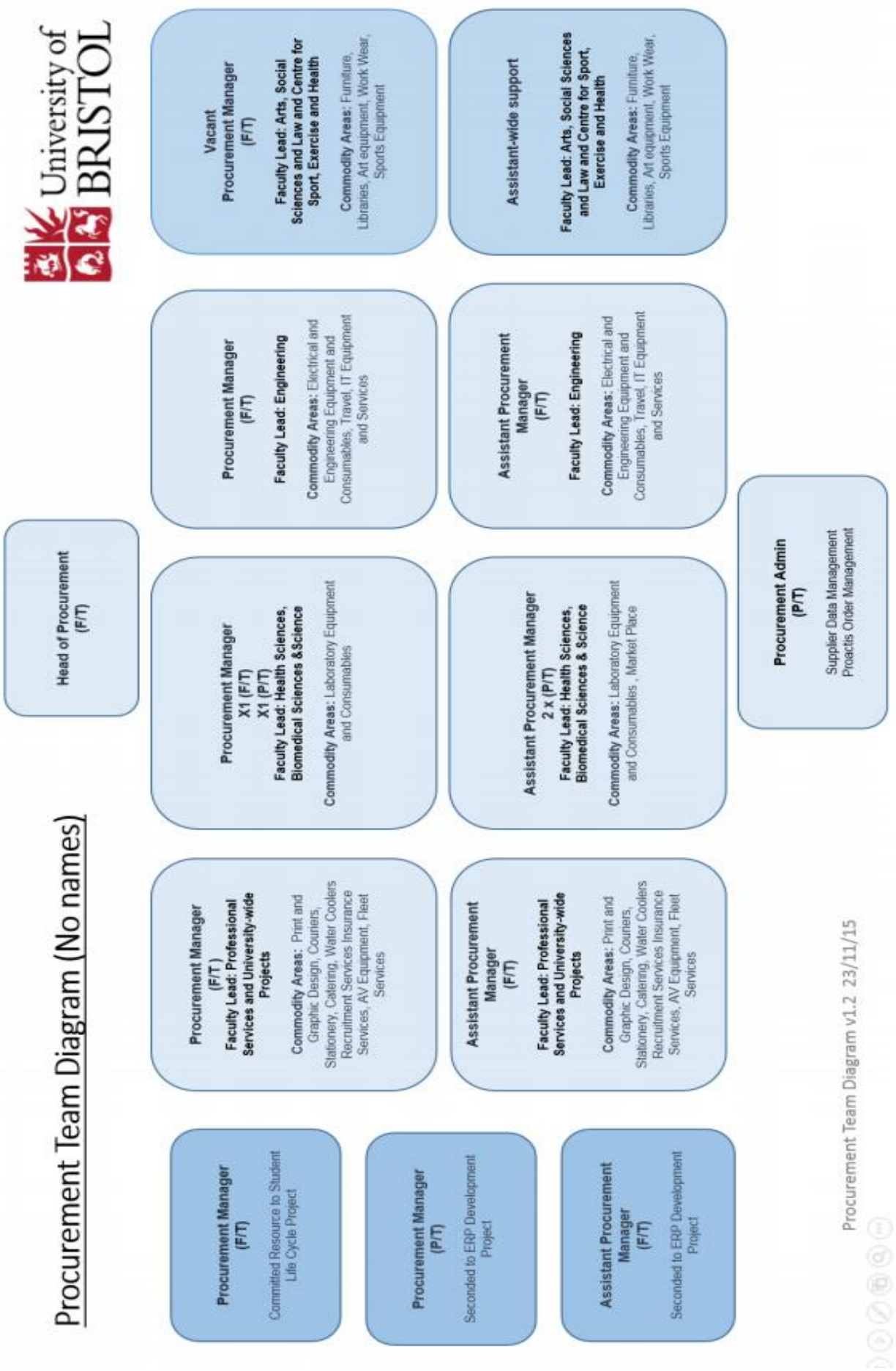
Specification of Requirement**REQUEST FOR QUOTATION**

For the Supply of **INSERT TITLE OF GOODS OR SERVICE REQUIRED**: Specification of Requirement

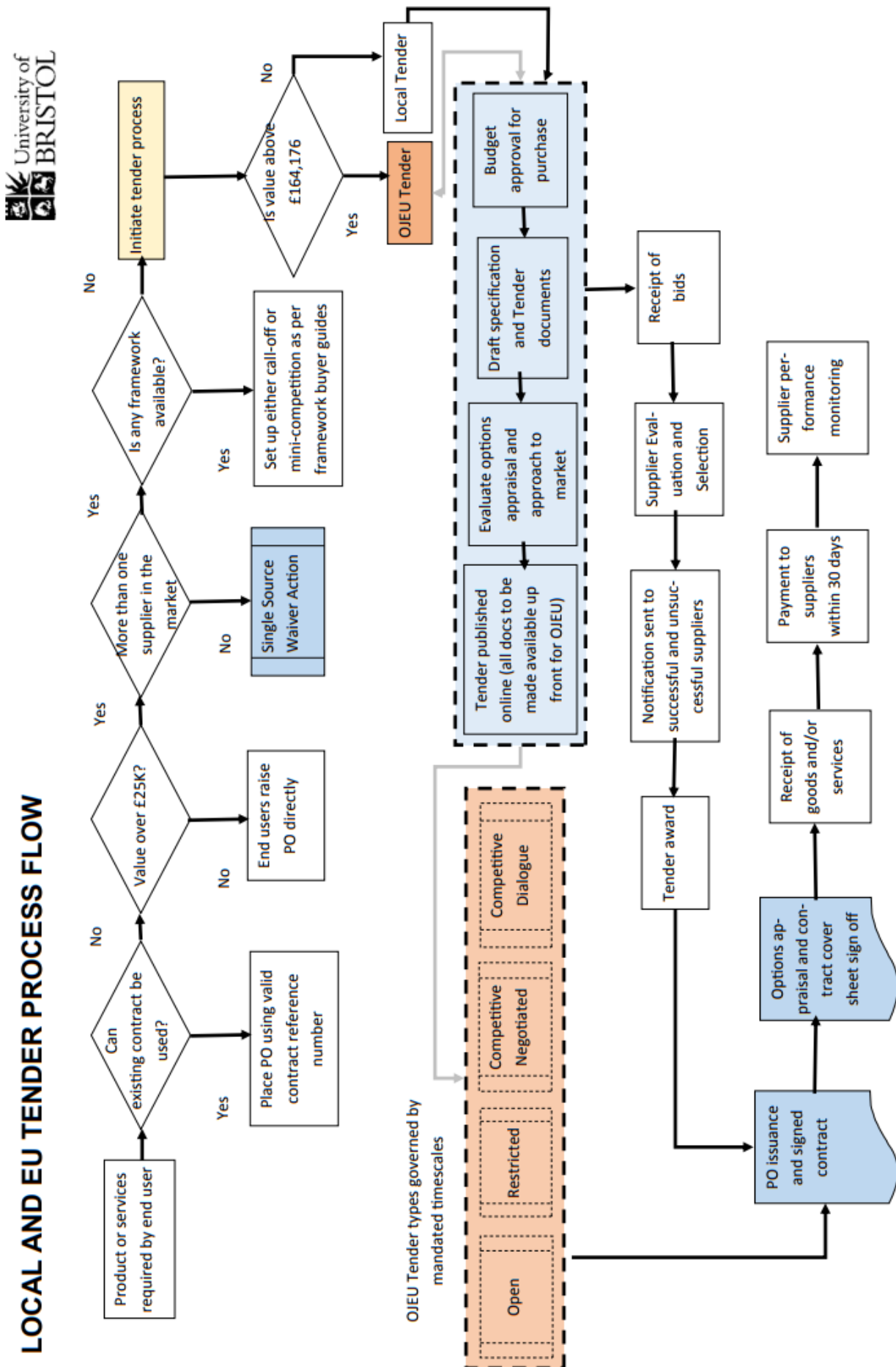
Contract Duration	<p>For Supply of Goods: The Contract shall commencement on the date of the acceptance of this Quote by the Customer. The Contract shall expire on acceptance by the Customer of the Goods, or when the Service requirement ends notwithstanding any liability by the Supplier to provide ongoing warranty as defined in this document or protection under the Sales of Goods Act 1979.</p> <p>For the supply of Services (including requirements for the maintenance or servicing of the Goods): The Contract duration will be DD/MM/YYYY to the DD/MM/YYYY</p>
Goods Description	<p>INCLUDE FULL SPECIFICATION OF GOODS, INCLUDING ANY QUALITY STANDARDS APPLICABLE. BE COMPREHENSIVE, DO NOT ASSUME THE SUPPLIER UNDERSTANDS WHAT YOU MEAN OR THAT IT IS 'INDUSTRY NORM'.</p> <p>Number of Items:</p> <p>Technical Specification:</p> <p>Quality Standard required to be compliant with:</p>

Service Description	<p>THIS MAY OR MAY NOT BE LINKED TO THE GOODS I.E. SERVICING PROVISION FOR THEIR MAINTENANCE. PLEASE NOTE WARRANTIES DO NOT GENERALLY COVER NORMAL UPKEEP AND WEAR AND TEAR, AND MAY EVEN STIPULATE THAT THEIR CONTINUED COVER IS RELIANT ON THIS UPKEEP BEING MAINTAINED.</p> <p>INCLUDE FULL SPECIFICATION OF the SERVICE EXPECTED, INCLUDING ANY QUALITY STANDARDS APPLICABLE. BE COMPREHENSIVE, DO NOT ASSUME THE SUPPLIER UNDERSTANDS WHAT YOU MEAN OR THAT IT IS 'INDUSTRY NORM'.</p> <p>Service Specification:</p> <p>Quality Standard required to be compliant with:</p> <p>Required output of service to be provided:</p> <p>Service Levels to be achieved:</p> <p>1-</p> <p>2-</p> <p>3-</p>
Delivery Requirements (MUST BE WITHIN THE UK ONLY)	<p>DATES IN THE FORMAT OF DD/MM/YYYY MUST BE WORKING DAY, ONE OF THE FOLLOWING OPTIONS:</p> <ul style="list-style-type: none"> - SINGLE DELIVERY DATE WHICH THE GOODS MUST BE DELIVERED BY - IF MULTIPLE GOODS, THE MULTIPLE DATES THE GOODS ARE TO BE DELIVERED ON - IF SERVICE, THE DAY ON WHICH THE SERVICE SHOULD TAKE PLACE, OR THE DATE UPON WHICH ALL SERVICES SHOULD BE COMPLETED BY. - ADDRESS DELIVERY MUST GO TO, AND THE POINT OF CONTACT THEY SHOULD RING TO ACCEPT THE GOODS/SERVICE
Installation	<p>WHAT INSTALLATION OR SETUP REQUIREMENTS ARE APPLICABLE? NOTE IF THE SUPPLIER NEEDS ACCESS TO IT SYSTEMS OR HAS THE POTENTIAL TO DAMAGE UNIVERSITY INFRASTRUCTURE OR PROPERTY PLEASE CONTACT PROCUREMENT</p>
Warranty of Goods	<p>NOTE THE SALES OF GOODS ACT 1979 WILL COVER MOST 'REASONABLE' WEAR AND TEAR (USUALLY CONSIDERED TO BE BETWEEN 3 MONTHS AND A YEAR DEPENDING ON THE GOODS). IF QUALITY OR CONTINUE LIFE OF GOODS IS REQUIRED LONGER THEN CONSIDER WARRANTY, BUT NOTE THE HIGH LIKELY COST.</p> <p>Minimum term of Warranty required:</p>

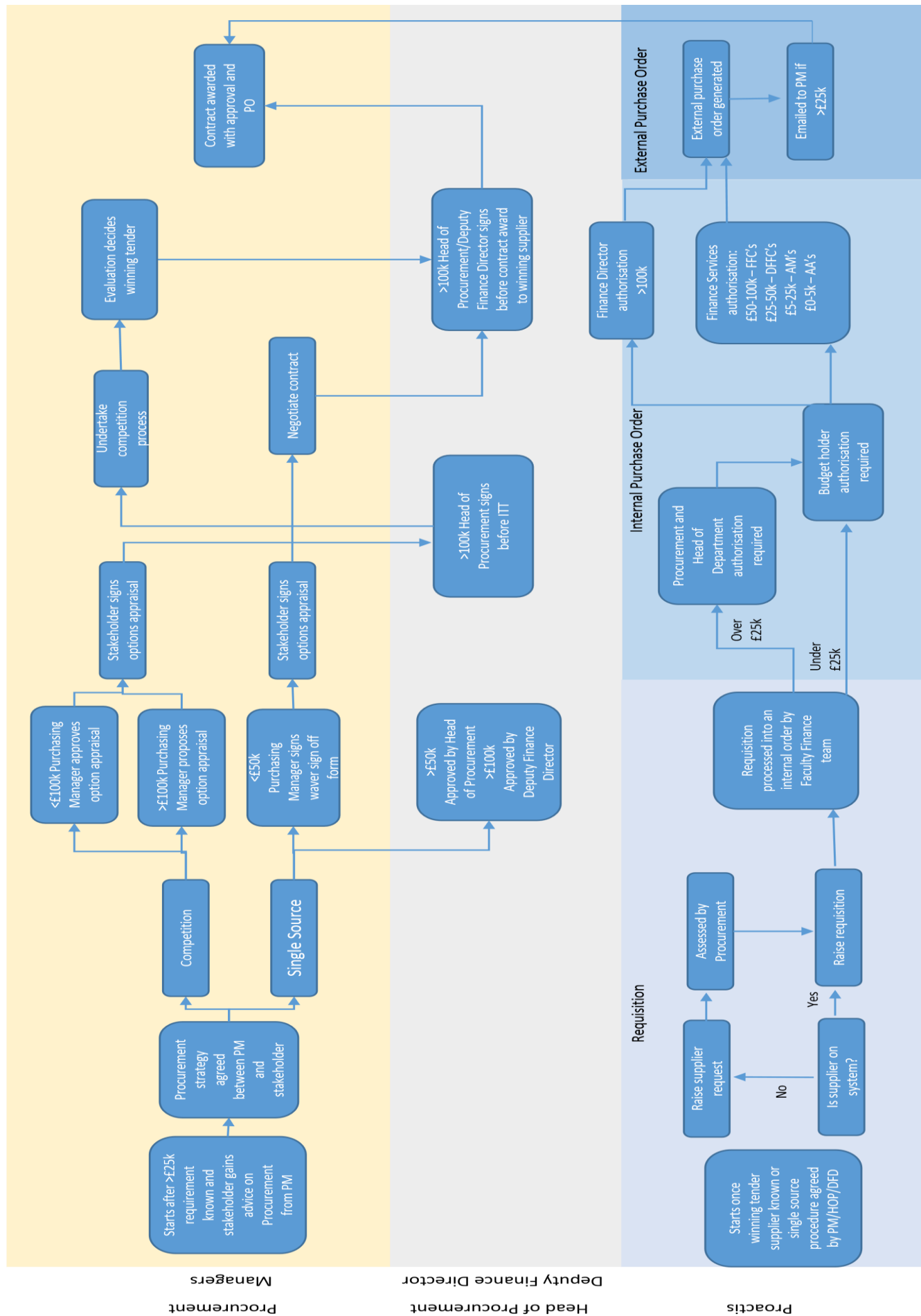
Appendix 2. Procurement Team Diagram



Appendix 3. Local and EU Tender Process Flow



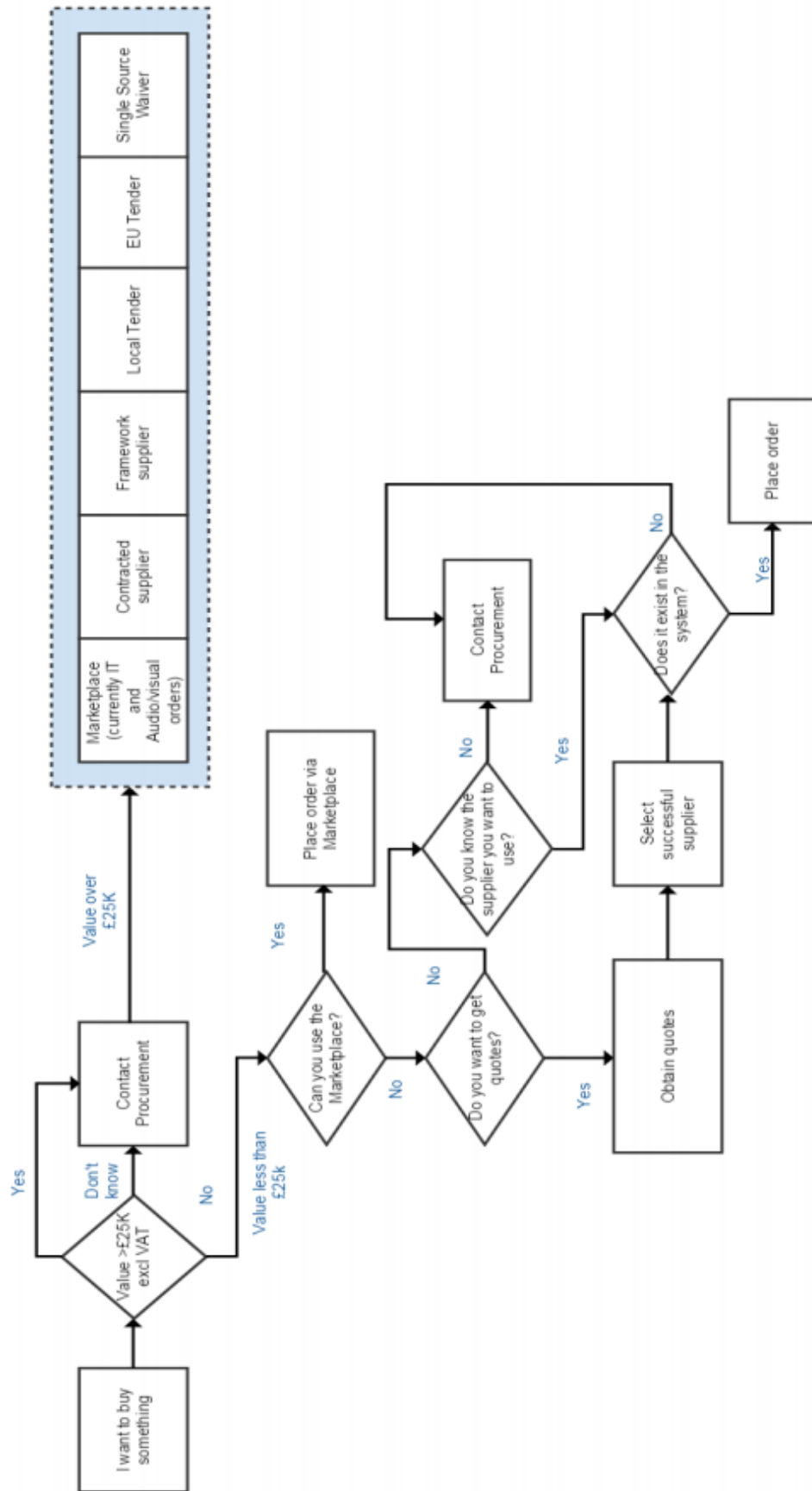
Delegation and Approval Steps - Procurement



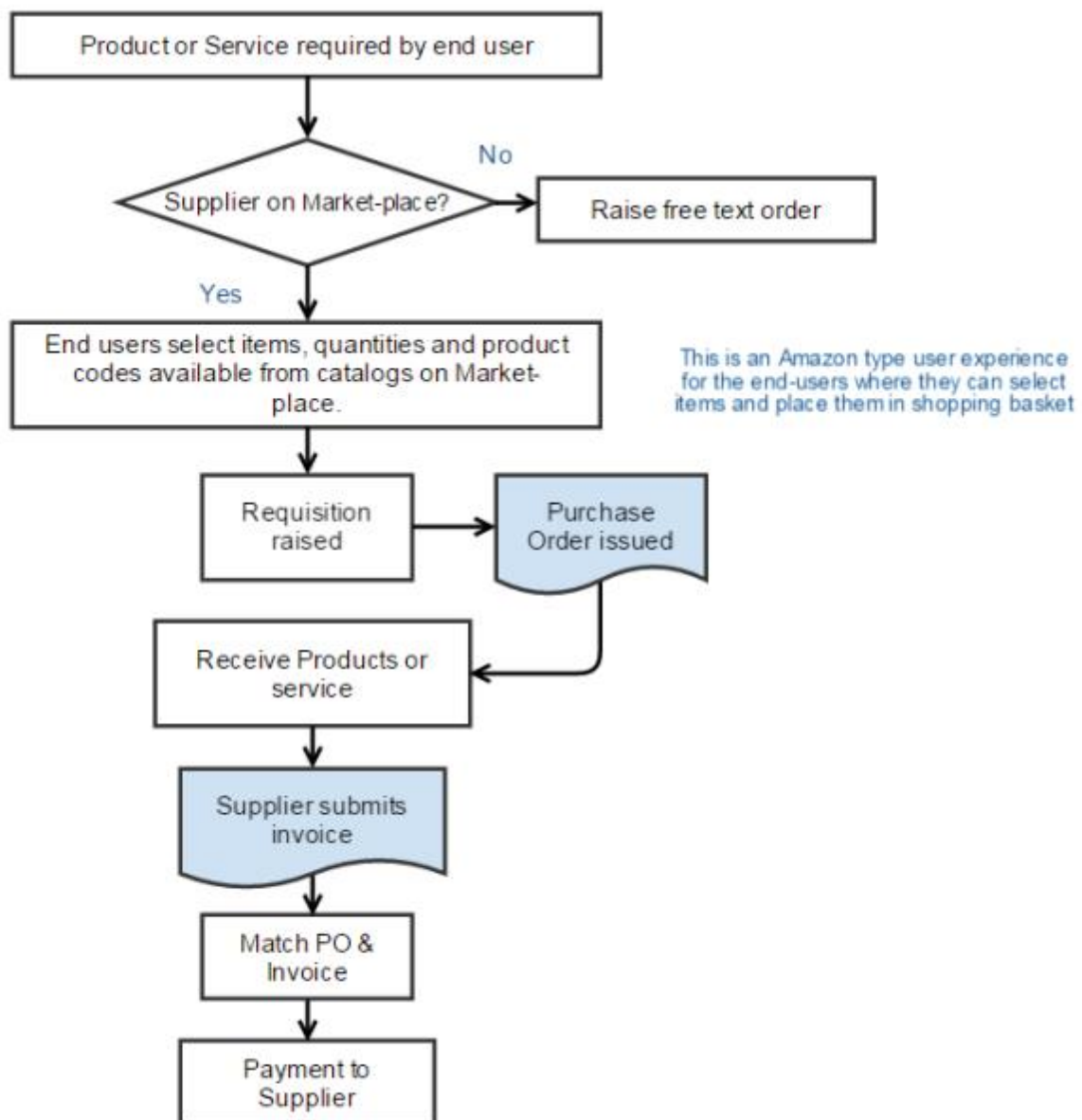
Appendix 5. How to Order Goods and/or Services



HOW TO ORDER GOODS AND/OR SERVICES




Appendix 6. Process Flow for Ordering from E-catalogues

**Process flow for Ordering from E-Catalogues**


Appendix 7. New Supplier Request Flow Chart

Current Process

1. New supplier request is received in Proactis

2. **Review Stage** | The submitted information is checked against:
 - a. Existing data:
 - Supplier already set-up
 - Supplier exists, but with different address, email, phone etc.
 - Supplier exists with a different currency/ bank details

→ Reject or request further information from the requisitioner
 - b. Accuracy of the information provided;
 - The correct currency is requested
 - All relevant field are completed (T&C, type of good. service)

→ Discuss further with the requisitioner
 - c. Procurement policies:
 - A framework agreement or contracted suppliers are available
 - The commodity area is managed by the Procurement Unit

→ Reject or discuss further with relevant Procurement manager
 - d. Finance rules:
 - Annual spend under £1000 → pay by T&S card
 - Annual spend under £100/ card payment not possible
 → pay by cheque request
 - Sole trader, not VAT- registered, service provider → fee claim
3. **Authorisation Stage**
 - a. 'Save and Submit' the supplier request if in accordance with the rules and policies (Stage 2.)
 - b. 'Reject' the supplier request if not in line with Finance and Procurement rules
 - State the reason of rejection
 - Give relevant advice in the comment field
4. **2nd authorisation stage** | Supplier request comes back for final authorisation
 - a. Double-check the information
 - b. Authorise or
 - c. Reject back to:
 - The requisitioner or
 - Review Stage



5. **Enabling Stage** | Coding suppliers under relevant commodity area
 - a. Find a relevant commodity in PMC that corresponds with the main activity (or the respective goods/ service purchased) of the supplier
 - b. Link the supplier to the commodity
 - Specify status: contracted (1) or non- contracted (2)
6. **‘Complete’** the supplier request in Proactis

Initial suggestions for the ERP system

- The second authorisation stage should be removed as all the checks are done in the Review Stage
- A more effective search and match tool would be constructive to automatically check for existing suppliers (both by address and company name). An advanced search option would be beneficial. Currently no option available to narrow down the search.
- To give the option of automatic rejection in certain cases, such as ‘spend under £1000’ (PCard payment), ‘spend under £100’ (submit cheque request form), etc. These are currently the most common reasons for rejection.
- At the enabling stage, a more transparent commodity coding needed. Currently, a considerable number of item groups are either withdrawn or empty. The coding system itself also needs to be rationalised, relevant commodity categories established. This is to ensure that suppliers are coded under the most relevant item group.
- One-off suppliers should be automatically closed down after a limited period of time.
- Setting up suppliers automatically as either ‘contracted’ or ‘non- contracted’
- Would be useful if the set-up and enabling stages can be consolidated within one stage.



Appendix 8. Interview Questions

1. In your view, what is the role & responsibility of the Procurement function (mandate)? As compared to other roles/functions?
2. Does the management of the company look at the procurement department as key to it being successful and profitable?
3. What are the other benefits (other than financial) brought by the Procurement function?
4. How do you see that the procurement activities within the company fit in with the general business strategy of the company and why?
5. What are key challenges (if any) the company faces regarding procurement?
6. What methods are being used for finding suppliers? Who should be talking to supplier candidates and screening them?
7. What are the driving factors for supplier selection?
8. Who should be involved in the different phases of supplier relationship (selection, agreement negotiations and later managing the relationship?)
9. How is the relationship with the organization's suppliers and how are they maintained?
10. How are the procurement / supplier management risks avoided?
11. How often do you visit your suppliers? Is there a prepared agenda?
12. Is there a Key Performance Indicator (KPI) strategy in place for measuring the performance of the suppliers? How has /would this be beneficial?
13. Would it be beneficial to align the procurement process with other departments? How could this be done?
14. Will the new ERP system help to optimize the integration of the departments of the University?
15. What procurement methods are used?
16. Have you heard of the Kraljic, Dutch windmill or Porter's five forces methods? If so are they optimizing the procurement process? In what way?
17. What works well currently?

Appendix 9. Complete Answers from the Interview with Mark Holness

1. To deliver value for money across all areas of the business working with internal and external stakeholders to achieve goals.
2. I would say that Procurement is a key function within the university.
3. Other added value in gaining and building stronger relationships with suppliers, having key people who are category experts and know the wider market place.
4. This can be linked the financial targets and if we are meeting the desired savings targets, also could be related to other KPI's that have been set in terms of management of the contractual spend.
5. Making sure that other areas of the business understand the financial regulations and how we to operate.
6. Depending on the tender process suppliers are normally vetted by our Pre-qualification process where suppliers must provide information about their company, financial standing, accreditations, levels of insurance etc.
7. Ensuring that suppliers meet our required standards (Ethical, sustainability, CSR, Financial)
8. Roles and responsibilities? This all part of the Procurement function and they should take the lead on these activities however it is key to work with the internal stakeholders who use the supplier on a day to day basis to help manage the supplier.
9. This is done from contract review meetings going in line with SLA's and KPI reporting, depending on where the supplier sits will depend on the frequency of the meetings.
10. Having contingency plans is important for example is a key supplier was to go bust tomorrow what would you do? It is important to understand each commodity area and the full impact and keeping an up to date risk register and regularly reviewing it.
11. Depending on how important the supplier is can range from once a year to every month or somewhere in between.
12. This is an area that the University has been a little slack with historically however having relevant KPI's are essential to operating correct contract management. If the performance is not measured how can it be identified if the supplier is performing or meeting our expectations?

13. This is already set out under our ‘‘How to buy guides’’ and the universities financial regulations.
14. Yes, it will indeed.
15. Depending on the requirement will use any of the following: single source, RFQ, Two stage tendering, RFP, Restricted Process, Open Process, competitive dialogue process, competitive negotiated process.
16. Yes, but Kraljic is typically used here. It helps to reduce costs and strategize better.
17. Procurement has been established as a function for a while and day to day the general function works well. What has been lacking is the focus to not just be a great sourcing team but to also improve the level of the contract management and the university in on a journey to deliver this.

Appendix 10. Complete Answers from the Interview with Anonymous

1. The role of procurement is to obtain value for money whilst ensuring we operate a fair and transparent process for internal and external stakeholders.
2. Yes, it is seen as a key role and not just a function which is evident in the structure and forms part of delivering the finance strategy.
3. Internal and external relationships improved, more cross functional working. Bringing added value from the supply base and making sure we are compliant with all financial regulations.
4. Working towards cost savings, targets through tender activities & category plans.
5. Timeframes for certain projects, having early stakeholder engagement is key.
6. Market research & attendance at key events, meet the buyer days, events form part of this process. Premarket engagement following a Prior information notice.
7. The supplier must meet all the requirements needed and have all the relevant accreditations/qualifications.
8. Procurement and end users and technical expert, IT if needed and any other department depending on the category area.
9. This is carried out with both formal contract review meetings and regular informal contact (catch up meetings). Supplier relationships are key to forming partnerships and working together.
10. There will always be some risk but this can be managed using a risk register and category strategy plans to cover the "what if scenarios"
11. Depends on the supplier from once a year to every month or somewhere in between, there is a supplier review agenda template and things can be added or removed if needed.
12. Yes, KPI's form a part of each contract without them it is hard to monitor a supplier's performance, but this needs to be looked at for improvements.
13. Yes, now procurement forms part of finance so it is important that it over arches with the areas of that department.
14. Yes, it will.
15. All processes are aligned with PCR 2015 (Public Contracts Regulations).
16. Yes, Kraljic 4 box model helps form all category plans.
17. The general process works well as Procurement is well established within the organisation.

Appendix 11. Complete Answers from the Interview with Anonymous

1. The main role is to purchase and deliver the goods as per contract specification. Responsibility is to make sure goods come in the right amount and quality.
2. Yes, procurement defines the costs which effect the profits that defines how successful the company is.
3. Project schedule improvement, keeping long-term relationships with suppliers and end customers.
4. It is based on how good internal communication is within the company weather the end customer is satisfied with the quality or weather everything is on schedule, if not some of the departments in the university are not functioning well.
5. Finding trustworthy suppliers, cost efficiency and staying on schedule.
6. Suppliers contact the university or they are contacted through previous the contract ties. The candidates should be interviewed and screened by project management and the project buyers.
7. Mainly pricing and quality followed by the ability to stay on schedule.
8. The category manager / procurement manager. In the long run, the supply management team should give their feedback on the current suppliers.
9. The relationship stays positive by having annual meetings, suppliers tell more about their strengths and the university informs them about their needs.
10. Quality risks, time management risks, costs risks which can be avoided by dealing with trustworthy suppliers, and doing cost risk analysis before projects.
11. There is an agenda, suppliers are visited based on the delivery supervision plan.
12. Yes, there is, but the way KPI's are being managed needs to be improved to optimize results.
13. Yes, it would beneficial, by improving internal communication within the company and making sure everybody is aware of what is happening in the project.
14. It would if the new ERP system will connect all the existing systems, has clear user interface and can be used by both the employees and suppliers.
15. We are using RFQ, RFP, open process, competitive process methods.
16. Yes, we use the Kraljic method in our purchasing strategy to reduce costs and increase supplier security.
17. Procurement is functional but there is always a need for improvement.