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Improving internal customer relationship in IT Purchases

Case: Helsinki Metropolia University of Applied Sciences

Helsinki

The study was designed to find out what Metropolia's internal customers expect of the IT purchasing departments services. The study was made based on a case study format. The topic was chosen because of inside information of the processes, a genuine demand for the information in IT Services and general interest in service management and purchasing.

The thesis consists of two theoretical parts and a primary research part. The primary research is considered as the focal point of the research, with the secondary research providing a basis for the new discoveries. The primary research was implemented in the form of a survey that was sent to Metropolia University of Applied Sciences internal customers. The survey consisted of questions related to the role of the purchasing department, how internal customers perceive its services and what expectations they have.

The results of the study show us that the flow of information plays a key role in providing excellent service. It also became clear that service quality could be improved by understanding the internal customers expectations and what they value. Furthermore, customers with different backgrounds value different qualities in service, which should be considered when providing a service.

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1   Introduction

Information technology plays an important role in our lives and reaches us on many levels. In today's world IT is becoming more common in everything we do. We can see this trend in our education system, as iPads, smartphones and Smart Boards[1] are integrated into universities, high schools and even kindergartens. But the general trend, especially in higher education, is constantly looking ahead into new solutions such as MOOCs (massive open online courses), cloud services and streaming[2] lecture videos online.

Ultimately, it is up to the facilitator to utilize the maximum potential technology has to offer. This can be considered as one of the struggles that may slow down the use of technologies available. However, this is why IT Services play an important role in organizations in providing the end users with guidance, knowhow, and the right tools for their jobs.

The purpose of the study is to find ways in which the purchasing department can serve its internal customers in the best way possible in IT purchases. In this case, the study will be implemented in a case study format for Helsinki Metropolia University of Applied Sciences and its internal customers. Although this thesis examines these issues from the purchasing departments perspective, this study can be reflected for entire organizations (especially in the education sector) departments and their relationships. The study will provide noteworthy insights into what internal customers expect from the purchasing department and what factors are most important when aiming to provide above expected service quality. The study will also discuss what factors relate to internal customers expectations and how these can be achieved.

There is very little previous research and material available on the topic as specific as this. Although customer relationship management, service management and service

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[1] Interactive whiteboard

[2] Data streaming, commonly seen in the forms of audio and video streaming, is when a multimedia file can be played back without being completely downloaded first http://www.techterms.com/definition/streaming

quality are common to come across, the unique approach of this thesis will provide new angles to the field of purchasing for internal customers.

1.1   Objectives, scope and limitations of the study

The aim of the present study is to understand and develop 1) the connection between the purchasing department and it's internal customers at Helsinki Metropolia University of Applied Sciences 2) how the customer relationship can be enhanced. The research will aim to improve understanding on what kind of overall benefits the customer and organization could gain from learning about customer needs more deeply. A customer relationship approach will be taken in the study.

As a researcher I will be able to provide inside information on the subject at hand, as I have been working in the purchasing department since April 2012. During my time in the organization I have been able to witness different scenarios where a closer relationship could have made a meaningful difference in the final outcome. This is one of the main reasons behind the decision of studying this topic. Also, considering that the funds we at Metropolia's purchasing department have at our disposal are the taxpayer's money, this brings a whole new angle to the reasons behind the topic choice. The study's topic relevance was also recognized by my superior, the IT Service Manager, who then gave me an official statement for proceeding with the assignment.

This brings us to the main research question:

- What factors are most important when aiming to provide above expected service quality in Metropolia IT purchasing?

The thesis will examine what kind of theoretical approaches can be suggested from the field of service management from a customer relationship approach and how it can be implemented in facilities environment purchasing; provide the case company's purchasing department suggestions to how they could improve in the field of service management and CRM on the basis of primary and secondary research. The empirical part of the study will help understand what internal customers want from the purchasing department, and what areas the purchasing department could develop in.

The study will also concentrate on how the service orientation in the purchasing department can be improved, and how this could be achieved. The aim is to identify errors in communication between internal customers and purchasing department and how to improve current collaboration with the internal customers. What this means in practice is examining how the current methods that internal customers are accustomed to, measure up to new suggested methods that arise from this study. The study will hopefully result in finding appropriate guidelines on what good service is and how this can be achieved.

As mentioned in the introduction, the purchasing departments role in the organization is important and has concrete effects on what tools teaching facilitators have at their disposal. The study made has real potential in achieving better results in this field of work. Helsinki Metropolia University of Applied Sciences is undergoing major structural changes in the coming years, as the organization will be facing a new four-campus plan. It is also clear that in these difficult economic times, new ways of improving inhouse operations are critical for Metropolia to stay in the top half of the University of Applied Sciences rankings.

In a higher education institute like Metropolia, teaching is the number one service or end product that is provided. Metropolia's staff is ultimately serving students – the customers. However, support functions such as the IT Services and purchasing department also serves almost all staff members of Metropolia. The purchasing department in Metropolia plays an important role in providing the organization with the best possible tools in the most economical way as possible.

 Although current operations can be considered adequate, new ways of improving the cooperation between internal customers and the purchasing department should be considered. The gap that exists between these components will be addressed in this study, leading to a greater understanding of the sources of unsatisfactory outcomes in purchasing and customer support satisfaction. The outcomes of the study would have potential for changing the direction of certain project purchases, providing guidance towards more sustainable and economical decisions.

The limitations of the study are the availability of topic specific theory and articles on organizations departments with their key focus on serving internal customers. Although theory on service quality and service management is common to come across, the subject matter is often very general or takes a business point of view (for example, a hotel's service levels). Another possible limitation is that a large proportion of relevant theory is rather dated. Therefore the empirical part of the study is in a greater role in the overall result. However, a limitation was recognized in terms of the survey; which is that teachers, managers, directors and other staff members are often times busy with work-related matters, and only have a very limited time for answering surveys. Staff members might also not be familiar with the structure of Metropolia's departments, and may confuse IT Services and the purchasing department as a single unit.

1.2   Research methodology

The study is based on a problem-solving style, as the study is made for a real organization. The focus of the study is ultimately on the organization's purchasing department and the internal customers, but secondary study plays a central role in providing a basis for the empirical study. The overall plan is to study the problem from the organizations perspective, contextualized with reference to relevant literature.

The study conducted is composed of primary and secondary research: secondary research consists of the literature available from books and online articles on the related topics, from which relevant theory was applied to the primary research. Theory from several topic areas was included in the study, composing a structured build-up of information to find and support ideas on the practical aspect of the study (case company/organization). The secondary research will examine and explain key concepts in the field of purchasing for internal customers, service management and service quality. This will help understand how the numerous factors relate to each other and ultimately form a definition of the topic area. Also various articles and earlier research made on the topic will be discussed to help relate to the case study.

The interview part of the study will provide thorough insights into how the purchasing department's operations are perceived by the main internal customers in the organization. Primary research is a vital part of the research, as very little information on inter-

nal purchasing is available from such a specific point of view (Higher education organization). Due to the fact that the research topic at hand has not yet been studied much, it was clear that empirical data should have a large contribution to the study. This would give a comprehensive view of a support function operating in a service-oriented organization.

The email surveying technique was applied as the research method. This way the survey could reach a larger audience. It was known that reliable data was available from the department's asset management software called Requeste. This meant that it was possible to access all data on who has made purchase requests in a certain time period; who has approved these purchase requests; what products were requested (and eventually purchased) and what value these purchases had. However, the research does not go into specifics on what products were bought and how they are valued, but rather the data was used to ensure the survey was sent to the appropriate applicants. This was a way to attempt for a higher response rate to the survey.

Face-to-face interviewing was also a possibility. This way it would have been possible to gain deeper insights into what internal customers thought about the purchasing departments services. Also it would have given the opportunity to follow up on questions with discussion. However, this method would not have provided enough information in terms of scale. Interviewing only a handful of internal customers would not be able to represent Metropolia in as an organization. This problem was addressed by taking a relatively quantitative approach; applying the survey technique via email to attempt to receive a wholesome representation of the full demographic of Metropolia.

The reliability of the information must be considered as well. The survey conducted was in English; this meant that there was a possibility of respondents misunderstanding clauses and terms. However, the respondent was also given the opportunity to answer in Finnish. This way the respondent could provide more detailed answers in their native language. It is also important to note that respondents could make their input anonymously. It is also a part of Metropolia's strategy and values to work in a transparent environment.

1.3   Literature review

The literature review for the study conducted focuses onservice management and marketing (Grönroos 2000), a customer relationship management approach, as well as purchasing in a facilities environment by Weele (2009).

Purchasing and Supply Chain Management by Weele (2009) gives an insight into the processes and differences between purchasing to make and purchasing to use i.e. purchasing in a facilities environment. Weele (2009) separates the different aspects, as to how internal customers react differently to the purchasing department. This customer relationship aspect is followed by service management theory and the customer relationship approach provided by Grönroos (2000). The disadvantage from Grönroos (2000) is that the theory is concentrated on external customers and their relationships.

Service quality is covered by Rust and Oliver (1994) in Service Quality: New Directions in Theory and Practice. Rust and Oliver provide a clear view into the measurement of service quality, approaching the concept with the five dimensions: tangibles, reliability, responsiveness, assurance and empathy. The tools that Rust and Oliver present bring a whole new angle to the performance measurement spheres. The concept of service quality is also thoroughly established by J. Fitzsimmons and M. Fitzsimmons (1994) in Service Management: Operations, Strategy, and Information Technology.

Especially with the service management and service quality books, it is important to note that although the theory is extremely detailed and thorough, they require more from the reader to establish a connection between the given theory and the initial research question for the case company. This is much due to the examples and theory based on private companies, where the service aspect is more concentrated on businesses such as hotel, car rental, airline and IT companies. The disadvantage of the available literature is that there is very little information on such a specific topic like IT purchasing and its internal customers in a higher education institute and rarely concerned with public procurement and internal customer service. It is also apparent that in order to build a comprehensive study of the topic, several areas of theory must be contributed (service management, customer relationship management, purchasing in facilities environment and service quality).

Some articles found on internal customers gave a refreshing touch, especially as the material on such topics was scarce. Internal Customers Balance Purchasing Departments by Peter E. O'Reilly gave a very original insight to a study made that explored what internal customers thought of the performance of their purchasing departments. The surveys used were also aimed at organizations in the service industry, which require different measurement processes, than more traditional manufacturing processes.

A blog post "How to keep internal customers happy and satisfied" by Teri Yanovitch, gave a more relaxed way of promoting the importance of satisfying internal customers, and how this would ultimately have a distinguished result in the end product of the organization.

2   Purchasing for internal customers

2.1   Facilities environment purchasing

The following chapter will talk about what facilities purchasing is and what qualities internal customers appreciate. It will also point out how the views can be different from the purchasing departments perspective. The customer relationship aspect will also be discussed. This will be followed by suggestions on how internal purchasing activities can be improved based on Weele's (2009) views.

Investopedia (2013) provides a clear definition of central purchasing, which is another term for Weele's term of facilities in a facilities environment:

> A department within a business or organization that is responsible for making all procurements. Central purchasing works with other departments and agencies to consolidate orders for products, and then use economies of scale in order to exact cheaper prices. Additionally, organizations use a central purchasing department in order to simplify a procurement budget or to keep the organization's spending in a centralized location that can be checked for discrepancies easily.

Weele (2009: 79) states, "In particular, effective purchasing in a facilities environment requires that buyers are sympathetic to the needs and requirements of their internal customers". The statement identifies the need for the purchasing to deeply understand the needs and requirements of the customer, rather than only seeing the customer as a duty. Weele (2009) recognizes this, in how the internal customer perceives the role of the purchasing department, but also how the purchasing department sees its role.

Later on, Weele (2009: 79) also points out how managers in different departments appreciate certain aspects and qualities of the purchasing department. The most valued aspects were easy access by telephone or face-to-face contact, quick response time to questions, prompt delivery of goods and services ordered, consistent quality of goods delivered and immediate feedback in the case of delivery problems. If the purchasing department were able to meet these factors, internal customers would allow purchasing to make more pro-active solutions. However, it is clear that the purchasing department will still emphasize the significance of low price, a good contract and clear specifications. (Weele 2009: 79)

Figure 1 illustrates how the perception of other internal departments perceptions compare to those of the purchasing department.
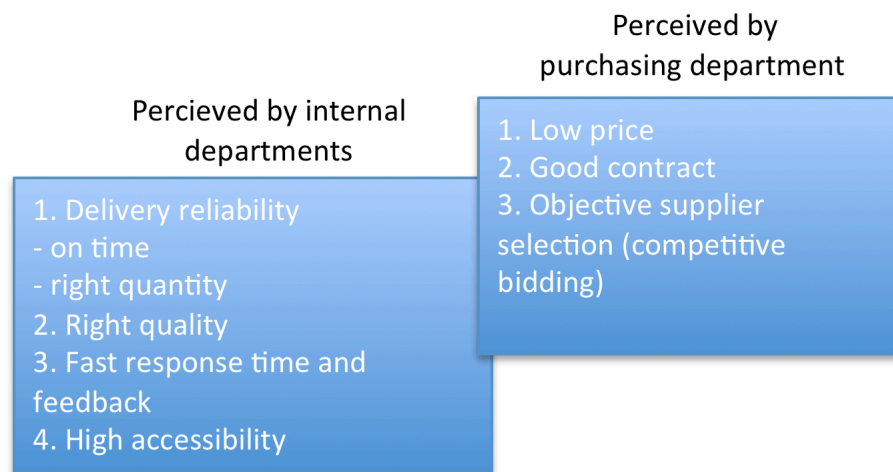
Figure 1. Differences in expectation of purchasing's role in a facilities environment (Weele 2009: 80)

Although the relationship between the internal customers and the purchasing department can be well balanced, friction between them can lead to difficulties and even radical changes. Thus, problems may lead to significant boundary problems with the departments, where internal departments would ultimately prefer to make purchasing activities by themselves (Weele 2009: 80).

Furthermore, Weele (2009: 80) points out that the prime concern of the purchasing department is to ultimately improve the customer orientation. The five approaches Weele (2009: 80) identifies are: 1) analyse the total purchasing spend for each internal department. This would help develop an understanding of the internal market share of the purchasing department for both specific departments and also product categories. 2) Assess internal customer satisfaction thoroughly. Each individual department should provide feedback on how they perceive the services of the purchasing department. 3) Based on the results of the previous step, set targets on how to improve on the areas that received unsatisfactory reactions. The potential for improvements can vary greatly in various categories. In a case of software purchasing, if the purchasing department has a clear lack of expertise, it must be determined whether to build up expertise to

enable better results. 4) Consider forming cross-functional buying teams when improving the purchasing departments expertise. Specialists from other departments should work together with the purchasing department in order to build up expertise in specific fields. 5) Develop sourcing strategies for each buying team. The five approaches pointed out by Weele do indeed seem reasonable improvements, however the question of where resources can be allocated is a point to think about.

In the second approach Weele (2009: 80) pointed out how each individual department should provide feedback on the services that the purchasing department provides. This can be identified as a crucial factor in the purchasing operations in Metropolia. The third point that Weele (2009: 80) makes is how the results of the previous step should be exploited and used to set targets on improving the service quality.

Weele (2009: 82) summarizes suggestions on how facilities environment buying can be improved:

- Efforts in reducing product variety through standardization
- Efforts in supplier reduction through introducing tender boards, sourcing committees
- Improving purchasing systems and procedures
- Improving product and market knowledge
- Improving purchasing process management
- Introduce electronic catalogues for routine items
- Simplify authorization procedures
- Simplify invoice handling and approval procedures

2.2   Performance and perception of the purchasing department

Performance and customer satisfaction in purchasing as explained by Weele (2009) can be considered an important issue. Understanding how to measure and monitor the performance should ultimately lead to better performance in various categories (Weele 2009). This however, is described to be more complex in an internal customer service environment, as it is in a more traditional manufacturing environment. It is due to the issues such as intangibility, heterogeneity, perishability and inseparability of production

and consumption that require greater input in obtaining information from internal customers on performance (Weele 2009)

Based on Weele's (2009) theory, we can say that internal purchasing should be looked at from a different perspective compared to traditional purchasing for manufacturing purposes. The relationship between the purchasing department and internal customers should be on solid ground, where both parties understand their role in the organization. Weele also points out certain qualities that internal customers appreciate from the purchasing department. These in turn could lead to more trust, followed by internal customers allowing the purchasing department to make more pro-active actions. However, problems in certain service aspects could also lead to friction between internal customers and the purchasing department. This could be followed by even radical changes, such as where internal customers would prefer to make purchasing activities themselves.

3   Service management and service quality

3.1   Service management

One of the major concepts that will be discussed is the service management concept, which is highlighted to link the relationship between service management and the concept of purchasing in a facilities environment. In the case of Metropolia's purchasing, these two are interrelated and thus should be discussed in detail. This chapter will also discuss service quality with the aid of a study based a concept called SERVQUAL. These topics will provide an overview on what service quality is composed of and what key components can be used to improve the quality of services.

Christian Grönroos, a professor of service marketing in Hanken School of Economics, explains service management to be more concerned with understanding how to manage a business in service competition. Services can however, also be interpreted in a more diverse approach (2000: 195). Grönroos (2000: 195,196) defines service management in the following way:

> Understanding the value customers receive by consuming or using the offerings of an organization and knowing how services alone or together with information, physical goods or other kinds of tangibles contribute to this value; understanding how total quality is perceived in customer relationships to facilitate such value and how it changes over time; understanding how an organization (people, technology and physical resources, systems and customers) will be able to produce and deliver this perceived quality and value.

Grönroos (2000: 196) also highlights that the organization needs to understand the customer's perceived quality that customers look for in services and how to create value to the customers.

Continuing on service management, Grönroos puts emphasis on the management of business in service competition, which is - in most levels - the case with the purchasing department in Metropolia. It is also the perceived quality that customers look for in services that they value. Keeping Grönroos' points in mind, this takes us to the next concept of service quality, where in turn the assessment of quality is made during the service delivery process (J. and M. Fitzsimmons 1994: 132). J. and M. Fitzsimmons explain that the customer satisfaction in services can be defined by mirroring the per-

ceptions of service received with expectations of service desired. It is when the expectations are exceeded, the service received is perceived as exceptional quality. When in turn the already formed expectations are not met, the service quality is considered unacceptable. This theory of customer expectations is also explained in a nutshell by Ian Chaston in Customer-focused Marketing (Chaston 1993: 151):

> The reality of delivering customer satisfaction in the service sector is that it cannot be achieved merely by focusing on a single variable such as range of product choice or employee interpersonal skills. Satisfaction occurs when customer expectations are equal to the perceptions formed during all the processes associated with selection, purchase and consumption of the desired service.

However, Chaston (1993: 151) tells us how only a single variable cannot solely achieve customer satisfaction; rather it is a chain of processes associated to the service.

In his text, Chaston (1993: 151) focuses on the influencers that build up the perceptions of the service. These components are everything that is associated with all of the organizations facets, whether it is the face-to-face contact with personnel, or the physical spaces that the service provider operates in. This service provision process is explained in the figure below:
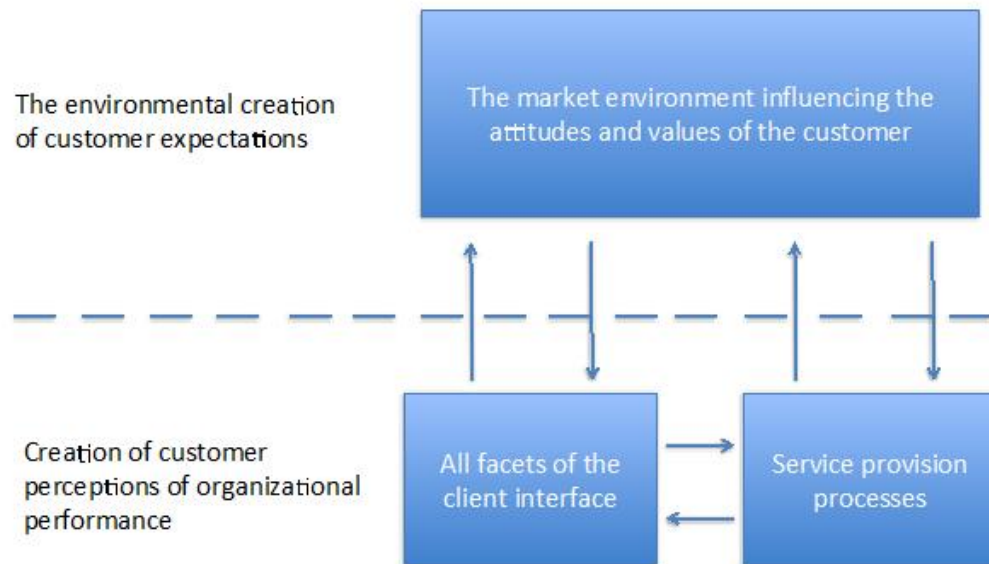
Figure 2. The interaction of customer and organization in the service provision process (Chaston 1993: 151)

3.2 Service quality

The dimensions of service quality, as retold by J. and M. Fitzsimmons (1993: 151), break down to five principals: First, reliability – the ability to perform a promised level of service both dependably and accurately. Reliability in this case means that the promised service is accomplished on time, in the same manner and without reoccurring mistakes Second, responsiveness – providing customers help willingly in a proactive manner. This in practice means, for example, not letting customers wait for service for no apparent reason. The third, assurance is the employee's ability to convey trust and confidence. Having respect for the customer and showing politeness in delivering the service. The fourth, empathy: the provision of caring and providing individualized customer care. These traits are for example, approachability, sensitivity and effort to understand the customer's needs. And lastly, the fifth dimension of tangibles: the appearance of physical facilities, equipment, personnel and communication materials. These factors communicate the care and attention that is given by the service provider. It is these five principals or dimensions that build up to the overall service quality of the given deliverable. The service quality, according to J. and M. Fitzsimmons (1994:

133), arises as the customer compares the level of service expected and perceived from the five dimensions point of view.

The conceptual figure below underlines the fundamental areas of the service quality dimensions and how they translate to the perceived service quality, meaning the end product, or deliverable of the service:
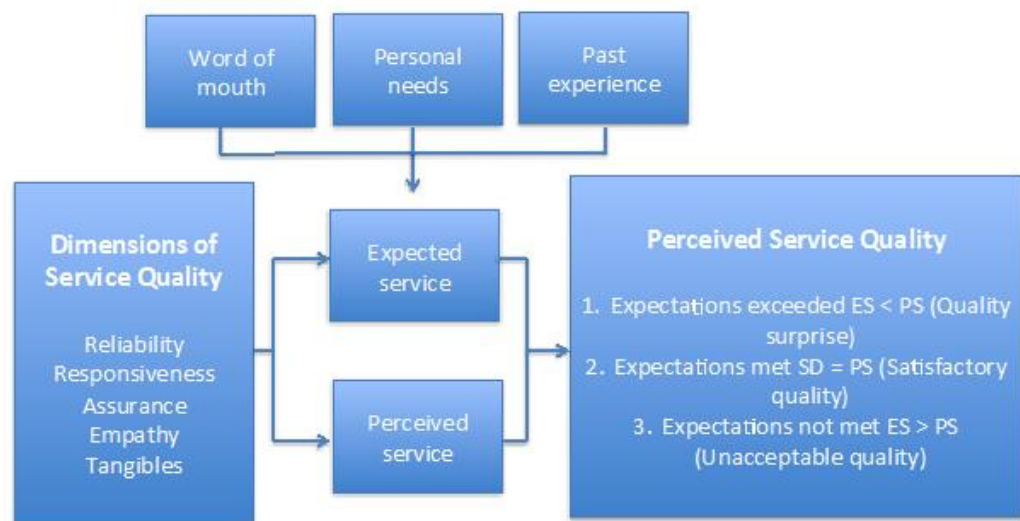
Figure 3. Perceived Service Quality (Fitzsimmons 1994: 133)

The service quality and its five dimensions show us how these areas should by no means be neglected, but quite the opposite. Between recognizing the need for improving service quality and finding potential ways to make improvements, lies the tool by which organizations can learn about how customers, internal or external, can communicate their desires - a tool by which organizations can measure the performance of their delivered service. The following study, focusing on the performance of the purchasing department, will open the question of how performance measurement can be implemented. The concept of Service Quality, or SERVQUAL was created by three professors; Parasuraman, Zeithaml and Berry from the Texas A&M University (O'Reilly

1997; Wikipedia, 2013). The concept was formed, as they concluded in their earlier research, that "service functions due to such factors as intangibility, heterogeneity, perishability, and inseparability of production and consumption, require a greater deal of input related to customers expectations of service." (O'Reilly 1997)

3.3 SERVQUAL

O'Reilly (1997) conducted a survey, which explored what internal customers thought of the performance of their organizations Purchasing Departments. The survey was made keeping in mind that service oriented organizations require different measurement processes that traditional manufacturing organizations. The conclusions made from the feedback would allow Purchasing Departments become better prepared in meeting the service-related challenges that internal customers have. (O'Reilly 1997)

O'Reilly's (1997) research focused on the distribution of a four-part questionnaire for internal customers and a similar questionnaire was distributed to the management of the participating Purchasing Departments. The questions were aimed at internal customers who were asked to inform about their expectations, service perceptions, the relative importance of service dimensions and other miscellaneous service questions. The management would answer to a similar set of questions, for example on what their views were on customers' perceptions. 25 firms and institutions completed the questionnaire.

Some of the issues that were asked to evaluate was service factors such as: understanding business needs; routinely solicit input; provide value added services and; allow for cost economies. Respondents answered based on a Likert Scale, answers ranging from 1 (strongly disagree) to 7 (strongly agree). Figure 4 illustrates the results:

Exhibit 1 - **SERVICE FACTOR ANALYSIS**

SERVICE FACTORS	CUSTOMER RESPONSES	MANAGEMENT RESPONSES
Understanding Business Needs	5.02	6.00
Routinely Solicit Input	4.06	5.04
Provide Value Added Services	4.65	5.87
Allow for Cost Economies	4.88	6.27

Figure 4. Service factor analysis (O'Reilly 1997)

O'Reilly's study (1997) shows that Management's numbers are roughly one point high-er than their customers. O'Reilly also points out that one of the possible causes for this discretion may rest in management's failure to be as involved with their customers as their customers would like. O'Reilly adds that a greater interaction with customers is required in all of the service factors.

The second question O'Reilly asks is whether the Purchasing Departments are too ser-vice-driven or too price-driven. Figure 5. Illustrates the results:

Exhibit 2 **SERVICE VS. PRICE ANALYSIS**

SERVICE/PRICE APPROACHES	CUSTOMER RESPONSES	MANAGEMENT RESPONSES
Too Service-Driven	6 %	4 %-
Too Price-Driven	29%	16%
Service-Price Balance	65%	80%
Total	100%	100%

Figure 5. Service vs. price analysis (O'Reilly 1997)

O'Reilly's data shows that customers perceive the Purchasing Department to be more price-driven than that of the Purchasing Department's management. According to

O'Reilly here lies a dilemma, as one of the objectives of a Purchasing Department is to keep operating costs low. However, one of the problems with achieving this is being perceived as allowing other elements, such as service and quality, to suffer.

The third question in O'Reilly's (1997) survey asked customers how they felt about the overall performance of the Purchasing Department. The following figure illustrates the results:

Exhibit 3 SERVICE LEVEL ANALYSIS

SERVICE LEVELS	CUSTOMER RESPONSES # of Firms-%	MANAGEMENT RESPONSES # of Firms-%
Excellent	0-0%	9-36%-
Good	16-64%	13-52%
Fair	9-36%	3-12%-
Total	25-100%	25-100%

Figure 6. Service level analysis (O'Reilly 1997)

O'Reilly's survey results indicate that none of the customers answered the service quality to be "excellent", however, 36% of Purchasing Department managers felt their organizations did provide "excellent" services. According to O'Reilly, this shows us, once again, that management's views are distorted due to lack of understating their customers.

The Five Dimensions Of Service comes into play in the next part of the survey. As mentioned earlier, the SERVQUAL technique by Parasuraman, Zeithaml and Berry identified the five dimensions relative to providing service (O'Reilly 1997). The five traits were surveyed, and the results are illustrated below in figure 7.

Exhibit 4 - RELATIVE IMPORTANCE OF SERVICE DIMENSIONS

SERVICE DIMENSIONS	CUSTOMER RESPONSES	MANAGEMENT RESPONSES	PREVIOUS RESEARCH STUDIES
Tangible	8.3	7.0	11.0
Reliability	34.7	33.4	32.0
Responsiveness	22.9	23.4	22.0
Assurance	20.3	22.4	19.0
Empathy	13.8	13.8	16.0
Total	100.0	100.0	100.0

Figure 7. Relative importance of service dimensions (O'Reilly 1997)

According to O'Reilly (1997), all research performed over the years using SERVQUAL technique have had the five dimensions ranked the way they are here in this study. Generally, all service flaws related to reliability should be under attention the most, while tangible factors should have the least attention paid to them (O'Reilly 1997).

O'Reilly makes concluding observations, that despite a relatively small number of internal customers took part in the survey, internal customers provide an excellent source of measuring the effectiveness of Purchasing Departments. O'Reilly continues explaining that if internal customers are not satisfied, it is difficult for service organizations to be successful in contributing to their firms overall competitive advantage. (O'Reilly 1997).

As a conclusion, service management and service quality can be defined as understanding the value customers receive, whether the received total quality is a combination of service, information and physical goods. It is also the quality that customers look for in the services that they value. Service quality and customer satisfaction can be determined by comparing the expectations of the service desired to the actual service provided.

4   Purchasing at the case company

4.1   Background of the case company

As a publicly funded organization, Metropolia university of applied sciences is obligated by law to follow the Finnish law for universities of applied sciences (Finlex Data bank 2013). Strict regulations in terms of quality control issues, strategically set goals and boundaries and limitations in budgets, aim to provide a well-structured operational model to provide quality higher education to meet the demands of current and future labor market trends.

Finnish university of applied sciences are obligated to follow the public procurement regulations. "The main purpose of the procurement regulation is to increase the efficiency of the use of public funds and also to enhance the competitiveness of European businesses – including Finnish businesses." (Ministry of Employment and the Economy 2013) These regulations, in terms of procurement, provide a strong foundation to be able to secure well-planned purchasing contracts with the best-suited suppliers. It is however, Metropolia's responsibility to ensure that products, which the public tendering is based on, meet the needs of the higher education organization.

Difficult economic times have also affected higher education in Finland. Budget cuts at university of applied sciences put additional pressure on providing well-equipped teaching facilities, as well as other teaching infrastructure with fewer funds.

4.2   Current procedures in purchasing

Before the study moves onto the primary research phase, it is important to fully understand the current role of the purchasing department. This way the analysis of the empirical results can better communicate where the improvement areas are, and where there is a gap between supply and demand in services.

The purchasing department is a unit under IT Services. However, the role of the purchasing department could be considered as a fairly loose service provider in IT related cases. Currently the purchasing department focuses on the following tasks:

- Competitive bidding for supplier contracts
- Organizing basic IT solutions that teaching facilities require
- AV-equipment in classrooms and auditoriums
- Providing services for Metropolia's internal customers (teachers, other staff members)
- Placing orders for single laptops, tablets and other equipment upon request
- Reporting, billing, etc.

The purchasing departments role can be described to be a support function, which operates on an ad-hoc basis, rather than on a more proactive basis. What this means in practise, is that initially the role of the purchasing department is to comply with requests made by the internal customers. It is at this point that the purchasing departments relatively passive role can become a negative attribute, as occasionally internal customers do not have the required knowhow to make a technologically sound purchase decision. This is due to the fact that in many cases (relatively small purchases, such as tablets, laptops, smartphones etc.) the decision is in the hands of the customer, and the customer's superior. Usually at this stage the decision has already been made and would not be discussed further (provided that the purchase request is within the realms of Metropolia's guidelines).

4.3   Performance measurement

The purchasing department, much like IT Services as a whole has very little KPI's, in the way private companies have (PwC 2007). This is one of the reasons why organizations in the public sector (especially is service oriented organizations) should be studied, as they have larger potential for making improvements and enhancements.

The purchasing department's KPI's almost exclusively concern with price and quality of purchased products. This is much due to the public procurement regulations, which have a tendency of focusing the invitation for tenders towards price. This being said, it is in the tenderers responsibility to be able to specify a level of quality than can be examined subjectively (for example specifications of computer hardware). Apart from these factors, the purchasing department is not currently under any performance

measurement, especially in terms of providing a certain level of service. It is also due to the nature of the services provided that KPI's are not being implemented. This is why surveys made on customer satisfaction should be utilized in order to obtain insights into what internal customers feel about the service.

5 Empirical study and research findings

5.1 Survey and background of respondents

In the following chapter I will discuss what questions were asked in the survey and introduce the respondents that have taken part in the survey. After this the results of the survey will be analysed thoroughly with the aid of various graphical illustrations.

The survey questions were formed based on nature of the purchasing department's current services and which areas were thought to be the most important as a service provider. The survey was also influenced by theoretical background discussed in earlier chapters, such as the five dimensions of service quality (J. Fitzsimmons and M. Fitzsimmons, 1994), Weele's (2009) discussion on departments' boundary problems and several others. These numerous factors molded the survey so that it could provide as valuable information as possible.

The survey had four background questions: Position in Metropolia; Department; Number of years working in Metropolia; and Approximately how often have you made a purchase request or approved a purchase for an employee? The position of the respondent could be either Manager level or employee level (lecturer or other staff). The department question would possibly provide information whether different fields of study have correlations with certain survey answers. The experience of years as a Metropolia employee could also serve as valuable information. Finally, the last background question would provide a range of how often a respondent has used the purchasing departments services – this could provide some degree of weight so certain answers.

The first actual survey question was "What do you think is the role of the purchasing department?". This question was aimed to provide information whether the respondent was aware of the purchasing departments activities – this would help determine some idea of what the respondent might expect from the purchasing department. The second question: "Do you think there is a gap between your expectations and actual delivered service?"

The third question: "What are these expectations you have for the purchasing department?" This would provide insight into what internal customers expect from the service provider. The question would give ideas by the means of Weele's (2009) theory of differences in expectation of purchasing's role in a facilities environment (see page 11 figure 1.) The fourth question in the survey was "Would you prefer if each department would have total control to their IT purchases?" This question was asked to see if there were internal customers that felt they would rather make purchasing activities themselves. If the answer were "Yes", the reasons behind this would be examined. The fifth question "What qualities do you appreciate of the purchasing department" would provide insight into how the customer forms the perception of good service. This could also be compared to how they vary compared to what expectations internal customers have. The sixth question "How would you rate the service level of the purchasing department?" would give a direct answer to the service quality – these could also be compared to qualitative answers. The seventh and final question "Do you feel the purchasing department is: Price-driven, Service-driven or Service-price balance" would provide information to how internal customers perceive the purchasing department to be out of the three options.

The survey was first sent to 100 staff members of Metropolia that have made a purchase request, or have approved a purchase request to their subordinate. The demographic consisted of 30 managers and 70 lecturers or other staff members. As mentioned before, it was expected that the response rate would be relatively high, as the sample was chosen based on reliable data available. However, after two days only 15 responses were logged into the electronic form. This meant that only 15% had responded to the survey. An additional 76 lecturers or other staff members were informed about the survey via email to increase the responses. The additional 76 members of staff were also taken from data available on previous purchase requests made. Also, an email reminder was required for the first mailing list, which was sent on the same day. This meant that the survey had been sent out to 176 members of staff.

The survey was published 10.9.2012 10:00 and was open until 17.9.2012 12:00. This gave respondents a week time to answer. The email addresses were taken from the asset management software used by the purchasing department. Roughly half of the questions had a drop down menu or radio button format, where respondents had to

choose from several options available. The second half consisted of open-ended questions, where the respondent could express their views more freely.

5.2   Analysis of empirical results

The survey received a total of 37 answers, translating to 21% (37/176*100).

The survey started with background questions. The results are illustrated in the figures below:
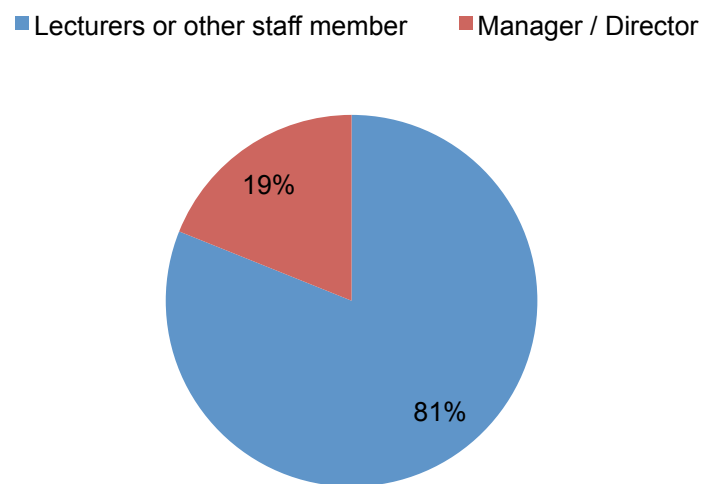

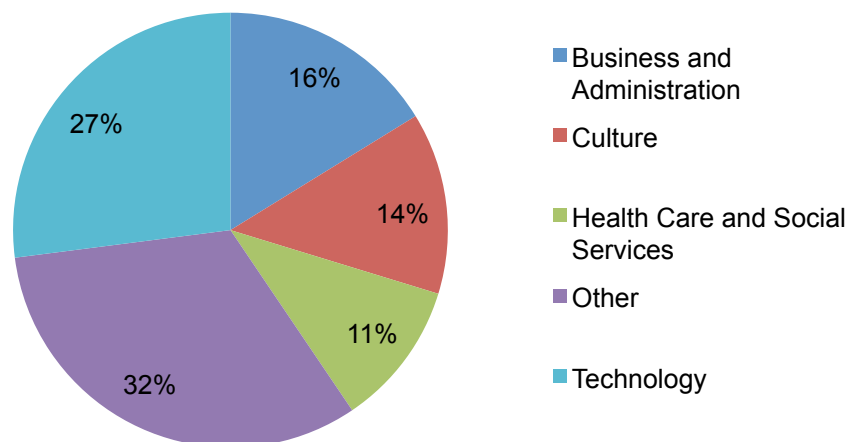Figure 8. Position of respondent
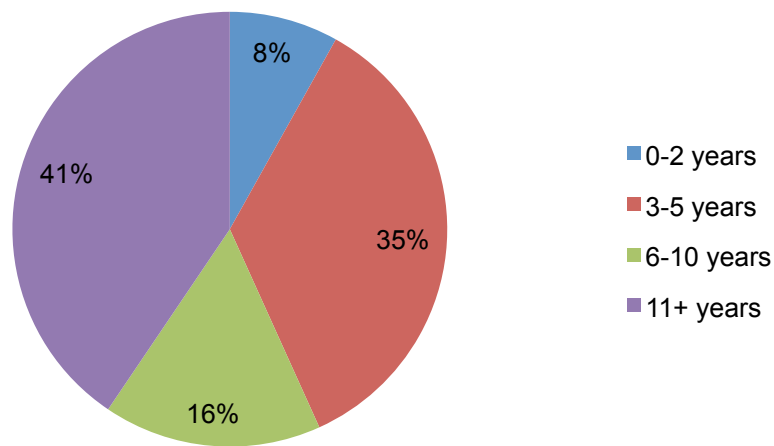

Figure 9. Department of respondent

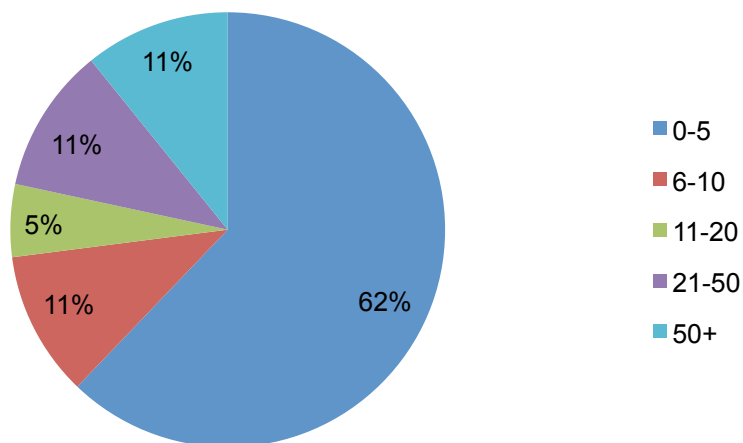Figure 10. Number of years working for Metropolia

Figure 11. Number of purchase requests made / approved

The background questions were followed by 7 questions regarding Metropolia's purchasing department.

The first question was: "What do you think is the role of the purchasing department?" As this was an open-ended question, the method of analysis was to break the answers down into categories. Each answer that contained information related to a certain topic was counted as one. The figure below represents the division of answers to these categories:
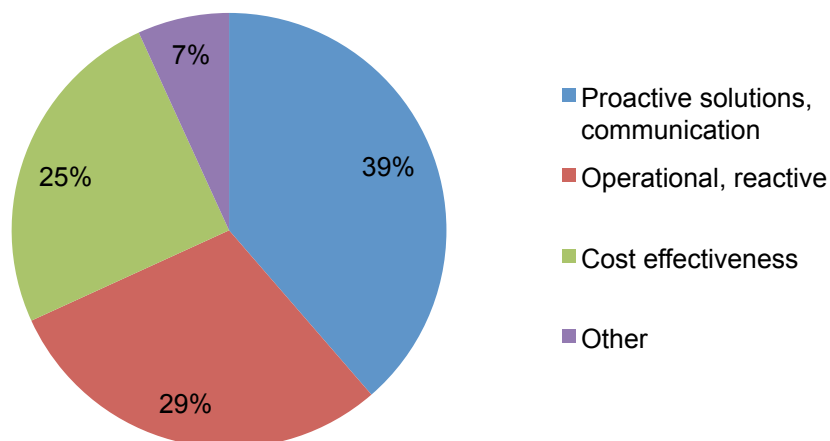
Figure 12. The role of the purchasing department

Surprisingly, answers were fairly easy to divide into the 3-4 themes. Only 7% of answers had to be categorized into "Other", as such a large proportion of answers were directly related to the groups indicated in the figure.

The results show that 39 % of answers contained information related to subjects, such as pro-activeness; providing information and help; providing solutions to specific needs etc.

25% of answers were directly related to ensuring cost effectiveness with available resources. Typical answers were for example: "Gain advantage of combining needs and volumes in a large organization", "To ensure best price" and "To have good equipment available at a decent price".

29% of answers related to the purchasing department having a function of acting as an operational service provider; doing what the customer wants. Common answers were for example: "To acquire and deliver the products we want", or "make a purchase".

An interesting phenomenon was that of the 6 respondents who worked in Business and Administration, 5 of them saw the role of the purchasing department to provide proac-

tive solutions and communication. Also, it is worth mentioning that only 2 of the 10 respondents in Technology responded in this way. However, from the Technology department 4 out of the 10 answered Cost effectiveness and another 4 answered Operational and reactive.

The second question in the survey was "Do you think there is a gap between your expectations and actual delivered service?" The results are illustrated below:
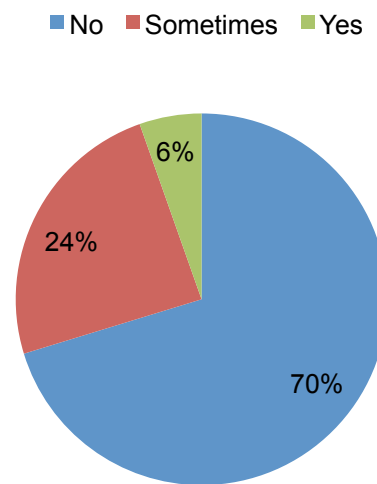

Figure 13. Gap between expectations and delivered service

An interesting finding is also that 3/5 of the culture respondents answered "Sometimes", possibly indicating a trend that internal customers from culture have different expectations that aren't being met as well as on average. It may also tell us that internal customers working in culture should be provided with different approaches of service due to their dissimilar needs. Unfortunately due to the scarcity of data, conclusions cannot be based on this result at this point.

The third question in the survey was "What are these expectations you have for the purchasing department?" With this question, I wanted to find out what qualities internal customers expected or valued from the purchasing department. The answers were very similar to what Weele (2009: 79) described: "Easy access by telephone or face-to-face contact, quick response times to questions, prompt delivery of goods and services ordered, consistent quality of goods delivered and immediate feedback in the case of

delivery problems." Again, most responses could quite easily be categorized, or coded into 4 themes; Prompt deliveries, Easy access and communication; Expert knowledge; Quality of goods and other. The figure below illustrates how the responses were divided:
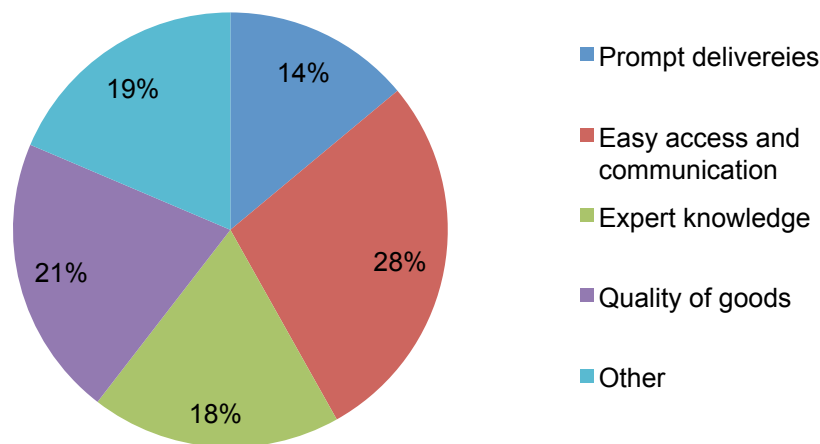

Figure 14. What are these expectations you have for the purchasing department?

Easy access and communication came up the most in the survey answers. 28% reported their expectations to concern a good level of communication and a sense of proactivity as well. Answers related to this category included "Flexible and a listening process", "When to contact and whom? Where to find info? Dumping in Tuubi is no communication" and "Professional help and service".

The other 4 categories of answers were divided relatively equally. Quality of goods was also a very important expectation from internal customers at 21% of answers. This was expected from the respondents, however the communication factor was a surprisingly important expectation.

The following figures together will try and explain whether there are potential boundary problems between the purchasing department and its internal customers. The figures represent the answers for question 4. "Would you prefer if each department would have total control to their IT purchases? (IT Services and purchasing department would still provide classroom equipment, projectors etc.)
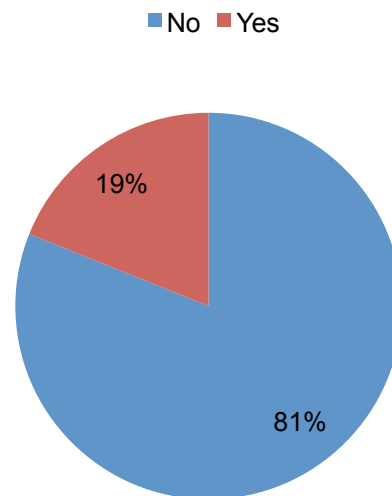
No ■ Yes

Figure 15. Would you prefer if each department would have total control to their IT purchases?

The results in figure 15 indicate that 19% of respondents would like to have total control over their purchasing. As mentioned in earlier chapters Weele (2009: 80) implies that problems between the purchasing department and its internal customers may lead to even radical changes. Friction may result in internal customer's own departments preferring to make purchasing activities by themselves. This phenomenon can be considered at least as partly true, as 5 of the respondents that felt there is a gap in service, also would prefer if their department had total control over their purchases.
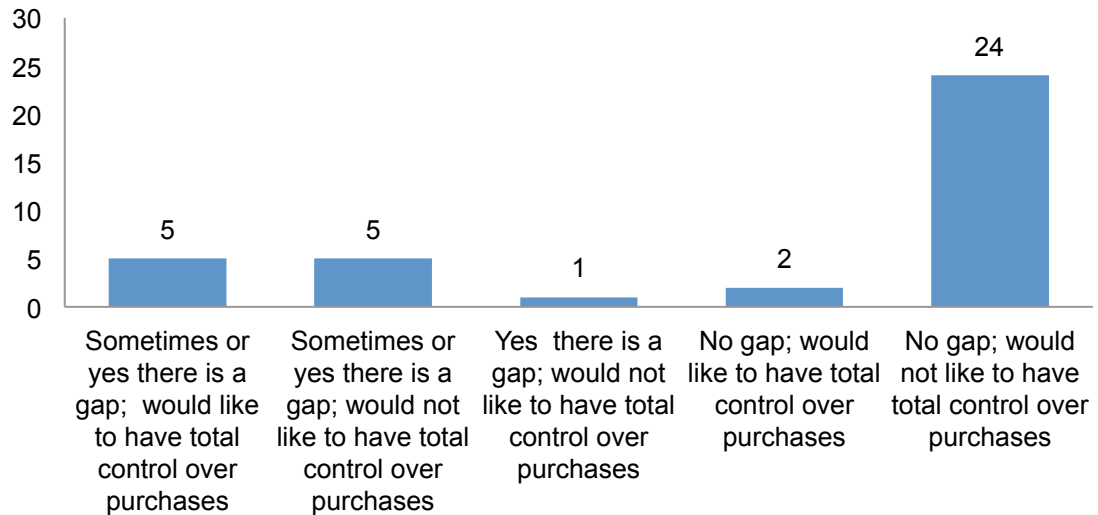
Figure 16. Relationship between gap in service and preferring to make purchasing activities by themselves

Listed below are some of the comments mentioned in the case where the respondent answered "yes" to "Would you prefer if each department would have total control to their IT purchases?"

"In design we have special IT purchases so it would be easier if we had total control."
"IT does not listen to the customer; nor is knowledgeable enough to know the needs."
"On some smaller purchases the process is much faster."
"Usually IT teachers know quite well what they want."

In the case of special IT purchases the possible lack of expertise can be a possibility. The challenge in providing each internal customer with special services is the sheer lack of resources available. Additionally, Weele (2009) claims that facilities environment purchasing can be improved through standardization and efforts in supplier reduction. This may however, be a way to enhance more common purchases, but with specialization.

The fifth question, "What qualities do you appreciate of the purchasing department and its services?" also provided a large scale of qualitative answers. These were also grouped into categories to make analysis easier. A large proportion of the answers were related to the answers to an earlier question, "What are these expectations you have for the purchasing department?" However, a lot of respondents did have fairly different answers between these two questions.

The responses were categorized into four groups: Speed of service, Expertise, Customer service skills and other. The figure below illustrates the division of responses:
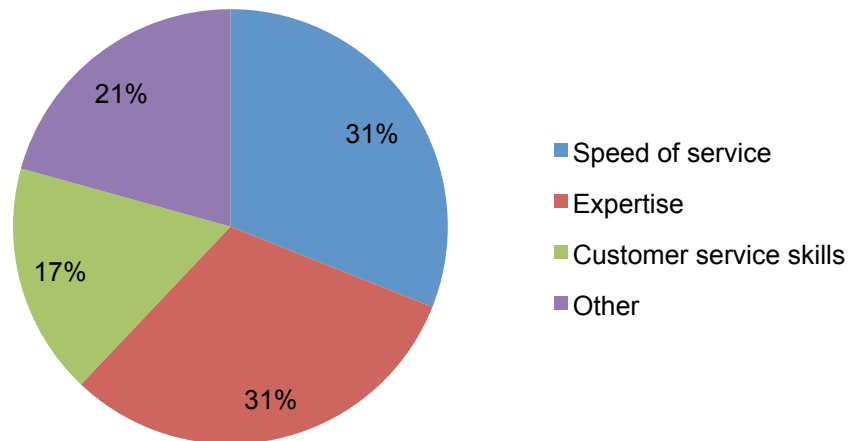

Figure 17. What qualities do you appreciate of the purchasing department and its services?

It was interesting to find out that Quality of goods was not directly mentioned at all, where as in the question of expectations (see Figure 14) it came up in 21% of the answers. In addition, speed of service grew to become the most common answer, tied with "Expertise" at 31%. Customer service skills and communication was no longer seen as much in this question, but was in fact considered an important factor in the question of expectations reaching 28% (see Figure 14). This gives the impression that good communication skills are a vital trait in customer service, with the speed of service and expertise considered more of an additional advantage in services.

The next question was asked to evaluate the service level of the purchasing department. Four options were given: Excellent, Good, Fair and Poor.
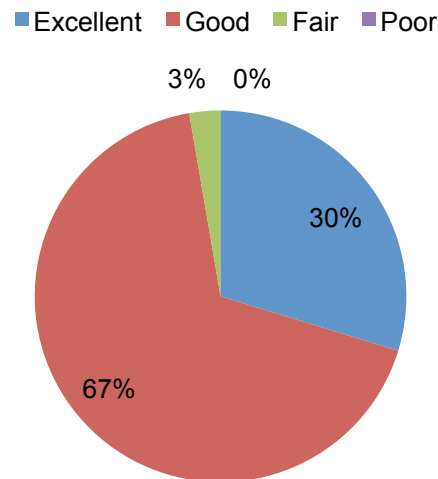
Figure 18. How would you rate the service level of the purchasing department?

Only 30% of respondents thought service level was "Excellent". However, a generous 67% thought service was "Good". Only 3% claimed it to be "Fair" and 0% "Poor".

It was interesting to find that of the 11 respondents that said "Excellent", 7 of them appreciated fast service and prompt deliveries. Also, 8 of them value expertise and professionalism. What was most interesting was that only 2 mentioned communication. This may tell us that communication between the purchasing department and internal customers should be enhanced, as the customers evaluating the service level to be "Excellent" do not value communication.

The last question asks how the internal customers consider the purchasing department to be in terms of perceptions in service or price being the most important factors. The options were: Price-driven, Service-driven and Service-price balance. This would provide information on whether internal customers felt the purchasing department only valued price. Weele (2009) also acknowledged this in his theory "Differences in expectation of purchasing's role in a facilities environment" (see Figure 1, page 9).

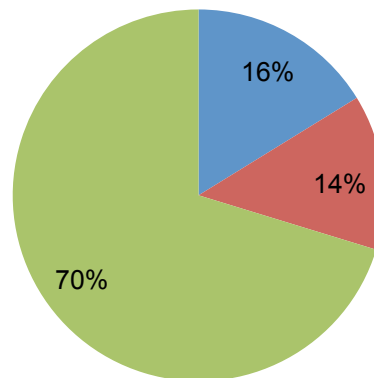Price-driven ■ Service-driven ■ Service-price balance

Figure 19. Do you feel the purchasing department is: Price-driven, Service-driven, Service-price balance

Only 30% of respondents thought the service of the purchasing department was either Price-driven or Service-driven. 70% said there is a service-price balance, showing that resources are being utilized fairly efficiently. The results are rather different than of O'Reilly's study (see page 17). O'Reilly found out that 29% or respondents thought the purchasing department to be price-driven, which leads to a dilemma as one of the main objectives of the purchasing department is to keep costs low. However, the problem is to not allow quality to suffer. This is a factor that is challenging to balance, however the distribution between Price-driven and Service-driven is near equal.

The survey also had a chance to give open feedback or comments. Some of them are listed below:

> It would be nice to know more about the purchasing department.
>
> I would appreciate more communication on decisions on classroom hardware.
>
> Cisco videoconferencing system is almost unused. Why was it purchased, must have been expensive.
>
> The service is a bit slow, also got the right subscription only after a first wrong one.
>
> The question: how often have you made a purchase request... requires more definition e.g. how often in a month/year...

Purchasing has always work perfectly. Managers haven't probably not been so interested in upgrading staffs personal equipment - well, it is a question of money, of course.

6   Conclusions and recommendations

In the following chapter I will provide conclusions to the study and discuss what these results mean. I will also talk about reliability issues and how the study process went overall.

The study problem in the thesis was what factors are most important when aiming to provide above expected service quality in Metropolia IT purchasing. The study was constructed from relevant literature in purchasing and service management as well as a part quantitative, part qualitative survey. The survey was distributed to 176 members of staff via email. The response rate for the survey was 21% (37 answers). As a researcher I had access to inside information because I have been working for the purchasing department since April 2012. This gave me the advantage of fully understanding the nature of the problem.

The study shows that the role of the purchasing department is generally seen to operate in a pro-active fashion and to act as a communications channel to internal customers (39% of answers). Also, the operational side was seen as a major role of the department (29% of answers). Additionally the study shows that internal customers in various departments require a different approach to service. For example customers in Technology (lecturers, managers) responded the role of the purchasing department to be merely operational, reactive and to provide cost effective products. However, Business and Administration customers largely see the role to be communications based as well as providing pro-active solutions.

Certain boundary problems can be identified from the results of the survey. With the assistance of Weele's (2009) theory on boundary problems, we can see that issues, such as differences between the expectations of service and actual service delivered may result in a gap in service quality. This could ultimately result in different departments wanting to have total control over their purchases. The survey indicated that 19% of internal customers would want to have total control over their purchasing activities. However, there was no clear correlation between customers feeling there is a gap in service and wanting to make purchasing activities themselves. This can be seen

from figure 16, as an equal amount of respondents who feel there is a gap and who do not; both want to make purchasing activities themselves.

The expectations of internal customers also varied. However, the most common factor was easy access and communication (28% of answers). After this, high quality of goods delivered was considered an expectation (21% of answers).

The study also shows that there are differences in the values internal customers expect and what they appreciate. Internal customers value speed of service (31%); and expertise and professionalism (31%). Based on this information, we can say that good communication skills, a sense of presence, and constant flow of information are vital elements in excellent customer service. Additionally, speed of service and expertise are considered additional advantages provided that other factors of the process are at a moderate level.

We can conclude that in order to be able to serve internal customers with excellent service, one must understand what the customers expectations are of the service provider and also what they value the most. Not all customers can be categorized the same way, because usually different backgrounds require different attention to certain aspects in customer service. This may be constant feedback on the current situation, friendliness or technological expertise.

The information gained from the survey definitely provides excellent guidelines to which direction the services of the purchasing department should go. The findings of the study will help the purchasing department recognize the areas of development and ultimately provide better, more accurate and tailored services to different customers. These acknowledgements should be acted upon and a more in-depth study should be implemented with a larger scale.

6.1   Reliability and validity

The reliability and validity of the study should also be taken into account. This way the conclusions of the study can be evaluated more accurately.

The respondents' views on the purchasing department might not be equally clear, as different respondents have used the services of the purchasing department more than others. The topic of the survey should have become clear to the majority of respondents as the survey was introduced in the email as well as in the actual survey page. The first questions were also used to set the tone to the survey theme. The survey was sent to members of staff that had a record of using the services of the purchasing department in the past. This was also so that the response rate would be maximized. The survey was also sent by IT Service Manager Mikko Mäkelä in order to improve visibility of the email. Though the response rate was not as high as expected, a total of 37 responses can be considered as sufficient. Based on these factors I see the study being valid and successful. The study undertaken does however require more attention and further studying, as various adjustments to the service can have genuine effects on the customer satisfaction.

As a researcher I found it important to ensure I understood the theoretical framework behind the study. Also, it became clear that the study required information from a number of fields of expertise, which then had to be contextualized into the case study. The study required a lot of out-of-the-box thinking, as examples of the specific topic was scarce.

It was interesting to find that a lot of respondents were pleased to hear the subject being studied, as the purchasing department plays an important role in the organization. A number of respondents were also eager to see the final results of the survey.

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Appendix 1. Email to mailing list

Hei,

Opiskelen International Business and Logistics –koulutusohjelmassa ja teen opinnäyte-
työtä Metropolian tietotekniikkahankinnoista. Olen myös työskennellyt tietohallinnon
hankinnoissa 2012 lähtien hankintasuunnittelijana.

Kyselyssä arvioidaan Metropolian hankintapalveluita ja sen täyttäminen kestää noin 10
minuuttia. Kysely auttaa minua opinnäytetyössäni, sekä kehittämään nykyisiä toiminta-
tapoja.

Opinnäytetyöstäni on myös sovittu toimeksiantosopimuksen muodossa ATK-
palvelupäällikkö Mikko Mäkelän kanssa.

Kyselyyn voi vastata ajanjaksolla 10.9 – 17.9.2013.

Kyselyyn on mahdollisuus vastata myös suomeksi.

https://elomake.metropolia.fi/lomakkeet/8950/lomake.html

Kiitos avustanne!

Ystävällisin terveisin,

Tuomas Haikonen

Hello,

I am studying International Business and Logistics and I am doing my thesis on Metropolia's IT purchasing. I have also worked in the purchasing department in IT Services since 2012.

Please take 5-10 minutes of your time to answer to the survey below. Your answers will help Metropolia's purchasing department achieve better performance in providing you services.

You can answer the survey between 10.9 – 17.9.2013.

Survey: https://elomake.metropolia.fi/lomakkeet/8950/lomake.html

Thank you for your time and help!

Best regards,

Tuomas Haikonen

*M*Metropolia

Improving Metropolia's purchasing department's services

Form is timed: publicity starts 10.9.2013 10.00 and ends 17.9.2013 12.00

The following survey will provide Metropolia's purchasing department (part of the IT Services) a better understanding how they can improve in providing quality IT solutions and support to Metropolia's stakeholders. The questions listed below will be distributed to 100 lecturers, support staff and managers.

The orange questionmarks will provide guidance in some questions.

Completing the form will take approximately 5 minutes.

Thank you for your time!

Background information

*Position in Metropolia   --Select--

*Department   --Select--

*Number of years working in Metropolia   --Select--

*Approximately how often have you made a purchase request or approved a purchase for an employee? **?**   --Select--

Survey questions

*1. What do you think is the role of the purchasing department? **?**

2. Do you think there is a gap between your expectations and actual delivered service? **?**

Yes   No   Sometimes

*Please select   ◯   ◯   ◯

*3. What are these expectations you have for the purchasing department?

4. Would you prefer if each department would have total control to their IT purchases? (IT Services and purchasing dept. would still provide classroom equipment, projectors etc.)

Yes   No, the current method works well

*Please select: ◯   ◯

4.1 If you selected "yes", please specify why:

*5. What qualities do you appreciate of the purchasing department and its services? (Please

mention at least 2).

---

6. How would you rate the service level of the purchasing department?

                          Excellent   Good   Fair   Poor

* Please select: ○   ○   ○   ○

---

7. Do you feel the purchasing department is: ?

                          Service-driven   Price-driven   Service-price balance

* Please select: ○   ○   ○

If you have any other comments, please include them below:

Proceed

Save

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