Optimizing Purchase to Pay process
GIS department

Graduation Thesis
DE Master Blenders 1753

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Foreword

This research concerns the thesis for the Bachelor degree in Business administration at the Hogeschool Utrecht. The research was conducted on behalf of the Global Information Systems department (GIS) of the international coffee and tea company Douwe Egberts Master Blenders 1753 in Utrecht. The report is written during the period September 2012 to June 2013.

I want to thank all employees in GIS who helped and supported me to do the research and to complete the report that is in front of you. During my graduation project I had the pleasure of working with the Vendor Management team and the support of the team has helped me to come to this advisory report. I want to give special attention to my business mentor R. Panda. He was a great help at the start of the project and during the research his door was always open for questions and advice.

I also would like to thank my supervisor Mrs. A. Zegers for the advice she gave me at the start of the project and the encouragement she gave me to successfully complete the internship. Besides this I also would like to thank Mr. F. Schaaf for the support from the Hogeschool Utrecht.

The assignment for this research came from the IT department of Douwe Egberts Master Blenders (GIS). Within this department there is not much insight in the actual costs. The process from signing a contract until payment of the corresponding invoices is not structured, which produce extra costs and an unclear picture of the actual costs that are made. The recommendations done in this report are implementable and will ensure a structured process and a reduction of costs.

The report is written in English, because the GIS department is highly international oriented. My business mentor is from India and does not speak or read the Dutch language. The working language in the department is English.

Stefan Dijs
Utrecht, May 2013

Summary

This advisory report is about "optimizing the Purchase to Pay process" within Vendor Management of the IT department of Douwe Egberts Master Blenders 1753 (DEMB). The Purchase to Pay process starts with a signed contract and ends with the actual payment of the corresponding invoice. The motivation for this report came from the Director of Vendor Management, R. Panda. It is identified that there is a big opportunity to improve the Purchase to Pay process to enable better monitoring of costs and forecast accurately. The Director of Vendor Management assumes that a structured Purchase to Pay process could lead to better control of costs and timely payment of incoming invoices.

The main question in this research is:

How can the Purchase to Pay process, from a signed contract to payment of the invoice, within Vendor Management be structured so that the process costs can be reduced by 5% within a year after implementation?

To come to a substantiated and solid conclusion several research methods were used. The report is based on the Deming Cycle (Plan-Do-Check-Act model). This is used as a background for the assignment. The report is built on the basis of the following six phases.

1. Current process
2. Bottleneck analysis
3. Best Practices
4. Conclusion
5. Advice
6. Cost / Benefit analysis

The most important methods applied in this research are interviews with different domain experts and working on a practical level with the systems that are used in the process. To provide a good advice, it was important to understand the end to end process and all the existing deficiencies. This is why the practical work cannot be underestimated in the research to a structured Purchase to Pay process in IT Vendor Management. The steps of the process which are examined in this report are:

- Signed Contract
    - o The process starts with a signed contract between DEMB and a vendor.
- Preparation of Annual Operating Plan (AOP)
    - o The AOP is the annual budget for Vendor Management.
- Purchase Order creation
    - o Creation of a Purchase Order in the SAP software is basically to reserve some budget for a specific service or product. This has no financial impact.
- Goods Receipt creation
    - o Goods Receipts are created in a Purchase Order. This is basically informing finance that services or products are received and costs are made.
- Invoicing
    - o When an invoice comes in it needs to be matched with a Goods Receipt to get it ready for payment.

All five steps have their own bottlenecks. The major bottlenecks that cause the problem are the lack of visibility and usage of contracts in the AOP preparation and the non-matching of incoming invoices with a Purchase Order or a Goods Receipt. Due to the lack of structure in this area, the problem has remained unresolved.

For this thesis a research on best practices is carried out. The outcome of the research on best practices is very much in line with the research done internally, which strengthens the conclusions made in this report.

To overcome these bottlenecks this report concludes with giving a fair and implementable advice. In the form of 9 recommendations, shown in a schematic overview, all bottlenecks can be solved and Vendor Management can come to a structured Purchase to Pay process.

1. The contract manager uploads all active contracts in a contract database.
2. Setup of a database in which all information on contracts related to Vendor Management is managed.
3. In the AOP preparation for fiscal year 2014 active contracts and the database should be used to get up-to date information on expected costs.
4. More collaboration with other GIS teams can help to predict costs that will come during the year.
5. Purchase Orders should be created on the basis of an agreement or contract.
6. Directly after creation of a Purchase Order a mail should be send to the approvers.
7. The vendor needs to be informed when a new Purchase Order is created and approved.
8. Billing period and billing frequency should be added to the Excel database that is created by the contract manager.
9. The Finance department should document and provide information on actual monthly costs to the budget owner of Vendor Management.

To ensure that the recommendations can be implemented the support of the team is examined. For this report there is enough support by the Vendor Management team, because all staff is aware of the problems and there is a lot of willingness to change. The benefits in this report are not all quantifiable in monetary terms. The most important benefit is to come to a more matured process. To show that the implementation of the recommendations will result in a cost-reduction this report concludes with a cost / benefit analysis. The outcome is that Vendor Management can achieve a reduction of process costs of 5,19% in the first year after implementation of the recommendations when all the recommendations are actually followed. In the second year and the years after that the reduction of process costs will increase to 7,5%.

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1. Introduction

This report is about the Purchase to Pay Process in the IT department of Douwe Egberts Master Blenders 1753 (DEMB). The Purchase to Pay process is the process from a signed contract to the actual payment of the corresponding invoice. DEMB is a global manufacturer and marketer of high quality, branded products for consumers around the world. The most famous brands of DEMB are Douwe Egberts, Senseo en Pickwick. DEMB is an international coffee and tea company. The headquarters is in Amsterdam, Netherlands. The coffee and tea products are available worldwide in more than 45 countries. DEMB is the third largest Coffee and Tea Company in the world, with an annual turnover of € 2,6 billion. The number of FTE is around 7500. In 2011 the decision was made to split the international coffee and tea activities from SaraLee and start as a new, independent organization. Since July 2nd 2012 the 'new' company started under the name "DE Master Blenders 1753". The company is listed on the NYSE Euronext Amsterdam since the split off from SaraLee.

Global Information Systems (GIS) is the global IT-department of DEMB. The GIS department currently has four major vendors; HP, IBM, SAP en AT&T. In addition to these four 'big' vendors there are multiple 'smaller' vendors of which GIS purchases different products and services. The services and products vary from service on applications to hardware like laptops, desktops and mobile phones. The total budget for GIS is more than € 50 million. Currently, GIS has a total of 86 FTE. In Appendix 2 is a more detailed description of the company and the GIS department including the organizational chart of the department is displayed.

The focus of this report is on the Vendor Management team of the department. The management does not have a clear overview of actual costs. The main reason for this lack of information is that there is no structure in the Purchase to Pay process. In this report interviews with employees in different layers of the department are used to get a good understanding of the underlying problems. A theoretical study is used to come to substantiated recommendations. Vendor Management could implement these recommendations to come to a more structured Purchase to Pay process and with that the information will be made available for the management. Based on this management information, the management can make better decisions and forecasts. The objective is to achieve a minimum cost reduction of 5% for the department within one year after implementation.

The method that is used in this report is based on the Plan-Do-Check-Act cycle of W. Edwards Deming (1900- 1993). This cycle, shown in figure 1-1 (Appendix 1) is about process control. The principle of the cycle of Deming comes down to the following. Collect data on situations where things go wrong, research the data and try to detect the causes of the errors, implement the corrections and collect data on the results.

1.1 Reading guide

Chapter 2 of the report describes the research assignment. The motivation for the assignment, the scope and the objectives are described in this chapter. Also the main question and sub question that are based on the objectives are in this chapter. Chapter 3 till 8 are based on the sub questions mentioned in chapter 2.

In chapter 3 the current Purchase to Pay process in Vendor Management is described. All steps in the process are described and made visible by schematic process flows.

The bottlenecks in the process are described in chapter 4. The flaws of each step in the current process described in chapter 4 are covered here. Not only is a description of the bottlenecks given, also the causes of the problems are mentioned.

Chapter 5 is the benchmark research. In this chapter the research on best practices of the Purchase to Pay process is handled.

Chapter 6 is the conclusion. In this chapter the points of improvement for each step of the process are defined and explained. In this chapter is also a paragraph on the management information that is needed to control costs.

The recommendations are described in chapter 7. In this chapter is shown what Vendor Management can do to structure the Purchase to pay process and how the changes can be implemented in the current organisation. To conclude there is a paragraph on the question if there is support for these changes. Finally in chapter 7.4 a description of the costs and benefits that the changes entail is given.

After this there is the bibliography and a list of abbreviations. The appendices are at the end to substantiate the report. All figures and tables used in this report can be found in Appendix 1.

2. The assignment

2.1 Motivation

At this moment there is not much control on the Purchase to Pay process (P2P process) for IT support within GIS. As described in chapter 1, GIS is responsible for all IT related purchases within DEMB. The total budget of GIS is more than € 50 million. The Vendor Management team focuses on support costs like licenses and maintenance. Currently there is no insight into the actual costs that may be related to support. The lack of adequate management information is the major cause of the problem. Actual costs are in many cases not accessible for the management and accurate management information on costs is not provided. Costs are currently managed on an ad-hoc basis. One of the main goals is to prevent this and to manage costs in a more proactive way.

As a result of the problem mentioned above, in many cases costs are higher than expected. Invoices that come in do not match with the budgeted costs. Because of this, Vendor Management spends a lot of time checking invoices. This causes that budgets are often exceeded and actual costs are in many cases higher than necessary.

The Vendor Management team is, in addition to quality monitoring, the team that is responsible for support related costs. The budget for Vendor Management is more than half of the total budget for GIS. Unfortunately the team cannot control these costs and is not able to provide accurate information to the manager. For the management there is not a clear information system available showing all information relating to these costs.

The IT Vendor Management Director, on behalf of the Management Team of GIS, has asked for advice on how to structure the process and get more visibility on actual costs. It is of great importance that the management has a structured and detailed overview of the Purchase to Pay process. To accomplish this, the current contracts will be a good starting point. Besides this, the creation of a structured approach for payment of invoices is one of the main concerns within the management team.

2.2 Scope

The Purchase to Pay process and all aspects that affect this process are within the scope of the assignment. The Purchase to Pay process is the process from a signed contract until the actual payment of the invoice. This is an extensive process. The process can be influenced by many factors. Processes and activities that do not affect this process in any way are outside the scope of the thesis.

The main task of the assignment is to achieve cost savings in the Purchase to Pay process. Saving money on the actual purchase of products and services is out of scope. This means that the selection of vendors and the choice of products and services will not be part of the advice. The focus of this thesis will be on the structure of the process from a signed contract until payment of the invoice(s). The real facts and figures are confidential. In this report percentages are used to calculate the cost savings.

In figure 2-1 (Appendix 1) the steps that are within the scope of the thesis are schematically shown. The red marked steps are out of scope. In this report there will be no notice of these steps. The green marked steps are within the scope of the thesis. They will be described and analysed, and will be part of the final advice.

2.3 Objectives

The purpose of this thesis is to create a structured Purchase to Pay process for Vendor Management. The start of the process is the signed contract; the end is the payment of the corresponding invoice.

Improving the process will result in more efficiency. Therefore the savings will be mainly on time and resources. Furthermore, with the result of this assignment GIS will also save money.

Purpose
Advising the management team of the GIS department regarding the structuring of the Purchase to Pay process, so that the department can achieve a cost reduction of 5% on the process costs, within one year after implementation. This cost reduction will be reflected in the costs that the Purchase to Pay process entails. These costs are not the actual procurement costs.

End Result
The end result of the research is an advice in the form of some recommendations that can be implemented to structure the Purchase to Pay process. The research and conclusions are described in this advisory report. In this report I will also include a chapter for the organizational changes that needs to be done to be able to implement these changes. To support the advice, in the report the cost reduction that can be realized by implementing the recommendations is shown. This is shown by a comprehensive cost/benefit analysis.

2.4 Main question

How can the Purchase to Pay process, from a signed contract to payment of the invoice, within Vendor Management be structured so that the process costs can be reduced with 5% within a year after implementation?

2.5 Sub-questions

The report consists of ten sub-questions and will go through the following six phases.

1. Current process
2. Bottleneck analysis
3. Best Practices
4. Conclusion
5. Advice
6. Cost / Benefit analysis

Current process (Chapter 3)
1. How is the Purchase to Pay process currently arranged and who are involved?

Bottleneck analysis (Chapter 4)
2. What bottlenecks are there in the current process?
3. What are the causes of these bottlenecks?

Best practices (Chapter 5)
4. What structures do similar companies use in their Purchase to Pay process?

Conclusion (Chapter 6)
5. What management information is necessary to be able to control costs?
6. What can Vendor Management do to solve the bottlenecks in the process?

Advice (Chapter 7)
7. What organizational changes are needed to structure the Purchase to Pay process?
8. What can the Vendor Management team do to help to create a more efficient Purchase to Pay process?
9. Does the new process have support within the Vendor Management team? If not, how can this be achieved?

<u>Cost / Benefit analysis</u> (Chapter 7)

  10. What are the costs and benefits of the process change?

2.6 Research Methods

This research was conducted using different research methods. Through these methods, all information has emerged to come to a conclusion and to give some fair and substantiated recommendations. The purpose of the use of all research methods is to come to an answer of the main question of the thesis. Below, all different methods that are used in this report are defined. In Appendix 3 an overview of the research plan is given. As mentioned in the introduction of this report, the Plan-Do-Check-Act cycle of W.E. Deming is used in this report to come to a final conclusion. Below is shown that the first step is to collect information on situations where things go wrong in the Purchase to Pay process. Then the information is researched to uncover the causes of the flaws in the process. Finally the some recommendations to improve are given. The result is the answer to the main question and is shown in monetary terms in the cost / benefit analysis. After implementation, the data of the actual results can be collected and analysed.

Operational approach

In the first weeks of the graduation period the focus was on working on a practical level with all the applications that are used in the Purchase to Pay process. Training on these applications and working with the team was very important in getting knowledge of the current situation in Vendor Management and getting to know which applications are used. The three main applications in the Purchase to Pay process of Vendor Management are:

  1. SAP ERP Software (SAP)
  2. WorkPlace Invoice Matching (WorkPlace)
  3. Contracto

Internal research

The next phase of the research was the bottleneck analysis. To find out where the bottlenecks in the process occur and understand the underlying causes for these flaws, a lot of interviews and meetings with different experts in the GIS department were held. Working with the Vendor Management team and cooperating with other teams of the GIS department has helped to find out and formulate the bottlenecks and their causes. The various interviews and meetings that were held during the whole period are not documented, but the conclusions are shown in this report. Without all the interviews the flaws in the process could not have been made clear.

Best practices

To get an idea of the worldwide best practices in Purchase to Pay, different benchmark studies are used in this report. In the bibliography all the used benchmarks are mentioned. The method that is used in this research to get knowledge of best practices is a theoretical study. For this thesis not a real benchmark is done. To come to an answer to the main question in the form of a number of recommendations all the information needed was in the different benchmarks that were analysed.

Theoretical research

The method that is used to come to substantiated conclusions is a theoretical research. To get a better understanding of all the steps in the Purchase to Pay process various literature is consulted. The theoretical research has been done with various books and internet articles concerning the Purchase to Pay process. All of the used theory is mentioned in the bibliography.

Reporting

All the information that is gathered during the research using the methods mentioned above is documented and is presented in this report. The operational approach, the best practices and the

theoretical research are used to come to substantiated conclusions and fair recommendations. Personal analysis on the information that is gathered through those methods has ensured that the recommendations are specific for the Vendor Management team of GIS.

3. Current Purchase to Pay process

3.1 Purchase to Pay

The "official" definition of Purchase to Pay according to the Chartered Institute of Purchasing and Supply goes like this: "A seamless process enabled by technology designed to speed up the process from point of order to payment." [1] This isn't a great definition. It is unhelpful to use the word seamless. Whether it's a good process or not, the Purchase to Pay process is there and even when best practice is applied, there are plenty of "seams". Enabled by technology? Not necessarily – although technology can play an important part. And finally designed to speed up the process from point of order to point of payment – this is just plain wrong.

A better definition of the Purchase to Pay process is "Purchase to Pay is all about helping to optimize the processes associated with purchasing and recognizing that the process does not end at the purchase order but extends to include accounts payable and payment processes." [2] This definition is used in this report.

3.2 Purchase to Pay in GIS department

For the GIS department of DEMB the Purchase to Pay process is an important tool to monitor costs. Currently the Purchase to Pay process is not structured and not used in a proper way. Overall the process as it is now within the GIS department is schematically shown below.
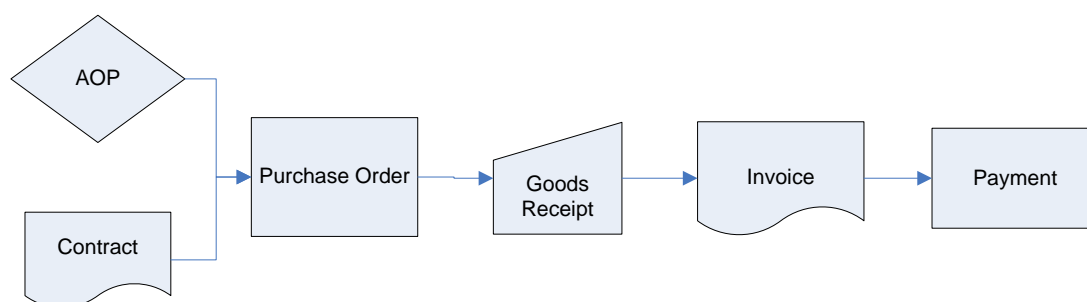

Figure 1-1

As mentioned above, the total yearly budget of the GIS department is more than € 50 million. The full budget is influenced by the Purchase to Pay process. For the scope of this research, Vendor Management, more than half of the total GIS budget is used. The budget for Vendor Management is split out over more than 50 different vendors. To categorize the vendors the ABC Pareto analysis is used. This method was originally suggested by the American Management-consultant Joseph S. Juran. The suggestion is that roughly 80% of the effects come from 20% of the causes. In this case 20% of the vendors should reflect 80% of the total Vendor Management costs when the ABC analysis is right. The outcome of the ABC Pareto analysis for Vendor Management of GIS is shown in Appendix 4. The top five vendors in costs, which corresponds to 10,91% in costs, are responsible for 81,78% of the total costs according to the analysis. This means that the main focus should be on these vendors. Currently the focus is on those vendors, so this should not be changed in the future. In the next paragraphs the current state of all steps in the Purchase to Pay process are explained. From the signed contract until the actual payment of the corresponding invoice, all steps are analyzed.

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[1] http://www.cips.org
[2] http://purchasinginsight.com/definition-of-purchase-to-pay

3.2.1 Contract

The first step in the Purchase to Pay process is the contract. The contract is an agreement between DEMB and the Vendor. The vendor selection and contract negotiations are excluded in this report. In this paragraph a short summary on how the contract process works is given. As explained in paragraph 3.2 the contract part is out of scope in this investigation.

The first step in the creation of a contract is the Request for Proposals (RfP). An RfP is basically a demand that is send to different vendors. The vendor reacts to this RfP with an offer. In this offer the vendor explains how they will do the work and what time and material they need to achieve this. The contract manager will select the vendor that has the best price/quality ratio. After the vendor selection is done the contract negotiations start. When both DEMB and the Vendor agree to the terms in the contract, the contract will be signed by both parties.

3.2.2 AOP

The Annual Operational Plan (AOP) is the budget for the next fiscal year. The AOP for Vendor Management is prepared by the manager of the Vendor Management team in consultation with Finance. The cost center[3] that is used by Vendor Management is 4407709. The AOP is created four months before the start of the fiscal year. All the historical costs for cost center 4407709 form the basis of the AOP preparation. The total AOP amount is an estimate. The amount is based on historical costs and assumptions for the next financial year (cost escalations, new projects/initiatives and changes in working model). The AOP is provided by the finance department in an Excel database. In this file all services are shown per vendor with the total budgeted annual costs. Below is the process flow for the preparation of the AOP.
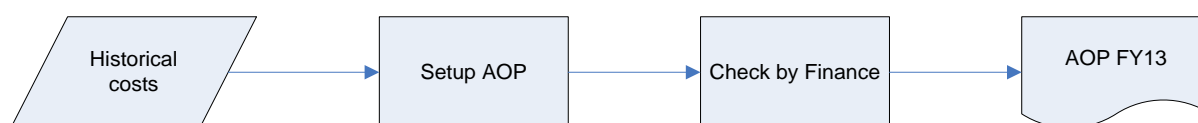
Process flow

Figure 3-2

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[3] The cost center is the code used by Finance to allocate costs to the right department/team.

3.2.3 Purchase Order

A Purchase Order (PO) is created in the SAP software. A PO mainly consists of a short description of the product or service, the vendor who supplies the product or service, the amount that has to be paid during the coming period and the cost center to which the costs should be allocated. (See figure 3-4 in Appendix 1 for an example of a PO in SAP).

'A PO is a formal request or instruction from a purchasing organization to a vendor or a plant to supply or provide a certain quantity of goods or services at or by a certain point in time.'[4] This "official" definition of a Purchase Order is provided by SAP. This definition covers the external part of a PO. In this report the PO is also used as an internal administrative action.

Purchase Orders for Vendor Management are created on the basis of the AOP information provided by finance. Because the AOP is an estimate in most cases, the amounts in the PO are estimates as well. Another reason to create a PO is by a request of one of the managers in the team. When a new application or service is demanded, there could be extra costs for Vendor Management. To book those extra costs a new PO has to be created. In Figure 3-3 you can see what triggers the creation of a PO and that a PO always has to be approved by the budget owner. In this report this is always the manager of Vendor Management.
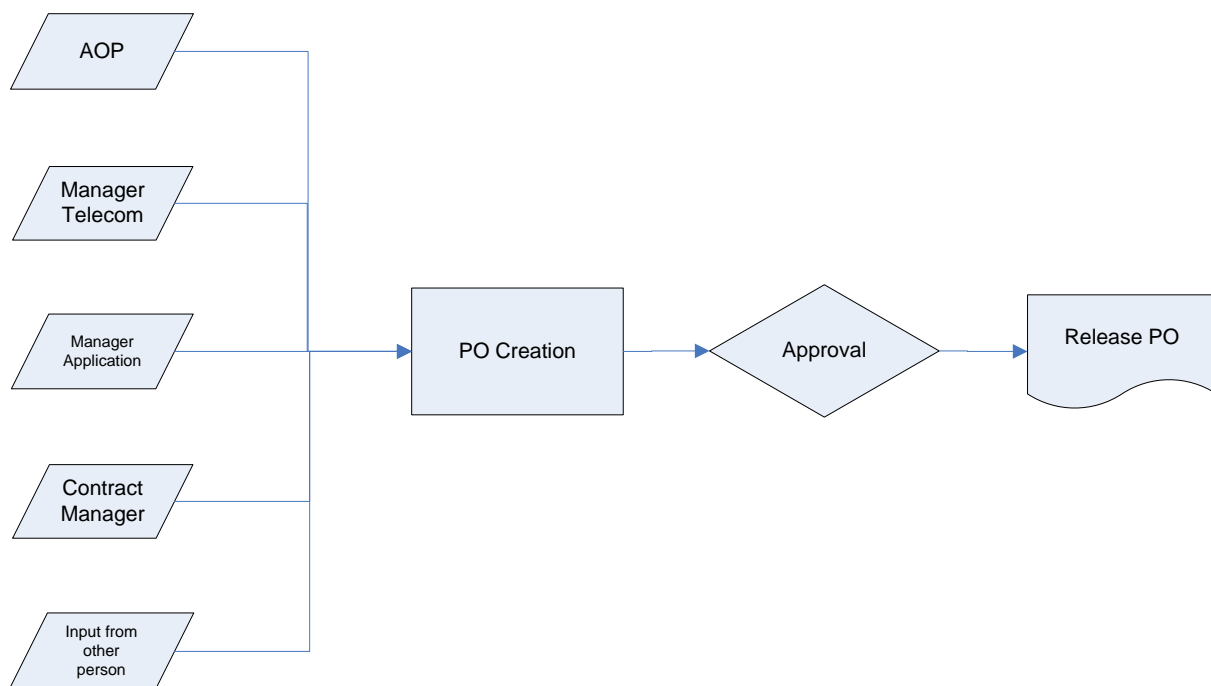
Process flow

Figure 3-1

Amendments

A PO can be amended when this is necessary. Reasons for this could be a change in amount, a change in currency or a change in Cost Center.

When the amount of a PO is reduced, the PO does not go into the approval flow again. When the amount is increased the PO needs a new approval by the manager of Vendor Management and the CEO of the GIS department. When the amount of the Purchase Order is increased, the reason for the increase needs to be communicated to the approver so that he can decide if this is acceptable.

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[4] http://help.sap.com/saphelp_erp2004/helpdata/en/75/ee0ce555c811d189900000e8322d00/content.htm

3.2.4 Goods Receipt

'A Goods Receipt (GR) is a goods movement with which the receipt of goods from a vendor or from production is posted.'[5] The posting of a Goods Receipt in SAP is actually a booking of actual costs. When services or products are received a Goods Receipt needs to be created. By posting a Goods Receipt you basically inform Finance that there are costs to be booked for this service in this month. (See figure 3-5)

For the Vendor Management part, Goods Receipts are created on a monthly basis. Every month the monthly amounts are booked on all the PO's corresponding to Cost Center 4407709. This is done to have all costs for the Vendor Management team in the monthly balance sheet of Finance. At the end of each month there is a Period End Close (PEC). Before the PEC all Goods Receipts for that month have to be done. The Goods Receipts that need to be created each month are a simple calculation of AOP value divided by 12 months. Another reason for a Goods Receipt occurs, when the vendor sends an invoice. This will be discussed in the next two paragraphs.
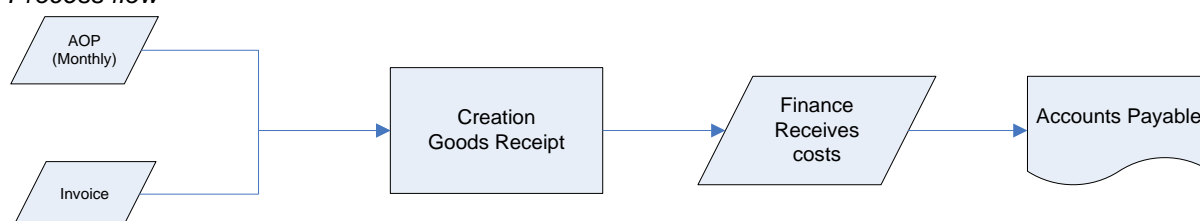
Process flow

Figure 3-5

3.2.5 Invoice

The vendor can send invoices in two different formats. The most used and preferred way to send an invoice is via OB10. OB10 is an electronic invoicing system that is used by DEMB. The vendor can add the PO number and all other information to the invoice via the system and it will automatically be send to the right department. Vendors can also still send paper invoices to the DEMB mailbox.

When an invoice is received, the invoice first goes to Financial Shared Service (FSS). FSS is the department that deals with all the invoices for DEMB. FSS does the first check on invoices. FSS checks if the invoice matches a Goods Receipt in SAP. When there is a Goods Receipt created that matches with all the information in the invoice (Vendor, Service/Product and total costs), the invoice will be processed and made ready for payment. In the next paragraph will be discussed what happens when an invoice does not have a matching Goods Receipt.

For the invoices related to Vendor Management the billing period differs per vendor. Most of the vendors wield a monthly billing period. Some of them send invoices per quarter, six months or one invoice for the full year. When an invoice comes in it will be booked against a Goods Receipt. For monthly invoices, the invoice should match the monthly Goods Receipt that is mentioned in Paragraph 3.2.6. For non-monthly invoices an extra Goods Receipt will be made to cover the total invoiced amount. The finance department will allocate the amount over the coming months to take care of right actual costs for each month.

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[5] http://help.sap.com/saphelp_45b/helpdata/en/a5/63317943a211d189410000e829fbbd/content.htm

3.2.6 WorkPlace

When an invoice can't be processed automatically by Financial Shared Service it is uploaded into the WorkPlace system. "WorkPlace Invoice Matching enables organizations to easily and quickly match goods and services ordered to vendor invoices and items received."[6] In WorkPlace we can find all the parked invoices for GIS. The focus is on the invoices meant for Cost Center 4407709.

There could be several reasons why FSS cannot process an invoice automatically. In figure 3-6 the work screen of WorkPlace is shown with invoices from different vendors. Invoices are uploaded in Workplace by Financial Shared Service (FSS) when:

- There is no Goods Receipt created for the invoiced amount
- There is no PO created for the Invoice
- The Goods Receipt doesn't match with the invoiced amount
- There is no PO number mentioned on the invoice
- The PO is not yet released

Every invoice that is uploaded in Workplace has an issue. The task of the Vendor Management team support is to check this and to match the invoices with a PO and Goods Receipt. There could be several solutions to solve the issue regarding an invoice. The most common solutions are to create a PO (because it was not created before) or do a Goods Receipt on an existing PO. On 15-12-2012 there were six invoices for Cost Center 4407709 in Workplace. All six invoices were waiting for a PO to be approved. When the Purchase Orders are approved, the invoices can be processed in WorkPlace, which ensures that they can be paid. When new invoices come in they need to be checked and processed for payment, when all the information on the invoice is right.

3.3 Roles

The roles and responsibilities mentioned below have a connection with the Purchase to Pay process of Vendor Management. In Figure 3-6 the roles that have an effect on the process are specified per team.

Responsibility	Role	Team
Budget Owner	IT Vendor Management Director	Vendor Management
Contract Management	Manager Contracts and Licenses	Vendor Management
PO creation	Specialist Support Services	Vendor Management
PO approval	IT Vendor Management Director	Vendor Management
Goods Receipt Creation	Specialist Support Services	Vendor Management
Invoice matching	Specialist Support Services	Vendor Management
Report IT costs to DEMB top management	Financial Accountant	Finance

Figure 3-6

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[6] http://www.paramounttechnologies.com/Invoice-Matching.aspx

4. Bottleneck analysis

In this chapter all the steps to come from a signed contract to the actual payment of the corresponding invoice are addressed. To get understanding of the problems that Vendor Management face during the Purchase to Pay process, in this chapter all bottlenecks are displayed and described step by step.

The steps where bottlenecks occur are:

- Signed Contract
- AOP preparation
- PO creation
- Goods Receipt creation
- Invoicing

4.1 Signed contract

As mentioned in chapter 3 the Purchase to Pay process starts with a signed contract. The task of the contract manager is to store and manage all the on-going contracts. GIS works with a contract database called "Contracto"[7]. In this tool all contracts should be archived. Currently not all contracts related to Vendor Management are in this database. Contract management never had an important role within the GIS department. Other reasons for the fact that not all contracts are archived are the split with SaraLee and the fact that the tool that is used is relatively new. The lack of availability of on-going contracts is a major issue in getting a good overview of costs.

The contracts that are in the database are not specified per budget owner. It is not possible to go into the database and check which contracts include costs for each specific cost center. The Contracto tool does not have the option to link the contract to a specific cost center or Purchase Order. This means there can never be a direct link between the contract in Contracto and the Purchase Order in SAP. The link between the contract and the Purchase Order could be very useful to match actual costs with the contract.

4.2 AOP preparation

The AOP or budget for Vendor Management is based on historical costs. The purpose of the AOP is to estimate expected costs in the next fiscal year. Because not all contracts are archived and easy to check, it is logical that actual contract are not used in the preparation of the AOP. The management always worked with the historical costs in AOP preparations. The problem of working with historical costs is that there could be unexpected costs during the year. New signed contracts and new projects finished could be a reason for extra costs during the year. The exact yearly costs for licenses and support should be in a contract with a vendor. This does not apply to variable costs like consultancy and other ad-hoc services. For those variable costs the already used historical approach is fine, though for the fixed costs a contract approach in AOP preparation is far more accurate.

Besides the lack of the use of contracts, there is another way to avoid unexpected costs during the year. For the preparation of the AOP of fiscal year 13 there was not enough consultation with other teams within GIS. When an IT project finishes, the support cost for the new applications start. These support costs are costs that should be in the budget of Vendor Management. In the past, the budget owner of Vendor Management had not enough information on on-going and upcoming IT projects. The team that is responsible for all these IT projects is the Project Management Office (PMO).

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[7] http://www.onlinecontractbeheer.nl/vervolg.aspx?pid=43&gclid=CMfvqfC26rUCFYqf4AodrXIAiQ

4.3 PO creation

Purchase Orders are created on the basis of the AOP. For the Vendor Management budget there is no link between the PO and the signed contract. Because of this, Purchase Orders are, like the AOP, estimations based on historical costs. This means that the costs mentioned in the PO are in many cases not the actual costs that will come during the period the PO is created. In the next paragraph the consequences for the monthly costs that are actually booked will be discussed.

Currently there is no attention for the billing period and the total of invoices that will come in during the fiscal year when a PO is created. Because of this there is no direct visibility if there will be an invoice each month, per quarter, per half year or even for a full year. To have a clear view on monthly costs that have to be paid, it is necessary that the invoiced amount per month can be retrieved before the invoice comes in. To cover this, a statement of this in the Purchase Order could be a simple and efficient solution.

4.4 Goods Receipt creation

As mentioned in Chapter 3, Goods Receipts are currently done on a monthly basis. The base of these Goods Receipts is the original AOP. For the Vendor Management budget owner the actual monthly costs are not visible, because there is no reporting of the monthly Goods Receipts. The finance department of GIS receives all booked costs via a Goods Receipt in SAP. Finance is responsible for the monthly cost reporting to the higher management of DEMB. Currently there is no cost reporting to the budget owner of Vendor Management. All costs that occurred during the month should be in the monthly finance report. The cause of the lack of information on actual monthly costs is that the finance department does not send a report of the actual monthly cost to the Vendor Management budget owner for all the Goods Receipts on his cost center.

The lack of management information is, as indicated earlier, a major concern for the management. Good management information is considered to be an end product of Business Intelligence. The information can be shown in terms of a clear report. The process to establish good management information seems fairly simple, but setting it up is not easy. The definition of Business Intelligence is 'converting data into information that organizations can use to steer on their objectives and anticipate on what will happen tomorrow. To rule is to foresee!'[8] In Chapter 6 the management information that is required for better management and forecasting is described.

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[8] Van Til, 2008, p. 13

4.5 Invoicing

Payment of vendors, including receiving, entering and checking the vendor's invoice for accuracy poses one of the biggest Purchase to Pay process challenges. In fact it will be difficult to reap large-scale benefits from the Purchase to Pay process if you have not addressed the invoice payment process.[9] This statement mentions that the invoicing step in the Purchase to Pay process is a big challenge in all companies that take the process seriously, worldwide.

One of the major bottlenecks in the process that cause a lot of extra work and time is the match of an invoice with a Goods Receipt. In many cases the invoice cannot be matched automatically by the Financial Shared Service department. In paragraph 3.2.6 the reasons for the problem of matching incoming invoices with booked costs in SAP are displayed. The most prevalent cause of a non-match is the absence of the right PO number on the invoice. The reason for this is that after creation of a new PO, the number is not always communicated to the vendor. The vendor will use an old PO number on the invoice or in some cases there is not even a number mentioned on the incoming invoice. This causes that a lot of invoices cannot be matched by Financial Shared Service and a check by the Vendor Management team is needed to process the invoice and get it ready for payment.

Besides the absence of the right PO number, an incoming invoice can have all the other issues that are mentioned in paragraph 3.2.6. All this issues cause that the invoice cannot be paid before the extra check and approval by Vendor Management is done. This takes a lot of (unnecessary) time and causes inconveniences for the team.

The main consequence of the non-matching of invoices is that invoices are not paid in time. Besides the earlier mentioned internal problems (extra work and inconveniences), late payment of invoices cause some external problems. The external problems that occur due to late payment are related to the dissatisfaction of the vendor. DEMB will not receive penalties for late payment, but vendors are discontent and may not consider any discounts in future engagements. Frequent late payment is not good for the image of DEMB and will cause a bad negotiating position for future engagements.

4.6 Summary

In this chapter all bottlenecks that occur in the Purchase to Pay process of Vendor Management are described for each step of the process. In Figure 4-1 is a schematic overview of all bottlenecks in each step of the process. The persons responsible are mentioned in paragraph 3.3.

Process step	Bottleneck
Signed contract	- Not all signed contracts are archived. - There is no direct link between contracts and the AOP. - There is no link between contracts and SAP.
AOP preparation	- The AOP is based on historical costs, while the purpose is to estimate the future costs. - On-going contracts are not used in the AOP preparation. - Estimation of future costs is not easy without communication with other teams within GIS.
PO creation	- PO is created on the base of the AOP, contracts in which the real expected costs are mentioned are not used - There is no information on billing period and billing frequency in the PO.
Goods Receipt creation	- The Vendor Management budget owner has no visibility in actual costs - Goods Receipts that are done are not reported to the budget owner.
Invoicing	- Financial Shared Service can't match an invoice when the PO number is not mentioned - Other reason for a non-match could be the absence of an approved PO, or the absence of a matching Goods Receipt

Figure 4-1

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[9] http://www.springcm.com/procure-to-pay-process

5. Best practices

To get an idea of the worldwide best practices in Purchase to Pay, in this chapter a research done by Rob Handfield of the Supply Chain Resource Cooperative is used as the main reference. [10] Besides this comprehensive research, a research from VISA[11] and an article of Acom Solutions[12] are used as comparison references. For this advisory there is not a real benchmark research done. The purpose of the research is not to copy a structure that is used in other companies, but to implement a genuine and specific Purchase to Pay process. Because in this advisory a specific and unique Purchase to Pay process is illustrated, the research does not include a benchmark study. A real benchmark study is not mandatory for this report. In this chapter a summary of global best practices is given. In chapter 6 the link between the global best practices and the structure within Vendor Management of GIS is given. To have some extra background in the report, this chapter is more a theoretical research. The benchmark studies that are used for this all have a common factor; the best way to organize the Purchase to pay process is to implement an easy to use and comprehensive structure. The estimation is that a good two-thirds of the companies worldwide do not have a structured Purchase to Pay process. All these companies basically face the same problems as there are within the GIS department of DEMB.

A qualitative study of the Purchase to Pay process was undertaken by Rob Handfield of the Supply Chain Resource Cooperative, in order to determine the symptoms, root causes, and recommended approaches to identifying and solving the problems associated with the Purchase to Pay process. In this research different supplying and purchasing companies have been interviewed and analyzed. For this report the companies that have been involved in this benchmark are not relevant. The general problems that occur in the Purchase to Pay process are in the basis the same as the bottlenecks that occur in GIS.

- Manual workarounds and high manpower
- Long cycle time / Late payments / Aged invoices
- No central point of contact
- PO / Invoice match problem
- Not enough budget on PO

To solve these problems the benchmark comes with some general recommendations. Because technology evolves and the business requirement will change in the future, the Purchase to Pay process will need to be revisited every year. To ensure that vendors are satisfied and the management can work with the process, the process needs to be open and changeable whenever this is necessary. This is equivalent to the Plan-Do-Check-Act cycle of W. Edwards Deming (1900- 1993). This cycle, shown in Figure 1-1 (Appendix 1) is about process control. The principle of the cycle of Deming comes down to the following:

- Collect data on situations where things go wrong.
- Research the data and try to detect the causes of the errors.
- Implement the corrections and collect data on the results.

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[10] http://www.drkresearch.org/Clients/P2P_Workshop/Best_Practices_in_Procure_to_Pay_article.doc
[11] http://usa.visa.com/download/corporate/mid_size/program_optimization/global_best_practices
    executive   summary.pdf
[12] http://www.acom.com/accounts_payable/articles/ioma_AP_p2p_benchmarks.html

The research done by Rob Handfield identifies six key findings that will lead to improvement in the Purchase to Pay process.[13]

1. Robust processes and training;
2. Onsite relationship managers to allow field maintenance to focus on doing its job;
3. Robust technology using single point of contact;
4. Improved forecasting for maintenance and planning for emergencies that can "flex" with different situations that arise;
5. Reduced complexity in catalogues and buying channels to streamline procurement;
6. Top management support.

These findings will help to come to a more structured Purchase to Pay process for Vendor Management. My opinion is that not all of these findings are helpful for this assignment, because GIS, and Vendor Management in particular, has a very specific construct. In chapter 6 is shown which of the key findings of the benchmark analysed in this chapter are relevant for the Purchase to Pay process of Vendor Management. The relevant findings are included in the advice. However, these findings are not directly copied to the recommendations and advice given in this report.

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[13] http://www.supplychainredesign.com/publications/practix032006.pdf

6. Conclusion

6.1 Management Information

In this paragraph the management information that is required for better management and forecasting is described. The key factor in getting the right information is to have a structured overview of costs that are related to Vendor Management. The sources for information needed to control and to forecast these costs are:

- Contracts;
- Actual monthly costs;
- Running projects.

To prepare the AOP for next fiscal year the IT Vendor Management Director can make use of the information that is provided by the sources mentioned above. Currently not all the sources are available. As is mentioned in chapter 4 not all contracts are archived and there is not enough insight in actual costs. The information on running projects is important, because projects can cause for future costs for Vendor Management. When a project is finished service costs or costs for licenses could come to Vendor Management. In paragraph 6.2 the improvements Vendor Management can implement to structure the Purchase to Pay process and with that provide the right management information to the budget owner are displayed.

6.2 Improvements

In this paragraph the possible enhancements that Vendor Management can make to come to a structured Purchase to Pay process and to generate and provide the required management information are shown. For each step of the process the improvements to solve the bottlenecks described in chapter 4 are displayed and explained. Four of the key findings of the research on global best practices that help to come to these improvements are included in the recommendations for improvement. The findings that are relevant for Vendor Management are:

- Implement robust processes
- Robust technology using single point of contact;
- Improved forecasting
- Top management support.

In the next paragraphs all improvements to solve the bottlenecks and to answer the main question are displayed per step of the process. Above findings are included in these points of improvement.

6.2.1 Signed Contract

As mentioned in Chapter 4, not all contracts are archived. The first step to improve the Purchase to Pay process is getting a clear visibility on current contracts. The contract manager should have access to all the on-going contracts to report this to the budget owner. Important is that all contracts are archived and can be seen by all members of the team. The system that is used for this is Contracto. This system does not have the option to add the expected costs and cost center details. This means that it is not easy to see whether a contract belongs to a specific team. To check this, the full contract must be checked. To have a clear and easy view in contracts, the use of Contracto only is not enough. The Contracto database is very useful for uploading contracts, but to have all the information in place this is not enough.

The easiest way to get all the information on contracts in place is to make use of an Excel database. In this shared database all information on on-going contracts should be mentioned. The information that is necessary to come to a structured Purchase to Pay process is:

- Vendor
- Short description
- Total costs
- Renewal date
- Invoice frequency
- Billing dates
- Contract owner
- PO number

In Appendix 5 there is a format version of the Excel database that Vendor Management can use as an extra document in contract management. This Excel database should be developed by the Manager Contracts and Licenses.

6.2.2 AOP preparation

Currently the AOP is based on historical costs, which causes an unrealistic version of reality. To have a more realistic picture of the costs in the next fiscal year, contracts that are active should be used more in the AOP preparation. As mentioned above, all contracts related to Vendor Management should be easy to obtain for all persons in Vendor Management. In the contract there could be two types of costs; fixed costs and variable costs. Fixed costs are mostly in service and support contracts. Variable costs are costs for consultancy and support of vendors on an ad-hoc basis.

For fixed costs the exact total yearly costs are in the contract. When contracts are used in the preparation of the AOP, the AOP value is not an estimate, because the exact costs are known. This ensures that the expected fixed costs are in the AOP. For variable costs this is different. In the AOP preparation the budget owner has to make a substantiated estimation of the total costs these contracts will entail. The use of contracts will help in preparing an accurate estimation of the variable costs and ensures that no estimation has to be made for fixed costs. To be able to make use of the contracts in the AOP preparation, the budget owner must have access to all the information on costs that are in the contracts. The archiving of all contracts related to Vendor Management in combination with the database mentioned in paragraph 6.2.1 will provide all the information necessary to come to a realistic AOP.

The other problem of creating the most accurate AOP for the coming fiscal year arises from the costs of future engagements that Vendor Management will face. Because these are future engagements it is not easy to predict the costs for these. To have a clear view on possible costs that come to Vendor Management during the year collaboration with other teams in GIS is necessary. The Management Team of GIS calls this; 'breaking the silo's. Collaboration with especially the PMO team (Project Management Office) will result in a more accurate estimation of future costs. The PMO team has all the information on current and upcoming IT projects. When a project is finished and applications and software go live, the support costs will come. These costs are for Vendor Management and should be in the AOP. Meetings and discussions with the PMO team during the AOP preparation will give the budget owner of Vendor Management a better view on costs that will arise during the year.

6.2.3 PO creation

To have a perfect link between a Purchase Order and the contract, every PO that is created needs a corresponding contract in Contracto. The creation of a PO should not be done on the base of the AOP only. In a contract with a vendor the expected costs should be shown. For fixed costs the costs that are displayed in the contract should be exactly copied to the Purchase Order. To make sure that the actual monthly costs are booked correctly the costs in the Purchase order should be the same as the expected costs in the contract.

Currently there is not enough information in the PO. A simple way to add this information is to mention it in the additional text. The additional text is not readable for everyone, so this will not solve the whole problem. The information that is needed to match invoices and to get a clear visibility on monthly costs is the same as was needed for the improvement of the contract management and archiving. As mentioned before, an Excel database will mean the solution for this. The database that is mentioned in paragraph 6.2.1 should be provided to all persons in the Vendor Management team.

Another improvement in the creation of a Purchase Order can be made in the approval flow. A PO needs to be approved by the budget owner only when the total costs are less than € 50.000. When costs are higher the PO also needs approval of the CEO of GIS. To make sure the PO is approved within short time, it is mandatory to send an e-mail to the approver's right after creation. This will make sure that the PO is approved before the invoice comes in.

6.2.4 Goods Receipt creation

On the creation of the Goods Receipt itself no changes can or should be made. A Goods Receipt is created on a PO in SAP. On this actual method no changes can be made. The Goods Receipts has to be done on a monthly basis to inform finance that costs are made in that month. The improvements on the other steps, especially the improvement of AOP and Purchase Order accuracy, will help to create more accurate Goods Receipts. This will eventually help to match invoices against the GR's done.

The improvements that can be made in terms of the actual costs are in the area of the finance department. The management information that the finance department provide has to be complete and accurate. In this case, finance should provide a clear overview of actual costs (Goods Receipts) made on the Vendor Management cost center to the budget owner on a monthly basis. All Goods Receipts that are done during the month have to be in this overview. This information is needed to react on deviations and to inform the budget owner if costs are not exceeding the AOP value.

6.2.5 Invoicing

The matching of an incoming invoice with a Goods Receipt is currently a major problem. The result of a 'non-match' is that the invoice cannot be processed and has to be checked and approved by Vendor Management. This takes a lot of time of the support person in the team.

To make sure that the vendor can add the correct PO number to the invoice it is important that the PO and the corresponding PDF document[14] is communicated to the vendor right after the approval of the PO. The creator of the Purchase Order is the person that has to communicate the number and document to the contact person of the specific vendor. When the correct PO number is mentioned on the invoice, Financial Shared Service can automatically match the invoice to the right team. The communication of PO numbers will reduce the number of invoices that have a 'non-match'.

To minimize the number of invoices that come to Vendor Management via WorkPlace, the other common issues mentioned in paragraph 3.2.6 should also be addressed. In the paragraphs above, the solution to cover these issues are already given. It is not realistic to expect that Financial Shared Service can match all the incoming invoices perfectly to a Goods Receipt. Therefore GIS should continue to use WorkPlace as an electronic invoicing tool.

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[14]   The PDF document is a print from SAP in which all the Purchase Order information is included.
      This document is used as a commitment to the vendor.

7. Advice

In this chapter the recommendations are discussed. As a result of the research, a number of recommendations are given. The implementation of these recommendations will lead to a structured Purchase to Pay process for Vendor Management of the Global IT Department of DEMB. In paragraph 7.1, a numeration of all the recommendations per step in the process is schematically shown. In paragraph 7.2 the organizational changes that the improvements will entail are described. The organizational and practical changes have effect on all roles that have a connection to the Purchase to Pay process as described in paragraph 3.3. In paragraph 7.3 the support of the team is discussed. In paragraph 7.4 the cost and benefit analysis is given.

7.1 Summary recommendations

In the table below all recommendations as mentioned in chapter 6 are shown in a clear overview. The implementation of these recommendations will structure the Purchase to Pay process.

Process step	Bottlenecks	Recommendation
Signed contract	- Not all signed contracts are archived; - There is no direct link between contracts and the AOP; - There is no link between the contract and SAP.	- The contract manager is responsible for uploading all active contracts into a contract database; - Setup of a database in which all information on contracts related to Vendor Management is managed.
AOP preparation	- The AOP is based on historical costs, while the purpose is to estimate the future costs; - On-going contracts are not used in the AOP preparation; - Estimation of future costs is not easy without communication with other teams within GIS.	- In the AOP preparation for fiscal year 2014 contracts should be used to get up-to date information on expected costs; - More collaboration with other GIS teams can help to predict costs that will come during the year.
PO Creation	- PO is created on the base of the AOP, contracts in which the real expected costs are mentioned are not used; - There is no information on billing period and billing frequency in the PO.	- PO's should be created on the base of an agreement or contract; - Billing period and billing frequency should be added to the database.
Goods Receipt creation	- The Vendor Management budget owner has no visibility in actual costs; - Goods Receipts that are done are not reported to the budget owner.	- The Finance department should provide information on actual monthly costs to the budget owner of Vendor Management.
Invoicing	- Financial Shared Service can't match an invoice when the PO number is not mentioned; - Other reason for a non-match could be the absence of an approved PO, or the absence of a matching Goods Receipt.	- The vendor needs to be informed when a new PO is created and approved; - Directly after PO creation a mail should be send to the approvers.

Figure 7-1

7.2 Organizational changes

In Chapter 6 the practical improvements to structure the Purchase to Pay process and to get a better insight in actual costs are discussed. The implementation of these changes has effect on the organisation of the Vendor Management team. This is the reason that organizational changes are part of the advice. To take care of an implementation of the recommendations the organizational changes mentioned in this paragraph should be conducted. Many different theories and models about organizational change exist throughout the multidisciplinary literature base.[15] This report will not go into all details about organizational change theory, but will specifically tell which changes would help to implement the recommendations discussed in chapter 6. The focus in this chapter is on the improvement of internal communication and the change in roles and responsibilities.

7.2.1 Internal communication

The first thing to be done is to make sure that the communication within the team is optimal. Currently most of the communication is via mail and telephone. In many cases this proves to be sufficient, but a better communication can be achieved through more personal contact between the members of the team. To come to more personal contact, the most logical solution is to ensure that all members of the team are working in the same room next to each other. There is enough room in the office of GIS to achieve this. Better communication in the team will help the structure of the Purchase to Pay process. When the PO and Goods Receipt creator has a question on a contract he can easily ask the contract manager for the right amounts. This will help to speed up the process. Working with all team members in the same room will also help to get knowledge of each other's functions and personality, which will result into better collaboration.

7.2.2 Roles and responsibilities

The next organizational changes that need to be done to come to a smooth implementation of the recommendations are more on the roles and responsibilities of the members of the Vendor Management team that have a connection to the Purchase to Pay process. In Figure 7-2 below is shown which roles are related to the Purchase to Pay process and what new responsibilities are needed on these roles to come to a structured Purchase to Pay process. The current responsibilities for each role will stay the same after implementation of the recommendations. New responsibilities should be added to the personal objective of each role to secure that the recommendations will actually be implemented by the persons responsible.

Role	FTE	Current Responsibilities	New Responsibilities
IT Vendor Management Director	1	Budget Owner	- Check monthly cost report provided by Finance - Collaborate with PMO team during AOP preparation.
Manager Contracts and Licenses	1	Contract Management	- Archiving contracts and maintain Contract database*
Specialist Support Services	4	PO creation	- Communicate with Finance, Contract Management and budget owner
		Goods Receipt Creation	- Provide information to budget owner during AOP preparation.
		Invoices	
Financial Accountant	1	Report IT costs to DEMB top management	- Report monthly actual costs to budget owner

Figure 7-2
* The Manager Contracts and Licenses will be responsible for the archiving of contracts and the maintenance of the database. The work will be delegated to the Specialist Support Services. They will actually perform the extra work.

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[15] http://aled.tamu.edu/440/READ%20-%20Change%20Theory%20Article.pdf

The most important role in the Purchase to Pay process is the role of the Specialist Support Services. This is a supportive role to the whole team and this person is responsible for all Purchase Orders, Goods Receipts and the matching of invoices that come into WorkPlace. The Specialist Support Services needs to have a monthly meeting with the finance department to make sure that all monthly costs are correctly entered into the SAP software. This is a new responsibility for this role. Besides this, the Specialist Support Services will get extra work on archiving contracts and maintaining a contract database. Although the Manager Contracts and Licenses is responsible for these tasks, the extra work this may cause will be delegated to the Specialist Support Services.

Another important responsibility that needs renovation is the responsibility of the Manager Contracts and Licenses to archive and manage all contracts related to Vendor Management in the Contracto tool and the Excel database that will be in use after implementation. The Manager Contract and Licenses and the Specialist Support Service need to have daily contact and consultation on all new contracts and amendments that are made on existing contracts. The new responsibility for the Manager Contracts and Licenses is to setup and maintain an Excel database to manage all the active contracts and all the information that is mentioned before. Daily communication is essential to keep all the information in this file up to date. As mentioned above, this will not cause any extra work for the Manager Contracts and Licenses. The extra work need to be delegated to the Specialist Support Services.

The rest of the Vendor Management team (Appendix 2), like the Application Manager and the manager End-user services, does not have a specified and active role in the process. Their role is to support the process and to contribute to the implementation of the recommendations this report contains. In the next paragraph is discussed what help the Vendor Management team can give to implement the recommendations in this report. In this paragraph is also discussed whether the staff is willing to implement these changes. Willingness to change is very important in change management.

During the research some of the recommendations are already implemented. The existing active contracts are uploaded into the Contracto tool and the database with all the information on contracts, PO's, Goods Receipts and invoices is already in place. To guarantee that all the recommendations are implemented and the new responsibilities are carried out the by each individual, the management has to integrate all the new responsibilities in the individual personal objectives and in the job descriptions. Each individual in the Vendor Management team has his own objectives for the year. When the new responsibilities are included in the objectives and the job description, the IT Vendor Management Director can approach the person responsible when this person does not fulfil his new tasks or responsibility.

7.3 Vendor Management team support

To implement the recommendations given in paragraph 7.1 the support of the full team is essential. When the team does not support the changes, nothing will change and the problems will remain. Besides support for the recommendations, the team can help to achieve the implementation by working together and give attention to the process and its flaws. Also the commitment of the Management Team is essential to achieve a smooth implementation.

The staff of the Vendor Management team can be of help during the AOP preparation by providing all information on costs and contracts that is needed. Not only Vendor Management can help in the AOP preparation, as mentioned before, also the other teams, like PMO, can give their input in providing information on expected costs for Vendor Management in the future. When there are amendments to contracts or other agreements the budget owner and the Specialist Support Services should be directly informed by the Manager Contracts and Licences. This to make sure that no unexpected costs will show up, or in case of a decrease in costs some of the budget is not used. As mentioned before in paragraph 7.2 there are some organizational changes needed to implement all the recommendations. The team should have an open mind on these changes, otherwise the changes can't be made and the recommendations cannot be executed. Off course it is also important that the team has an open mind on the recommendations.

The problems that exist are known to the whole team. Multiple interviews with the director of Vendor Management show that the director has identified the problem some time before the start of this research. Now, the time has come to do something to solve the problem and get a more structured process in place. The conclusion of different meetings with the team and individual interviews with the members of the Vendor Management team is that not only the manager realizes that the process needs to be improved before it gets out of hand. All the members of the team are behind the assignment and want a solution for the problem. The recommendations that are given in this report have been well received by the team. They all want to work with the recommendations and want to have them implemented as soon as possible.

The problem of a non-structured Purchase to Pay process is handled in different meetings of the Management Team the last year. The whole Management Team is aware of the problems and are confident to solve the problems with the recommendations given in this report. The IT Vendor Management Director needs to manage the implementation and delegate the specific tasks to the different roles as shown in paragraph 7.2.2. The strong commitment of the IT Vendor Management director and the Management Team ensures that the recommendations done in this report will be used to structure the process.

7.4 Cost / Benefit analysis

In the main question is recorded that the recommendations done should lead to a cost reduction of the Purchase to Pay process of 5%. In this paragraph the cost reduction that the recommendations entail are showed. As mentioned before in this report, it is not easy to show the benefits in monetary terms. This is, because this research is about a process and not about the actual procurement or sales. The implementation of the recommendations will provide a structured process throughout the GIS department. The only costs that are directly related to the Purchase to Pay process are labour costs. This is why this paragraph will focus on the reduction of costs that will be realised in terms of man-hours. The structure of the process and the better visibility of all costs related to Vendor Management will bring some additional indirect benefits which will also be shown in this paragraph but not taken into account for the reduction of costs that are directly attributable to the Purchase to Pay process.

Man-hours

Currently there are 4 FTE directly working on the full Purchase to Pay process of GIS. These 4 FTE are the Specialist Support Services in figure 7-2. The labour costs for these employees are € 42.395 per year on an average. This is based on a monthly gross salary of € 2.600. € 42.395 per year equates to € 20,38 per hour (42.395 / (52*40) = 20,38). Total labour costs for the purchase to pay process are currently 4*42.395 = € 169.580 per year.

The implementation of the recommendations will only influence the workload of the Specialist Support Services. The archiving of contracts, setup and maintenance of the new database, the report on actual monthly costs and the processing of invoices are all tasks for the Specialist Support Services. As mentioned in paragraph 7.2 some of these tasks are delegated by the Manager Contracts and Licenses. In figure 7-3 the workload after implementation of the recommendations and the difference with the current workload is shown. In the new structure, 12 hours per week will be saved. This equates to 0,3 FTE. In appendix 6 is a detailed calculation of these hours.

Task	Hour/week		
	Old	New	Balance
PO creation	19	19	0
Goods Receipt creation	49	49	0
Processing Invoices	92	42,5	-49,5
Archiving contracts	0	11	11
Maintaining database	0	25	25
Report actual monthly costs	0	1,5	1,5
Total	**160**	**148**	**-12**

Figure 7-3

The allocation of the extra work on archiving contracts, maintaining the database and reporting the actual monthly costs is shown in figure 7-4. As mentioned above, the extra work that will come because of the implementation of the recommendations will be fully covered by the Specialist Support Services. 12 hours per week equates to 12 * 20,38 * 52 = € 12.718,50. In total, each individual Specialist Support Services has 3 hours less work on the Purchase to Pay process. These hours can be spend on other tasks or projects within GIS.

	Extra Work		Less Work		Balance	
	Hour / Week	Cost / Year	Hour / Week	Cost / Year	Hour / Week	Cost / Year
Total	+37.5	39.745,32	-49.5	-52.463,80	-12	-12.718,50
Role						
Specialist Support Services	+9,375	9.936,33	-12,375	-13.115,95	-3	-3.179,63
Specialist Support Services	+9,375	9.936,33	-12,375	-13.115,95	-3	-3.179,63
Specialist Support Services	+9,375	9.936,33	-12,375	-13.115,95	-3	-3.179,63
Specialist Support Services	+9,375	9.936,33	-12,375	-13.115,95	-3	-3.179,63

Figure 7-4

The reduction of the number of FTE can be attributed to the fact that more invoices will be processed directly by Financial Shared Service. Currently a lot of Invoices need to be processed by GIS, which consumes a lot of time approximately 92 hours per week on an average). When PO's are created in time and communicated to the vendor and Goods Receipts are done before an Invoice comes in, GIS will receive less Invoices to match. This will ensure a reduction of 49,5 man-hours per week. This reduction in man-hours for the invoicing process reduces the turnaround of the Purchase to Pay process. The turnaround is therefore already included in the calculation of man-hours.

Investment

The implementation of the recommendations is partly done during the research. The database with all the information is created and all active contracts that were not archived are entered into the Contracto tool. This means all the investments for the implementation are already done. The total investment that has been made is € 3.912,96. This is again based on man-hours for the archiving of existing active contracts and setup of the database. In Appendix 6 is the calculation of this investment. Figure 7-5, the Return on Investment (ROI) is shown. The ROI is on the total investment, where T stands for month.

Task	Investment	T=0	T=1	T=2	T=3	T=4
Setup database	- € 2.608,64					
Archiving contracts	- € 1.304,32					
Total	- € 3.912,96	- 3.912,96	1.027,15	1.027,15	1.027,15	1.027,15

Figure 7-5

The ROI is approximately 4 months. After these 4 months, the investments that were done to setup the database and archive all existing contracts are earned back. After these 4 months, reduction of process costs will

Additional financial benefits

The structure of the process and the better visibility of all costs related to Vendor Management will bring some additional indirect benefits that will influence the AOP in the next years. Main contributing factors to the decrease of the AOP value can be attributed to removing obsolete usage of support and licenses and timely payment. These additional benefits that could arise because of a structured process and a better visibility on actual costs are not direct process costs. Therefore these additional benefits are not included in the calculation of the reduction of process costs. The purpose of this research is to reduce process costs. Although the additional benefits are not direct process costs, it is good to mention that the improved Purchase to Pay process will have effect on costs that are not directly related to the process too. The amounts for these additional benefits are impossible to estimate in this research. The benefits that can be achieved depend on many factors, like the number of unused licenses, the amount of otiose support and which vendors are willing to give discounts. The amounts are excluded from this report, but to have a total view on the benefits that could occur, in this section the additional benefits are described.

Accurate forecasts and sticking to the numbers with better control is the key to achieve a decrease in the AOP value. The savings could be made, because there will be more visibility on the actual yearly costs. Because of better visibility of contracts, the right choices to renew or delete can be made by the budget owner. This could ensure fewer costs for licenses, applications and support that are not used in the company any more. When the actual costs are managed in a database and provided to the budget owner, the budget owner will have a better view on which licenses, applications and support are still used. It could be that a lot of licenses and support are currently not used and thus otiose. The contracts for these otiose support and licenses could be terminated, which will eventually lead to a reduction of costs. The total costs that

Timely payment ensures a better image for the GIS department. As mentioned in the report, this will lead to a better negotiating position. Because of accurate and timely payment GIS could ask for discounts on future engagement. GIS has never paid for any penalties due to late payment. This is the policy and is mentioned in the terms and conditions of every contract. The advantage of accurate and timely payment is the image of the company and possible discount on future agreements. The vendor is more likely to give discounts when they get their payments accurate and on time. The reduction of time spend on matching and processing invoices ensure faster turnaround times for the full Purchase to Pay process. This will lead to timely payment of all invoices. Because it is not possible to estimate the amounts that occur from these discounts, the actual reduction in amounts that can be realized is disregarded from this report.

Conclusion

As mentioned before, the purpose of this research is to realize a cost reduction on the Purchase to Pay process costs of at least 5%. In the overview in figure 7-6 is shown that in the first year € 8805,54 can be saved on process costs because of the implementation of the recommendations. This means a reduction in direct process costs of 8.805,54 / 169.580 * 100 = 5,19%. In the first year after implementation, the cost reduction of 5% will therefore already be more than achieved.

Task	Costs	Benefits	Balance
Setup database (Investment)	-2.608,64		
Archiving existing contracts	-1.304,32		
Maintain database	-26.496,88		
Archiving contracts	-11.658,62		
Report actual monthly costs	-1.589,81		
Processing invoices		52.463,81	
Total	-€ 43.658,27	€ 52.463,81	+ € 8.805,54

Figure 7-6

In the second year and the years after that, the investment will not come back. This means that in the years after the year of implementation, the cost reduction on the Purchase to Pay process costs will be even more. The reduction of the workload will result in a cost reduction of 12.718,50 / 169.580 * 100 = 7,5% for year 2 and the years after that. The cost reduction of at least 5% as mentioned in the main question will thus be more than achieved by implementing all the recommendations as shown in paragraph 7.1. In Appendix 6 is a detailed calculation of the man-hours expressed in costs.

The reduction of costs that will be made by implementing all recommendations mentioned in paragraph 7.1 will not cause a direct saving for the GIS department. This was not the purpose of this research. The turnaround of the process and the visibility of costs will be improved and with that a direct saving on the process costs could be realised. The man-hours that are saved can be used for other tasks or projects within the Vendor Management Team.

Bibliography

Abcouwer, T., Gels, H., & Truijens, J. (2006) . *Informatiemanagement en informatiebeleid*. Den Haag: Sdu Uitgevers.

Acom Solutions (2009). *Take a P2P perspective to help achieve world-class AP performance.* Retrieved February 12th, 2013, from http://www.acom.com/accounts_payable/articles/ioma_AP_p2p_benchmarks.html

Berge, L. ten, & Oteman, M. (2006) . *Inleiding Organisatiekunde*. Bussum: Uitgeverij Coutinho.

Bon, J. van (2007) . *IT Service Management, Best Practices: Het standaardwerk voor IT Service management*. Lunteren: van Haren Publishing.

Contracto. (n.d.). Retrieved February 2nd, 2013, from http://www.onlinecontractbeheer.nl/vervolg.aspx?pid=43&gclid=CMfvqfC26rUCFYqf4AodrXIAiQ

Deming Cirkel. (n.d.). Retrieved January 17th, 2013, from http://www.btsg.nl/infobulletin/Deming%20cirkel.html

Grit, R. (2012) . *Informatiemanagement*. Groningen: Wolters Noordhoff.

Grit, R. (2005) . *Projectmanagement*. Groningen: Wolters Noordhoff.

Handfield, R., McCormack, K., & Steininger, W.(2006). *Best Practices in Procure to Pay.* Retrieved December 17th, 2012, from http://www.drkresearch.org/Clients/P2PWorkshop/Best_Practices_in_Procure_to_Pay_article.doc

Handfield, R. (2006). *Best Practices in the Procure-to-Pay Cycle: Perspectives from Suppliers and Industry Experts. Practix, 2006* (9). Retrieved December 17th, 2012, from http://www.supplychainredesign.com/publications/practix032006.pdf

Howard, J (2009). *How to make Purchase-to-Pay Automation, pay.* Retrieved February 5th 2013, from http://www.it-director.com/enterprise/technology/content.php?cid=11179

Invoice Matching. (n.d.). Retrieved November 12th, 2012, from http://www.paramounttechnologies.com/Invoice-Matching.aspx

Nieuwenhuis, W. (2011). *Benchmark Purchase to Pay.* Retrieved December 18th, 2012, from http://www.slideshare.net/wsnieuwenhuis/benchmark-purchase-to-pay-samenvatting

Purchasing Insight (2010). *Definition of Purchase to Pay*. Retrieved November 12th, 2012, from http://purchasinginsight.com/definition-of-purchase-to-pay

Solve Procure-to-Pay Process Challenges. (n.d.). Retrieved November 16th, 2012, from http://www.springcm.com/procure-to-pay-process

Theories and Models of Organizational Change. (n.d.). Retrieved February 26th, 2013, from http://aled.tamu.edu/440/READ%20-%20Change%20Theory%20Article.pdf

Til, P. Van, & Rooij, T. de (2008) . *Business Intelligence: de eenduidige informatieomgeving en de gevolgen voor de organisatie*. Den Haag: Sdu Uitgevers bv.

Voskamp, E. C. (2008) . *Aanschaf van ICT: Contracten, onderhandelen en realisatie*. Den Haag: Ten Hagen en Stam.

Waal, A. De, & Bulthuis, J.H. (1995) . *Cijfers zeggen niet alles!: methoden ter verbetering van de interne managementrapportage*. Deventer: Kluwer.

What is e-Invoicing? (n.d.). Retrieved on February 2nd, 2013, from http://www.einvoicingbasics.co.uk/what-is-e-invoicing/?g=ppc&gclid=CPPbqoSb97UCFYfJtAodtjQA6Q

VISA Commercial Solutions (2008). *Profit from the experience of best-in-class companies.* Retrieved February 12th, 2013, from http://usa.visa.com/download/corporate/mid_size/program_optimization/global_best_practices_executive_summary.pdf

Abbreviations

AOP	–	Annual Operational Plan (Budget)
CEO	–	Chief Executive Officer
DEMB	–	Douwe Egberts Master Blenders 1753 (Company Name)
ERP	–	Enterprise Resource Planning
FSS	–	Financial Shared Service
FY	–	Fiscal Year
GIS	–	Global Information Systems (IT Department of DEMB)
GR	–	Goods Receipt
IT	–	Information Technology
KPI	–	Key Performance Indicator
P2P	–	Purchase to Pay
PEC	–	Period End Close
PMO	–	Project Management Office
PO	–	Purchase Order
Procure to Pay	–	Synonym for Purchase to Pay
RfP	–	Request for Proposals
SAP	–	Systems, Applications and Products in Data processing
SOW	–	Statement of Work

Appendix 1 Tables and figures

Chapter 1
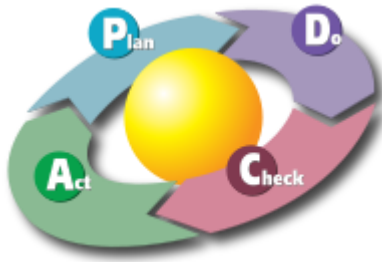
Figure 1-1

Chapter 2

Figure 2-1

Chapter 3

Figure 3-4

Figure 3-6

Appendix 2 Company description

DE Master Blenders 1753

DE Master Blenders 1753 (DEMB) is a global manufacturer and marketer of high quality, branded products to consumers around the world. The most famous brands of DE Master Blenders 1753 are Douwe Egberts, Senseo en Pickwick.

D.E Master Blenders 1753 is an international coffee and tea company. The headquarters is in Amsterdam, Netherlands. The coffee and tea products are available worldwide in more than 45 countries.
D.E Master Blenders 1753 is the third largest Coffee and Tea Company in the world, with an annual turnover of € 2, 6 billion. The number of FTE is around 7500.

In 2011 the decision was made to split the international coffee and tea activities from SaraLee and start as a new, independent organization. Since July 2nd 2012 then 'new" company started under the name "DE Master Blenders 1753". The company is listed on the NYSE Euronext Amsterdam since the split off from SaraLee.

The Department

The graduation project takes place within the department Global Information Services (GIS). GIS is the global IT-department of DEMB. De Global Information Services (GIS) department currently has four major vendors; Hewlett Packard, IBM, SAP en AT&T. In addition to these four 'big' vendors there are multiple 'smaller' vendors of which GIS purchases different products and services. The services and products vary from service on applications to hardware like laptops, desktops and mobile phones. Currently, the GIS department has a total of 86 FTE.

The GIS department has its own Chief Executive Officer (CEO). At this moment the department is split up into six different teams of specialists. Each team has its own manager. The teams all have their own tasks and responsibilities.
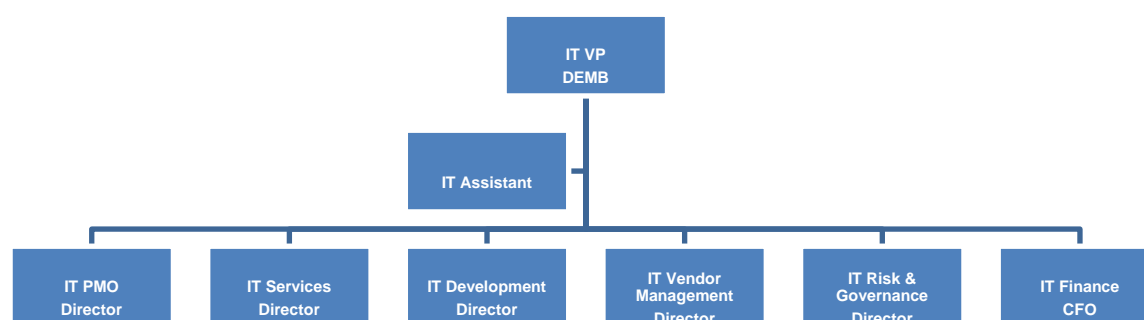
Organizational chart GIS

Below is a brief explanation of each team's tasks and responsibilities.

- Project Management office (PMO)
 *This team is responsible for all current and future IT-projects within DEMB. This team includes project managers, program managers and a support function. Total FTE is 5.*
- IT Services
  This team is responsible for local service and hardware. Each region has its own IT Manager. Total FTE is 39.
- IT Development
  As the name suggests, this team is responsible for technological improvement. When improvements in software, hardware or services are available, this team will notice and take action when needed. Total FTE is 23.
- IT Vendor Management
  The thesis will take place in this team. Vendor Management is the process of monitoring, reviewing and timely adjusting the performance of different vendors. The main purpose of this team is to control the costs and quality of services delivered by vendors. Contacts and contracts with vendors are central in this team. Total FTE is 11.
- IT Risk and Governance
  This is a small team, but not less important than the other teams. Risks can cause high costs and failed projects. This team responds to risks and ensures that risks are converted into opportunities. Total FTE is 3.
- Finance
  The Finance team ensures that costs are booked into the right accounts and in the right period. On a monthly basis, finance submits a cost report to the senior management of DEMB. Finance also has a control function for all the other teams. Total FTE is 3.

Organizational chart IT Vendor Management
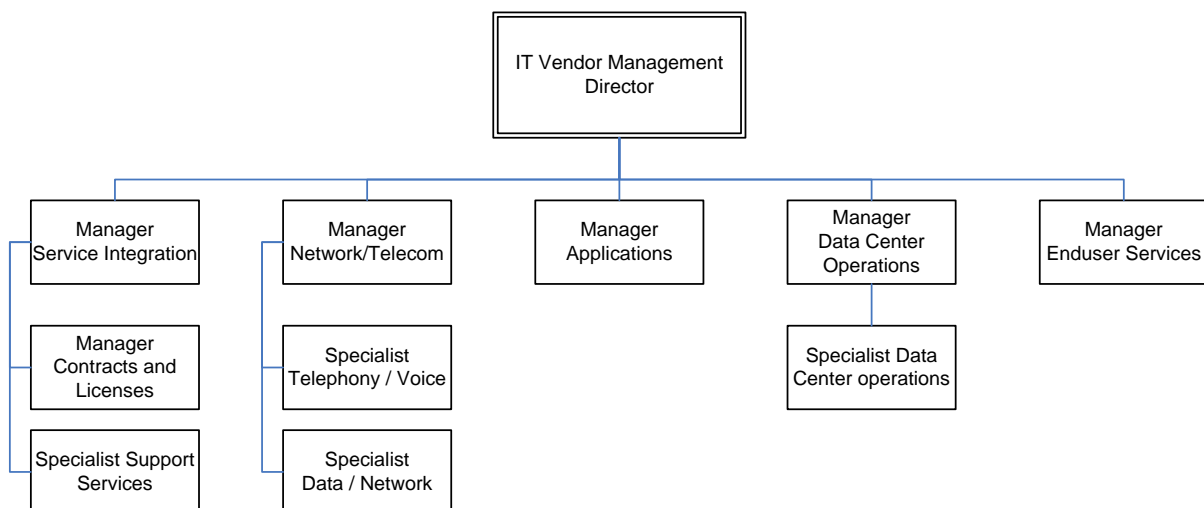
Organizational chart IT Vendor Management

Appendix 3 Research plan

Main question

How can the Purchase to Pay process, from a signed contract to payment of the invoice, within Vendor Management be structured so that the process costs can be reduced with 5% within a year after implementation?

Sub-questions

The assignment is mainly focused on the business discipline Purchasing. Besides this, the assignment covers two other disciplines. The sub-questions below relate to the following areas:
- Purchasing
- Organization
- Finance

The report consists of ten sub-questions and will go through the following six phases.

1. Current process
2. Bottleneck analysis
3. Best Practices
4. Conclusion
5. Advice
6. Cost / Benefit analysis

Current process (Chapter 3)
1. How is the Purchase to Pay process currently arranged and who are involved?

Bottleneck analysis (Chapter 4)
2. What bottlenecks are there in the current process?
3. What are the causes of these bottlenecks?

Best practices (Chapter 5)
4. What structures do similar companies use in their Purchase to Pay process?

Conclusion (Chapter 6)
5. What management information is necessary to be able to control costs?
6. What can Vendor Management do to solve the bottlenecks in the process?

Advice (Chapter 7)
7. What organizational changes are needed to structure the Purchase to Pay process?
8. What can the Vendor Management team do to help to create a more efficient Purchase to Pay process?
9. Does the new process have support within the Vendor Management team? If not, how can this be achieved?

Cost / Benefit analysis (Chapter 7)
10. What are the costs and benefits of the process change?

Research methods

Below is a schematic overview of the methods that are used per sub phase of the report.

Phase	Methods used
Current Process	Operational approach
Bottleneck analysis	Internal research / Interviews / Observations
Best practices	Theoretical study / Comparing different benchmarks
Conclusion	Theoretical study / Personal interpretations
Advice	Personal interpretations of all information gathered / Theoretical study
Cost / Benefit analysis	Interviews / Research on facts and figures

Appendix 4 ABC Pareto analyse

Vendor	Percentage of total costs	Cumulative percentage	ABC Pareto analysis
	0,00%	0,00%	0
Vendor 1	26,84%	26,84%	
Vendor 2	25,17%	52,01%	
Vendor 3	16,78%	68,79%	
Vendor 4	8,05%	76,84%	
Vendor 5	5,03%	81,87%	
Vendor 6	3,36%	85,23%	10,91%
Vendor 7	3,36%	88,58%	
Vendor 8	1,88%	90,46%	
Vendor 9	1,68%	92,14%	
Vendor 10	1,04%	93,18%	
Vendor 11	1,01%	94,19%	20,00%
Vendor 12	0,91%	95,09%	
Vendor 13	0,54%	95,63%	
Vendor 14	0,37%	96,00%	
Vendor 15	0,34%	96,33%	
Vendor 16	0,30%	96,64%	
Vendor 17	0,27%	96,91%	30,91%
Vendor 18	0,23%	97,14%	
Vendor 19	0,23%	97,37%	
Vendor 20	0,22%	97,60%	
Vendor 21	0,22%	97,81%	
Vendor 22	0,20%	98,02%	40,00%
Vendor 23	0,17%	98,18%	
Vendor 24	0,14%	98,32%	
Vendor 25	0,12%	98,44%	
Vendor 26	0,11%	98,55%	
Vendor 27	0,10%	98,65%	
Vendor 28	0,09%	98,75%	50,91%
Vendor 29	0,09%	98,84%	
Vendor 30	0,08%	98,92%	
Vendor 31	0,08%	99,01%	
Vendor 32	0,08%	99,09%	
Vendor 33	0,07%	99,15%	60,00%
Vendor 34	0,07%	99,22%	
Vendor 35	0,07%	99,29%	
Vendor 36	0,07%	99,35%	
Vendor 37	0,07%	99,42%	
Vendor 38	0,06%	99,48%	
Vendor 39	0,06%	99,54%	70,91%
Vendor 40	0,06%	99,60%	
Vendor 41	0,05%	99,65%	
Vendor 42	0,05%	99,70%	
Vendor 43	0,05%	99,75%	
Vendor 44	0,05%	99,79%	80,00%
Vendor 45	0,05%	99,84%	
Vendor 46	0,04%	99,88%	
Vendor 47	0,03%	99,91%	
Vendor 48	0,03%	99,93%	
Vendor 49	0,02%	99,95%	
Vendor 50	0,02%	99,97%	90,91%

Vendor 51	0,01%	99,98%	
Vendor 52	0,01%	99,99%	
Vendor 53	0,00%	99,99%	
Vendor 54	0,00%	100,00%	
Vendor 55	0,00%	100,00%	100,00%

ABC analysis Vendor Managment
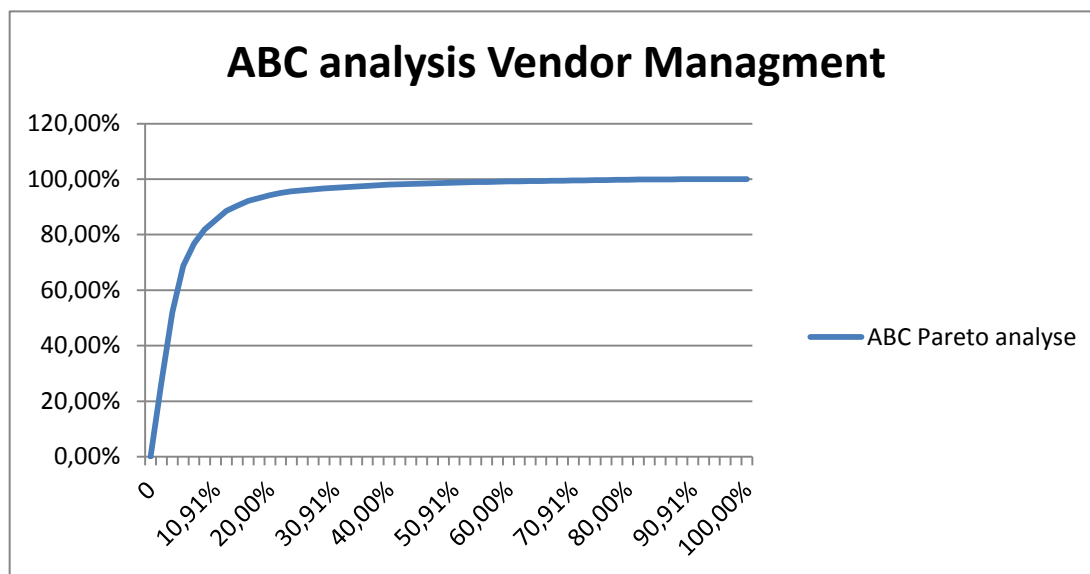
Appendix 5 Format Contract Management File

Vendor	Description	Category	Total AOP Value	Contract					
				Notification date	Renewal date	Contracto ID	Invoice date	Invoice frequency	Fixed/Variable Costs

				Amount left on AOP
PO number	PO amount	Total Goods Receipt	Total Invoiced	

P01			P02			P03			P04		
Amount	Goods Receipt	Invoice	Amount	Goods Receipt	Invoice	Amount	Goods Receipt	Invoice	Amount	Goods Receipt	Invoice

Appendix 6 Financial justification

Calculation man-hours

The implementation of the recommendations will have effect on the weekly work on the process. There are four activities that will change the total workload, and with that the total of FTE, for the Purchase to Pay process. The archiving of all active contracts, maintaining a database with all information in these contracts and PO's and the report on actual monthly costs will provide more work. Because more Invoices can be matched by Financial Shared Service, the work on checking and matching Invoices will be less.

Currently 4 FTE are directly working on the Purchase to Pay Process, this comes down to 160 hours per week. The allocation of the work is shown in the table below.

Task	Hour/week
PO creation	19
Goods Receipt creation	49
Processing Invoices	92
Total	**160**

Current workload

Because the same amount of PO's and Goods Receipts need to be created, the time that PO creation and Goods Receipt creation consume will not be affected by the recommendations. Processing Invoices will consume less time than before after implementation. As mentioned above there will be some extra tasks to structure the process.

Archiving contracts

The number of active contracts and agreements that need to be uploaded into the Contracto tool is not exactly known. Uploading one contract into the tool takes 15 minutes on an average. Weekly there are 30 new agreements or contracts that need to be uploaded. This means that 30*0,25 = 7,5 hours. To cover the uploading of already in use and active contracts and making the Contracto tool up to date, the Manager Contracts and Licenses will schedule 3,5 hours a week. This means that there will be extra work on archiving of contracts of 7,5 + 3,5 = 11 hours per week. This workload will be delegated to the Specialist Support services.

Maintaining database

Because the database with all information concerning contracts, PO's and Goods Receipts has already been set up during the research, the only extra time on the database is the daily maintenance. During the research the maintenance on the database is also already done for two months. Experience has learned that the total workload for maintenance of this database is 25 hours per week. This maintenance of the database will also been done by the Specialist Support Services.

Report actual monthly costs

This is a monthly task. 6 hours will be spend on creating a report and present this to the IT Vendor Management Director. This is also based on experience. The Finance department has done this before and the average time to create a report is 2 hours. The presentation and discussions will take 4 hours on an average. The total workload for this activity is 2+4 = 6 hours per month, which equals to 1,5 hour per week.

Processing Invoices

DEMB receives 340 Invoices for the GIS department per week on an average. Currently 35% of these Invoices are processed directly by the Financial Shared Service department. This means that on an average, 340*0,65 = 221 Invoices per week need to be checked, matched and processed by GIS. The average time that GIS spend on one invoice is 25 minutes. The total hours per week that GIS currently spend on invoices is 221*25 / 60 = 92,08. After implementation of the recommendations, the percentage of Invoices that will be processed directly by Financial Shared Service will grow to 70%. There will be no change in the amount of Invoices that DEMB receives for GIS. This means that the total amount of Invoices to process by GIS will be approximately 340*0,3 = 102. Thus, the total workload to process Incoming Invoices after implementation will be 102*25 / 60 = 42,5. This means that 92 – 42,5 = 49,5 hours per week will be saved on processing Invoices.

Investment

During the research the archiving of existing active contracts and the setup of the database is already done. The archiving and setup of the database were spread over 16 weeks. Per week the Specialist Support Services have spend 8 hours extra to setup the database and 4 hours extra to archive already existing contracts. The extra hours that were spend have been paid. The costs per hour for a Specialist Support Services are € 20,38. In the overview below is a calculation of the investment costs.

Task	hour/week	Total weeks	costs/hour	Costs
Setup database	8	16	20,38	2608,64
Archiving contracts	4	16	20,38	1304,32
Total	12	16	20,38	**3912,96**

Calculation Investment