

Master's Thesis

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School of Business, Master's Degree Program in Supply Management

MASTER'S THESIS

Controlling and Assessment Indirect Spend

–Case Study from Beverage Industry

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## Abstract

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| <b>Keywords:</b> electronic procurement, sourcing strategy, maverick buying, indirect sourcing  |
| <p>Over the past decades, companies' interest in controlling indirect sourcing process has increased. New indirect procurement strategies developed for the companies are needed in order to manage their indirect costs. New cost management strategies allow companies to improve their core competences.</p> <p>The research methodology and used in this thesis is qualitative. The theory is based on scientific publications. Empirical data given by the case organization, and was collected in the company's own systems and in project steering meetings. The purpose of the study was to select a new electronic system for the company and give options for the company to reduce case organization's indirect costs. The result showed that the most effective indirect cost management strategy was adopting a new electronic procurement system.</p> |

## Tiivistelmä

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| <p><b>Hakusanat:</b> elektroninen ostaminen, hankintastrategia, ohjostaminen, epäsuora hankinta</p>  |
| <p>Viimeisten vuosikymmenien aikana yritysten kiinnostus epäsuoraa hankintaprosessia kohtaan on lisääntynyt. Yrityksille uusien epäsuorien hankintastrategioiden kehittäminen on tarpeellista yrityksille, jotta ne voivat hallita epäsuoria kustannuksiaan. Uudet kustannusten hallintastrategiat mahdollistavat yritysten ydinkyvyyksien parantamisen.</p> <p>Tässä opinnäytetyössä on käytetty kvalitatiivista tutkimusmetodologiaa. Teoria perustuu tieteellisiin julkaisuihin. Empiirinen aineisto on saatu tutkimuksen kohteena olleelta yritykseltä, ja se on kerätty yrityksen omista järjestelmistä ja projektinohjaustapaamisissa. Tutkimuksen tarkoituksena oli valita uusi elektroninen järjestelmä yritykselle ja antaa sille vaihtoehtoja epäsuorien kustannusten vähentämiseksi. Tulos osoitti että tehokkain epäsuorien kustannusten hallintastrategia oli uuden elektronisen järjestelmän käyttöönotto.</p> |

## **Forewords**

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In Järvenpää, 1<sup>st</sup> of December 2014,

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## List of Abbreviations

|      |   |
|------|---|
| PO   | purchase order                            |
| ORM  | Operating Resource Management             |
| MRO  | Maintenance, Repair and Operations        |
| MOB  | Make or Buy                               |
| HVAC | Heating, Ventilation and Air Conditioning |
| HR   | Human Resources                           |
| CM   | Category Management                       |
| MB   | Maverick Buying                           |
| TCO  | Total Cost of Ownership                   |
| EBIT | Earnings Before Interest and Taxes        |
| ERP  | Enterprise Resource Planning              |

# 1 INTRODUCTION

In organizational level, the procurement process and strategies have been an area of interest since the beginning and mid-1900. Since the systematic development of procurement processes, the focus has been in direct procurement processes, but has little by little covered also indirect procurement. Over the years, the interest and need for new purchasing management tools have been increased. Multiple different electronic procurement tools have been developed to answer to the demand.

It has been discovered throughout the studies, that an average company spends at least 40 per cent of its revenue to indirect purchasing. In many cases, the percentage is even higher – up to 60 per cent. Due to the worldwide economic recession during the 21<sup>st</sup> century, the companies interests have been shifting more and more towards indirect procurement costs – how to manage and reduce them.

## 1.1 Key definitions and concepts

In this section, some of the key definitions and concepts are defined. The definitions and concepts chosen are based on the thesis' theoretical framework.

### **Direct procurement**

- Includes raw materials, equipment and services in order to manufacture organization's own revenue-generating products or services (Cox et al., 2005, 42).

**Indirect procurement**

- Indirect procurement includes all purchasing of items and services required to sustain organization's daily operational functions. This involves MRO products and services as well as support systems, which do not directly take part on generating revenue. (Cox et al., 2005, 42; Kim & Shunk, 2004, 153)

**Category management**

- Category management is a process of managing suppliers product categories offered to the purchasing organizations business units (Dussart, 1998, 51).

**Maverick buying**

- Maverick buying is the non-compliant, off-contract buying of goods and services, for which an established procurement process is in place based on pre-negotiated contracts with selected suppliers. The phenomenon is common in organizations using organization-wide frame agreements. Maverick buying prevents the full utilization of volume discounts negotiated, and also raises unnecessary process costs. (Karjalainen & van Raaij, 2011, 185)

**E-procurement**

- Electronic procurement (E-procurement) is defined as business-to-business procurement using the Internet technologies (Kim & Shunk, 2004, 154). Azar et al. (2011, 1418) describe E-procurement as using Internet in the purchasing process by placing an order and communicating with suppliers via network.

**ERP-system**

- Enterprise resource planning system refers to sourcing, tendering, auctioning and informing by utilizing Internet- based technologies (M.J. Garrido et al.2008, 616).

## 1.2 Research methodology and structure of the research

The research methodology used in this thesis is qualitative. The usual features of qualitative research are its comprehensive approach to the studied subject and that the data used is collected in natural, real situations. The object is chosen appropriately, and cases are dealt as unique instances (Hirsjärvi et al., 1997, 164). In business economics, the typical qualitative research is a configuration, which one or two cases are inspected. (Koskinen et al., 2005, 46)

Case study is one of the most used research methodology in business economics. The researched case is usually a company or a part of a company – department or a profit center (Koskinen et al., 2005, 154). This research is focused on one business unit, the procurement unit, by forming a case study in its indirect procurement process.

Theoretical data for the research is collected in scientific publication, while empirical part is based on data given by the case organization Altia. Empirical data was collected in the company's own systems and in project steering meetings in spring 2012.

The structure of the research follows next phases:

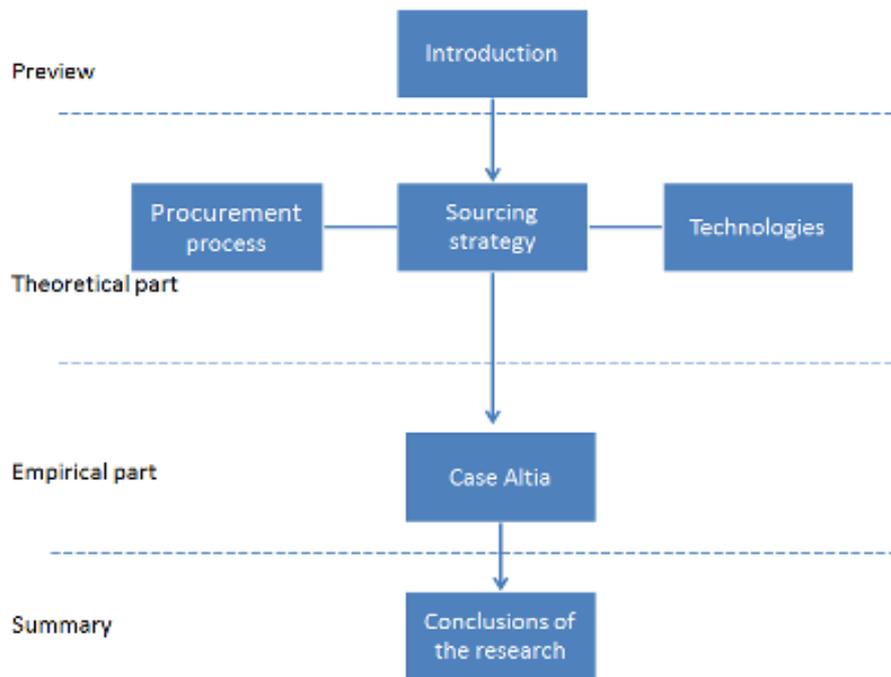


Figure 1. The structure of the research.

The first section, preview, gives an overall view of the research. The key definitions and concepts are presented and research methodology is expounded. In first section, the research problems and delimitations are also presented and defined, and the literature review is displayed. Last part of the preview presents the case study company, and gives an overview of it.

The second part covers the theoretical part of the study. The necessary theory is introduced and divided into three main parts; procurement process, sourcing strategy and technologies used as a part of the procurement process. In the theoretical part, the literature presented is focused on indirect procurement and e-procurement. The theoretical framework of the category- and portfolio management is presented as a part of the sourcing strategy. Second part also covers different possible technologies of indirect procurement process.

The third, empirical part of the thesis handles the case company, and company's indirect procurement process is presented. The theory is tested in the empirical part of the research, and more effective indirect sourcing strategy option is performed.

In the final part of the research the theoretical and the empirical parts of the study are summarized and analyzed. The research questions are answered. Further research of the topic is discussed and suggested.

### **1.3 Literature review and theoretical frameworks**

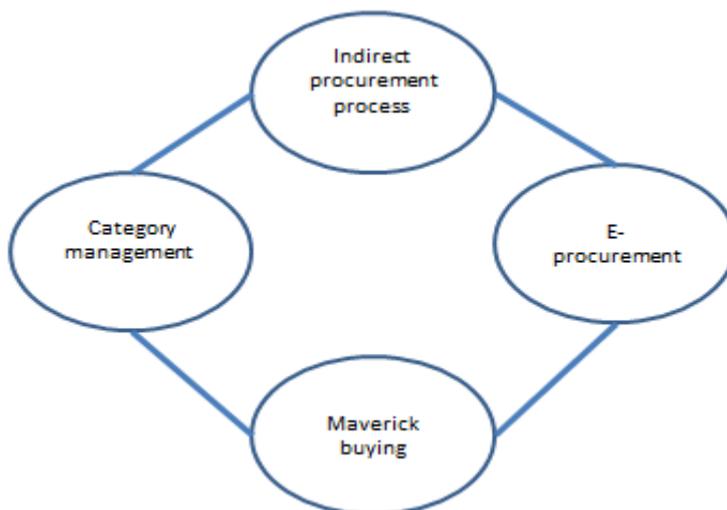
In the organizational level, indirect procurement has received less attention than much more researched direct procurement. In case of indirect procurement, the level of IT usage is small, resulting the processes being less standardized and automatized than in the area of direct procurement. Due to the lack of interest in indirect spend in organizations, the companies knowledge of their indirect costs have been incomplete. (Kim & Shunk, 2004, 154)

The companies have been using e-procurement practices since the 1990`s as a part of their sourcing strategy, when upcoming new technology made information transfer quicker and easier than before. In order to fully exploit the new technologies, there was and still is need for effective procurement tools.

Kalakota & Robinson (2001) and Neef (2001) claim, that the increased efficiency and effectiveness are the economic consequences of e-procurement. More effective procurement processes will permanently lower the costs. Osmonbekov et al. (2002) pioneered the research of the Internet use on the structure of the buying center contradict. The increased efficiency and communicational transparency are results of the standardized procurement process, and the utilization of different e-procurement tools. The adoption of Internet tools has been recently an interest among researchers, especially the economic and organizational consequences of e-procurement. (Garrido et al., 2008, 616)

The use of e-procurement tools can reduce significantly organization's procurement costs. Most studies emphasize the economic effects of using the

Internet- based procurement channels (Garrido et al., 2008, 620). According to Azar et al. (2011, 1419), it is possible to save 42 per cent purchasing transaction costs by using e-procurement based technologies. Some other researchers claim the percentage is even higher, at least up to 50 per cent (Kalakota & Robinson, 2001, 159). This reduction of costs has been traced into more efficient and simple purchasing process, resulting a faster purchasing cycle time, less paperwork and fewer mistakes. These changes make the purchasing process more flexible, and reduce the number of suppliers used. With e-procurement tools, it is possible to bring down managerial costs, use more up-to-date information and get better purchasing price.



*Figure 2. Research framework.*

In figure 2, the framework of the research is presented. The indirect procurement process is linked with the e-procurement and the category management which play key role in managing organization's maverick buying.

## **1.4 Research problems and delimitations**

The purpose of the research is to study the indirect procurement process in a case company. The aim of the research is to find options for the company to enhance its indirect procurement process and evaluate the indirect procurement project. The following research questions are stated:

- How the indirect procurement process is organized in the case company?

Sub-question related to the main research question is:

- What kind of options the case company has in order to improve the indirect procurement process?

After the indirect procurement process of the case company is portrayed and evaluated, the options for enhanced indirect procurement process are presented via pilot project, which presents the reduction plan of the indirect procurement costs in marketing materials. The pilot project's improved procurement process is then adapted to other product categories. After the research, the questions are answered and discussed.

## **1.5 Case company Altia Corporation**

Altia is a wine and spirits company producing, delivering, selling and marketing alcoholic brands in the Nordic and Baltic countries. In addition, the corporation imports and exports alcoholic beverages in its market area. (Altia Annual Report, 2011, 4) The company has 1 distillery, 3 bottling plants, warehouses and offices in six countries headquartered in Finland. Other operating countries are Sweden, Norway, Denmark, Estonia and Latvia. In 2011, Altia employed 1178 persons, and

the development is growing. (Altia Annual Report, 2011, 6, 46) In 2011, Altia's revenues were 524.8 million euros with gross margin 64.8 million euros. The company's operating profit was 34.4 million euros and net profit 21.3 million euros. (Altia Annual Report, 2011)

The company's strategy is growth based, which has been executed in business acquisitions and supplementary acquisitions of trademarks. These actions have increased Altia's net sale by approximately 100 million euros, and the operating profit with synergistic effects by over 10 million euros. (Altia Annual Report, 2011, 10-11)

Altia's aim is to improve efficiency by rationalizing and restructuring the business of the operation model structure, processes and Supply Chain. (Altia Annual report, 2011, 11) The total value of Altia's sourcing in 2011 was 324.1 million euros (Altia Annual Report, 2011 35). In sourcing and logistics, Altia utilizes the economies of scale. This means the company is producing its products in its own production plants or have them produced through subcontracting. (Altia Annual Report, 2011, 27)

## 2 PROCUREMENT PROCESS

Procurement process is one of the main functions in manufacturing company's daily operations. The chapter is focused on organization's indirect procurement process and tools needed for the company to organize and manage its indirect material flows.

### 2.1 E-procurement

According to Kim & Shunk (2004, 154) e-procurement systems are well suited for indirect procurement automation and support. E-procurement systems enable the organization to gain benefits in time and cost savings across the whole organization, as well as yield an improved level in self-service transactions for end-user purchasing. The e-procurement adoption also reduces maverick buying (Ibid.; Garrido & al., 2008, 621).

There are two possible ways to coordinate procurement process between selling and buying organization. In bilateral one-to-one contact there is a direct contact between buyer and seller. Multilateral many-to-many contact refers to usage of intermediaries such as e-marketplaces. (Kim & Shunk, 2004, 155)

According to Garrido et al (2008, 615-616) Internet can be used to access a large amount of information while lowering the costs of time and money compared to the use from other tools inside the organization. E-procurement gives greater transparency and creates value for the company and its procurement chain. The value can be seen in shorter purchasing and delivery times, system receptiveness and end-user satisfaction. E-procurement allows an organization to decentralize its purchasing processes and centralize the strategic ones, such as the supplier selection. This procurement model supports greater coordination inside the company.

Due to these benefits, the overall expenses of the whole purchasing process are easier to track and follow. The use of e-procurement tools also give the company a possibility to estimate the future procurement costs. Transparent and up-to-date storage information can make a substantial difference in cost management in case of both direct and indirect purchases.

The use of Internet-based purchasing tools affects the efficiency and effectiveness of procurement, while the size of procurement unit decreases (Garrido et al., 2008, 620; Osmonbekov et al., 2002, 152) This means that the effective use of e-procurement tools lowers the costs of the whole process inside the organization.

The challenge is how to deal with the substantial amount of information. Garrido et al. (2008, 615-616) points out that the high quality and quantity of information reduces the risks of uncertainty in purchases and therefore the transaction costs could be reduced. Although a lot of valid information is available, the efficient use of it can be difficult if the information is not in comparable form. For example, it is challenging to make purchase decision between two products available, if there are differences in packaging sizes, transaction costs, product maintaining and other product related costs.

Therefore a conclusion can be made, that the effective e-procurement affects the financial results of the firm (Garrido et al., 2008, 624). E-procurement implementation also consolidates of supply to a fewer providers and increases the awareness of acceptable and approved suppliers between the users inside the company (Croom & Brandon-Jones, 2005, 378-379).

Croom and Brandon-Jones (2005, 370) mention cost benefits such as digitizing product catalogues, which reduces costs, as well as minimize the errors occurring when orders are made. The other two are reductions in inventory and supplier's marketing costs. Due to these benefits, the company's information management and cost transparency is improved significantly. Croom and Brandon-Jones (Ibid.)

concluded that these areas of cost reductions make the e-procurement process more reliable and efficient than preceding manual and semi-automated processes.

The cost related benefits are not that unambiguous. There are costs forming when adopting a new e-procurement system. If the transformation and adoption system takes place when there are acquisitions and other changes happen in the company, the adoption process might prove to be more challenging than normally. Also the different procurement methods and processes between a parent company and its subsidiaries may complicate the e-procurement adoption process. The adopted e-procurement system results movement in more agile procurement processes and relationships in short term while improving longer supplier relationship

## **2.2 Maverick buying**

MB exists in every organization, and it is often linked to procurement of indirect materials, especially MRO, which are often considered as a high volume and low value materials. According to the literature (Karjalainen and van Raaij, 2011, 185; Karjalainen et al. 2009, 251-252) it increases purchasing costs by affecting purchasing prices and procurement process costs. By reduction of maverick buying, significant savings can be achieved. Uncontrolled spend and transactions is reported be reduced from 40 to 25 per cent with e-procurement system.

MB also effects on company's ability to trace the used procurement sources and procurement behaviors and diminishes the procurement visibility. It is claimed, that organization benefits from the increased spend visibility and is able to reduce total costs and risk (Ibid.). Despite the common belief among company's employees, the increased purchasing leverage and consolidated procurement contracts do not increase procurement delivery times and costs.

Partida (2012, 52-53) highlights the fact that organizations with higher level of MB need more time to issue a PO to a vendor than a company that has less maverick buying. More MB also means longer supplier lead times on materials and services. The costs on maverick buying are estimated to be 20 percent higher than in centralized and controlled procurement process with frame agreements negotiated by purchasing professionals (Karjalainen and Raaij, 2011, 185).

Karjalainen and van Raaij (2011) point out three forms of MB that occur in the organization. These are

1. Maverick buying to get better terms and conditions
2. Maverick buying to maintain a previous supplier relationship
3. Maverick buying due to unawareness of frame agreements in existence

The first form of MB takes place when employees compare the terms and conditions of existing negotiated contracts with outside alternative. The employees may have found an alternative supplier with lower price, and therefore may think buying outside agreements lowers costs and saves time for the company and the employers themselves. However, this procurement behavior seldom lowers the TCO and in fact, increases them.

The second form of MB occurs among the employees when the purchasing behavior is based on customary habits. Employees often create a personal relationship with vendor and therefore the employees prefer to use old and familiar sources.

Customary manners are seen as a time savers among the company's staff members. According to Partida (2012, 52), employees may also think that the established procurement process is too complicated and a waste of time. Therefore the organization should consider whether their procurement process and systems are too complicated to use for the employees (Partida, 2012, 53).

The last form of MB is due to the unawareness of the contracts and processes framed by the company. Karjalainen and van Raaij (2011, 187-188) claim this to be the most common form of MB, due to the fact that while numerous individuals are purchasing indirect materials, communication of company policies and contract details are difficult. Karjalainen et al. (2009, 248) found that particularly in indirect materials, the information of procurement contracts and communicating company policies are difficult to dismount throughout the company.

Education and information seems to be the key factors in successful reduction and management of MB. The better understanding of TCO, procurement and process costs is the main factor in controlling them. Complicity of systems and processes will cause employees to get the needed items from other sources. (Partida, 2012, 53)

### **2.3 Category Management and portal technology**

A company determines its purchasing categories by first clarifying spend and then deciding the segmentation of categories. The categories are formed as portfolios, which are then managed by selected managers. Every organization has its own ideas and methods how to determine these categories, and that is why there are no simple answers how to form and manage product categories. (Dussart, 1998, 51)

The categories can be formed by using different types of spend as a guideline, or if it is more suitable for the purposes of the company, by forming its own category types. CM may be defined in several different ways. For example as a process that consists managing product categories as business units and then meeting the customer needs by customizing the units on a store-by-store basis. Another way to describe CM is to look it as an organizational approach that points supplier and distributor or wholesaler and retailer focus towards the effect every product has on

a category's main profit view. All functions, which have some sort of impact to the category, are set under the control of a single factor. From a retailer's point of view CM signifies price determination, merchandising, promotions and product mixing relying on category targets, the competitive market and consumer conduct. (Ibid).

Furthermore, through portal technology buyers and suppliers may log onto a portal site and access the structured and unstructured data. Suppliers receive information about inventory levels of other members and may alter their product according to this new information. Buyers, on the other hand, may monitor the order status and receive offers from suppliers. They may also choose the qualified suppliers, which will attain the needed goods and services. (Azar et al. 2011, 1418-1419).

In addition, with some noticeable characters of portal technology, the procurement process may be unified and clarified. Portal technology allows the company to specify its procurement strategy and automate administrative functions. (Azar et al. 2011, 1418-1419).

### 3 SOURCING STRATEGY

Eltantawya & Giunipero (2013, 216) suggest that there are three main approaches how an organization has traditionally executed its sourcing strategy. The main focus in sourcing strategies has been on make-versus-buy decisions – whether to outsource product making process or keep it in organization. The second approach is the relationships between the company and its suppliers. The third approach concentrates on different dimensions of strategic sourcing. These approaches of strategic sourcing have been for gaining competitive advantage to the company, aiming to attain the goals of the firm and its suppliers (Eltantawya & Giunipero, 2013, 219).

In order to achieve competitive advantage, an organization has to make strategic resolutions such as MOB –decisions. When outsourcing its processes, the company must decide how to deal its relationship with different suppliers, whether to build a strong cooperation or keep it in an arm's length transaction. Both direct and indirect sourcing strategy is based on these decisions. Using Internet as a purchasing channel in indirect sourcing strategy, the ability to control the expenses of the whole process gives the company a strategic, competitive advantage (Garrido et al., 2008, 620).

The sourcing strategies have developed from reactive to a proactive direction. The new proactive, integrated approach to purchasing process has a strategic role within the organization, enabling more effective and cost conscious procurement process. (Apte et al., 2011, 223) The use of e-procurement tools supports proactive sourcing strategy, giving more transparent and detailed information throughout the procurement process. More information results more knowledge in organization's administrative level. Better understanding of the cost structure of the indirect sourcing process is the key in an efficient cost management.

### 3.1 Internal and external sourcing strategies

In the survey concerning internal and external indirect sourcing strategies, Cox et al. (2005, 42) divides indirect sourcing strategy in two. Internal strategies concentrate on improving the competence of the procurement function or other functions in the sourcing of the indirect spend within the organization. External strategies are the ones focused on improving the relationship between the organization and its suppliers in the sourcing of the indirect goods and services.

The five internal strategies (Cox et al., 2005, 42-43) are

“

- Influencing the design and specification process for indirect goods and services by other functions within the organization (**Internal Strategy 1**)
- Taking over the buying role of other functions in the organization, without impacting directly on design and specification (**Internal Strategy 2**)
- Influencing design and specification and undertaking the buying role for other functions in the organization (**Internal Strategy 3**)
- Working with other functions in the organization to develop their procurement competence through joint training programs and/or the creation of procurement-led audit and governance processes (**Internal Strategy 4**)
- Making improvements in the internal competence of the procurement function in an attempt to develop its ability to influence other functions in the organization (**Internal Strategy 5**)”.

These internal strategies are not solely seen in organization's procurement process. There can be combinations between some of these internal strategies. Thus, many companies may choose to make improvements to their procurement function (Internal Strategy 5) by rearranging and simplifying the procurement process, while cooperation with other functions (**Internal Strategy 4**) is used to gain procurement competence within the organization.

Four external strategies are

“

- Increase leverage through the development of external short-term sourcing strategies (such as reverse auctions and constant rebidding) **(External Strategy 1)**
- Increase leverage through the development of external long-term sourcing strategies (such as collaborative partnerships with preferred suppliers) **(External Strategy 2)**
- Increase leverage through the development of external consortia sourcing arrangements with other organizations to provide volume leverage **(External Strategy 3)**
- Increase leverage through outsourcing the external sourcing responsibility to third-party providers of indirect sourcing competence to provide volume leverage **(External strategy 4)** “ (Ibid.).

As for the external strategies -like internal strategies- the organization may use simultaneously many indirect procurement strategies above. Especially increasing the company's influence in long-term sourcing strategies (External Strategy 2) is the one, which can play a key role in achieving organization's competitive advantage. Increased collaboration with preferred suppliers is linked to company's ability to provide volume leverage (External Strategy 3). The importance of finding reliable long-term suppliers increases as the number of MRO and ORM related goods and services grow.

### **3.2 Indirect sourcing**

There are two types of sourcing, direct and indirect. Direct sourcing refers to a company's core businesses – the business why company exists at first place. The second sourcing, indirect sourcing refers to company's support systems – the businesses that keep its wheels running day-to-day bases. When managing these

support systems, the organization has to decide how to organize its indirect sourcing.

Croom and Brandon-Jones (2005, 373-374) suggest there are following types of system choices for managing indirect sourcing;

- Marketplace, which is a multi-supplier and multi-products catalogue hosted by a third party
- Company Hub, which is a similar to a marketplace where a third party provides supplier catalogues
- Extranet, a secure and closed Internet link between a company and a supplier, and where collaborative data is shared.

These system choices give the buying company some scale advantages and reduces the procurement costs, while assuring that the product quality remains consistent and in a certain level. This is made possible by the negotiations made beforehand between buyer and seller. While being decentralized and unmonitored, the indirect sourcing lacks often a focus and the costs for the company are surprisingly high.

### **3.3 Indirect Spend**

Managing and calculating indirect spend begins with identifying the indirect goods and services, commonly known as ORM and MRO materials and services. Indirect goods and services do not directly effect on organization's manufacturing process, but are the ones that company uses daily (Kim & Shunk, 2004, 153). Neef, (2001, 25) determines indirect materials as

“--- any commodity or service that a company buys that does not result directly in finished goods.”

Cox et al. (2005, 40) points out nine different types of spend

1. Electrical and mechanical parts and equipment, which support main manufacturing processes
2. Electronic parts and equipment, such as computers and other IT related products
3. Professional equipment, equivalent goods used during manufacturing process
4. Industrial supplies, such as general maintenance supplies
5. Safety and healthcare parts and supplies
6. Machine shop supplies, including machinery tools and equipment
7. Office supplies
8. Chemical supplies
9. Vehicle and fleet parts and supplies.

This classification concentrates on identifying indirect supplies, but lacks of recognizing services. For example, healthcare and travel services can create a substantial part of organization's indirect spend.

Payne & Dorn (2012, 3) determines indirect spend categories in different perspective (modified):

- Administrative expense: office equipment and supplies, furniture postage and small package shipping services
- Facilities expense: HVAC services, maintenance supplies and janitorial services, electricity and security services
- Finance and HR: payroll processing, corporate accounting, benefits, property/accident insurance and outsourced collections
- Sales and marketing: advertising, promotional items and printing
- Information technology and telecommunications: cell phones, data networks, software and hardware.

This approach acknowledges the services as a significant part of the indirect spend categories. The classification of indirect spend is presented in variable ways

in literature. This indicates that there are number of ways to build indirect spend categories within the organization. In order to achieve transparent and informative idea of company's indirect spend, the classification should be made in great diligence and thought. (Ibid.)

## **4 TECHNOLOGIES**

E-procurement systems enable access to buyer-specific multi-vendor catalogs from a web browser. The item selection and a possible purchase requisition approval are completed via e-procurement system. After the approval, the requisitions are turned into purchase orders, which are sent directly to the supplier using EDI, extranet XML, e-mail or fax, or via purchasing system, example ERP. (Kim & Shunk, 2004, 156)

PO's can also be transmitted to private or consortium e-marketplaces, which allocates the orders to the suitable supplier in specific formats. These applications make the organization's set buying rules easy to follow, which allows the company's administrative level to concentrate on strategic activities. Although the e-procurement systems are considerable time savers, the possible pit fall and major challenge in these systems is managing the content of vendor catalogs. (Kim & Shunk, 2004, 156)

### **4.1 Different/multiple technology possibilities**

The main challenge in maintaining vendor catalogs lies on data reliability. If it is the supplier's responsibility to update the product catalogs, there can be a risk the catalogs are not up to date if the responsibility to upload the catalog changes relies on buyer company's hands. (Kim & Shunk, 2004, 157)

Portal technology is used as a tool to allow buyers and sellers to access the structured and unstructured information. Portal technology gives the supplier an access to the inventory levels of its partners and to make changes on their products based on this information. The buying organization can check the status

of orders and the offers received by the suppliers, and select the qualified supplier's. (Azar et al. 2011, 1418-1419)

The other possibilities for catalog management for the organization is to host its own catalogs in buyer specific format, and are referred as supplier-centric e-procurement systems. This allows the buyer company to take control to its own hands by managing the catalogs in its own e-procurement systems. Buyers can easily access the supplier catalogs, and are able to check the open order or the invoice. Pricing can also be confirmed as well as the technical details of the ordered product. Technical support for the buyers is accessible in the e-procurement environment. (Kim & Shunk, 2004, 157)

Although the e- procurement environment enables the buyer company to gain these advantages, the technical solution may be high in price. The platform for this kind of solution requires the buyer and seller to systematically approve the buying method. The comparability of different seller's product catalogs and pricing might improve difficult and time consuming. The incompatibility between catalogs and organization's master data, such as finance, relies on supplier reports (Kim & Shunk, 2004, 157).

The e- marketplaces can create value to both, buyer and seller, with two different transaction mechanisms. These are aggregation and matching. The aggregation stands for static pricing, while matching means dynamic pricing. In the aggregation, the prices are pre-negotiated and fixed. For more dynamic approach, the matching gives buyers and sellers possibility to negotiate pricing in a real-time basis. (Kim & Shunk, 2004, 157)

## 5 ALTIA CASE COMPANY

In 2011, Altia started their indirect procurement managing project named as Smart Buy- project. The company's main goal was to reduce the overall costs of indirect purchasing by joining their several different ERP-systems and to launch a new ERP-system for indirect material procurement in the company. The main issue for the company was to clarify several different procurement systems and employees purchasing habits.

The invisibility and ineffectiveness of the indirect procurement process was a result of a complicated procurement process with several different ERP- systems and large number of suppliers. The cost data had to be collected in multiple sources, and the costs were hard to track and focus in correct cost pool. Thus, management of costs was almost impossible, as the transactions could not be tracked.

In figure 3, the Altia's indirect procurement processes information flows are presented in a simplified form. The purpose is to give a conception how multiple ERP-systems affected the indirect procurement process information flows and process visibility.

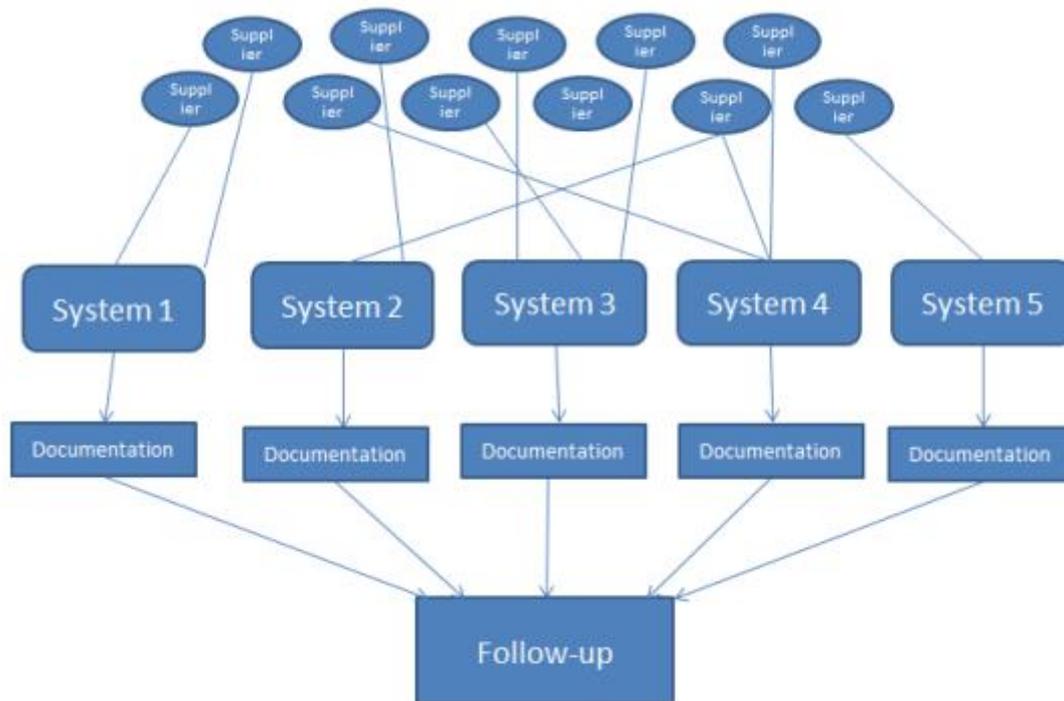


Figure 3. Indirect data collecting.

Due to the fact that Altia had five different ERP-systems (figure 3), data collection proved to be time consuming and difficult. ERP-systems were not linked together, so every system gave data in different form. This forced the procurement staff to join it in multiple Excel sheets. Numerous procurement channels also affected negatively on the whole indirect procurement process by making the product lead times slow and increased the total costs.

### 5.1 Maverick buying in Altia

Large number of suppliers was the one reason why Altia had a problem with maverick buying. The employees did not know about the negotiated supplier contracts and frame agreements. The unawareness of negotiated frame agreements caused maverick buying in the company. A common way of buying items and services was to order them from a familiar supplier, or by adding the

expenses on travel bills. This made the cost allocation impossible, and the costs were shifted in an unsuited cost pool.

Employees thought that the fastest and cheapest way to purchase an item was going to the store and buying it themselves. The procurement process via ERP-system was thought to be too slow and ineffective. Due to the slow lead time in procurement process, an expansion in number of suppliers took place.

## **5.2 The project starting point**

In 2012, Altia used 61,4 million euros in procurement of indirect materials and services in total. As presented in figure 4, the company's five main areas of indirect spend are marketing, advertising, purchasing services, rentals and energy. These categories of spend were significant due to the nature of the industry. The alcohol manufacturing companies tend to differentiate their products from others by investing in image advertising and marketing.

Marketing and advertising spent around 25 million euros, which is 33 percent of the total indirect procurement costs. The main areas of spend were marketing promotion such as exhibitions and fares, as well as marketing support and consumer advertising. In purchased services, the total spend was around 11 million euros, approximately 14 percent of the total indirect costs. Rentals and energy cut the indirect procurement budget for total of 11 million euros, around 9 percent of the total indirect procurement expenditure. The biggest costs came from car and real-estate rentals.

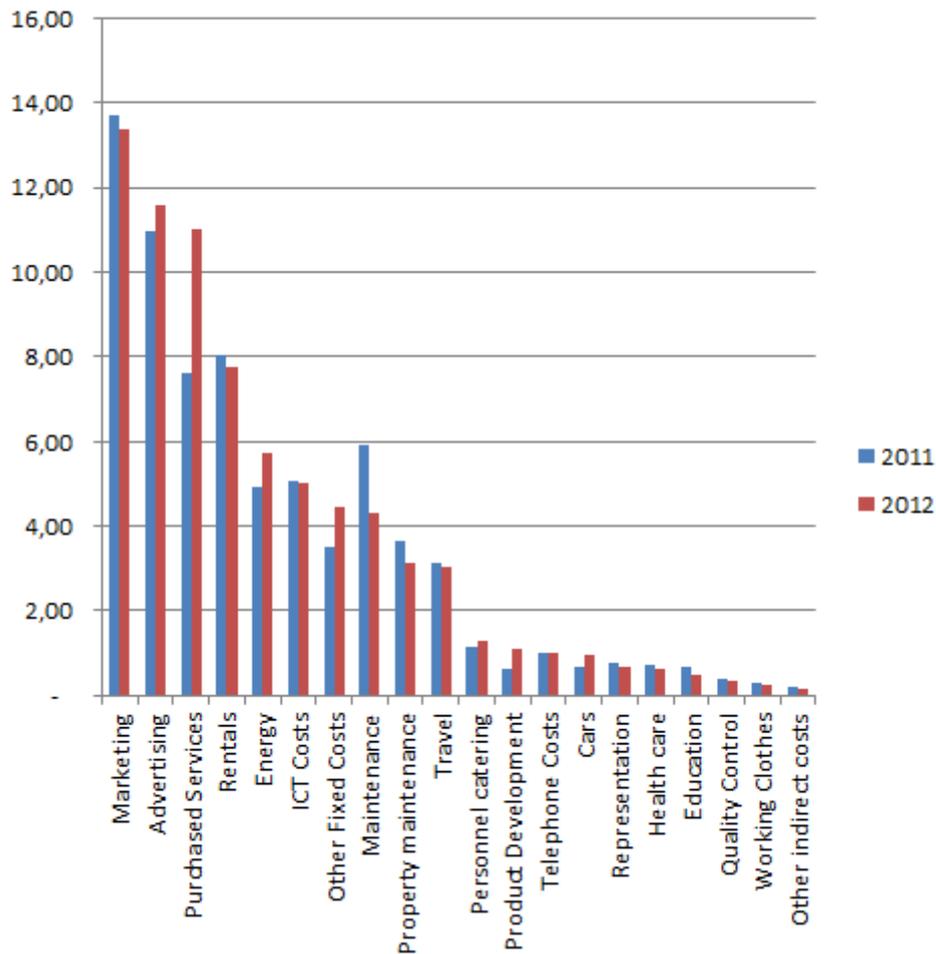


Figure 4. Indirect sourcing comparison 2011-2012 (Million €), (Altia 2011).

By putting the Smart Buy- project in to practice, Altia tried to achieve around 5-7 million savings in indirect procurement between years 2012-2014. The savings target was set high, but the savings potential in different categories were significant. The company had also made detailed plan for indirect cost reduction. Therefore the savings objectives seemed to meet the actions.

### 5.3 The Smart Buy - project

The project launched in 2011. At first, the company set up their main objectives and planned a timeline for the project (appendix 1.). The company first defined the

roles and responsibilities needed for the completion of the project. The project plan and its definition started by selecting categories in the project scope. Altia started by defining their project objectives and started to gather needed documents regarding the current sourcing process.

Next step was to execute the sourcing process for selected categories after capturing categories savings potential. The main area of improvement was sourcing process phases. The plan was to hand over the project at the beginning of 2013, when selected pilot projects were successfully executed and completed.

### **5.3.1 The objectives**

By the end of the project, Altia wanted to achieve three main goals. These were (Altia 2013)

- Achieving significant savings by working smarter based on true business needs
- Improving sourcing materials and services to get lower prices
- Gaining full scale of benefits by complying supply contracts.

The company also wanted to avoid cutting budgets across all chosen categories regardless of the one's category's needs. Nor wanted Altia to force contracts that did not met their needs, and therefore Altia was ready to make a significant effort to achieve good contracts. The challenge was to comply all attained contracts and to take full advantage of them.

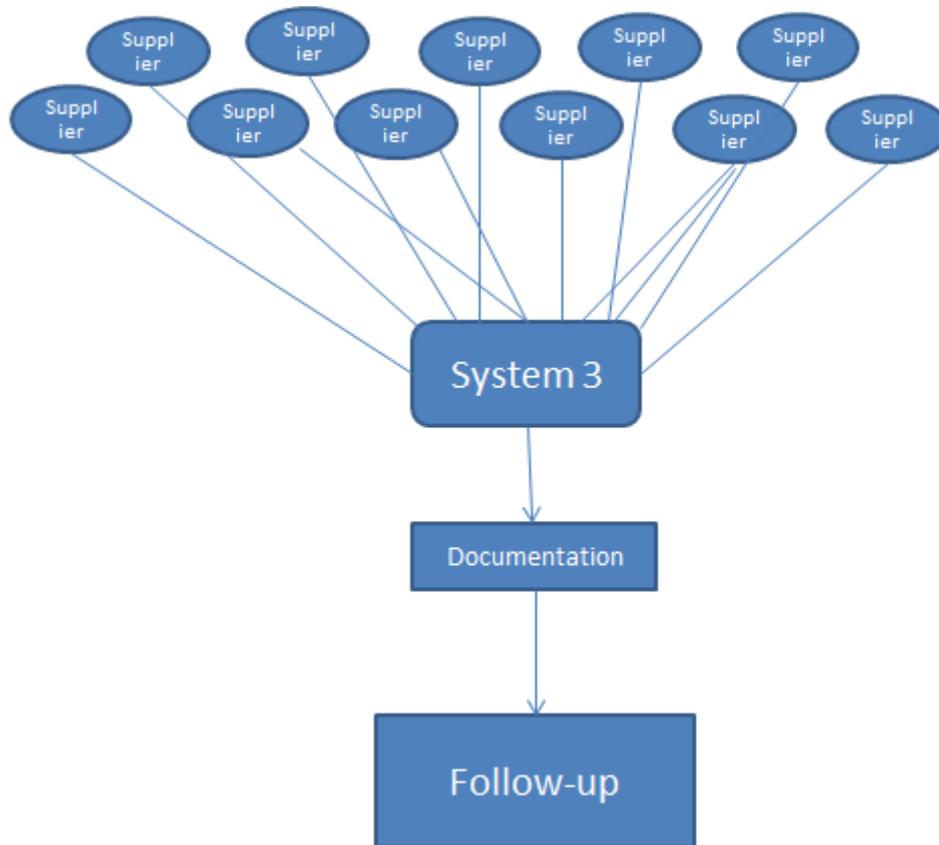


Figure 5. Indirect data collecting after the project.

Figure 5 presents the target Altia set for the indirect data enhancement after the project. With only one ERP-system, the company's indirect costs would be easier to follow. Using only one system, the negotiated contracts and frame agreements were expected to be easier to follow. In addition, the company anticipated the cost effectiveness and procurement visibility to increase.

The first goal setted meant that Altia had to cut the number of suppliers and evaluate which suppliers were important for the process. The suppliers the company selected to keep, needed to be informed of the process renewal. Also new contract negotiations needed to be executed. After concluding the negotiations with selected suppliers, the importance of complying supply contracts had to be informed throughout the organization. Complying supply contracts meant, that the company was able to gain full scale benefits during the procurement process.

Improving sourcing materials and services refers to a supplier selection. In order to get better contracts, the company had to negotiate better contract terms and conditions with its suppliers than previously. For example, the employees could purchase same item in different sources, and therefore vendors offering similar product were in supplier list.

#### **5.4 Cutting down the suppliers**

At the beginning of the project, the total amount of Altia's indirect materials and services suppliers was over 4000 companies. With almost half of them, the company had made total value of purchases under 1000 euros. In addition, the most of the purchases were significantly low, fewer than 50 euros, so the procurement process costs for these suppliers have been extremely high.

Figure 6 shows the reduction of suppliers Altia was planning to make during 2013-2014. The vertical scale shows the number of suppliers and horizontal scale the year. In 2013, the goal was to cut down the suppliers by quarter and during next year the supplier quantity to a maximum of 3000 vendors.

As seen in figure 6, the amount of suppliers was large. This indicated that vast amount of procurement actions were made with suppliers outside the contracts. The lack of awareness of contracted suppliers was most likely caused by majority of the single transactions between Altia and these vendors.

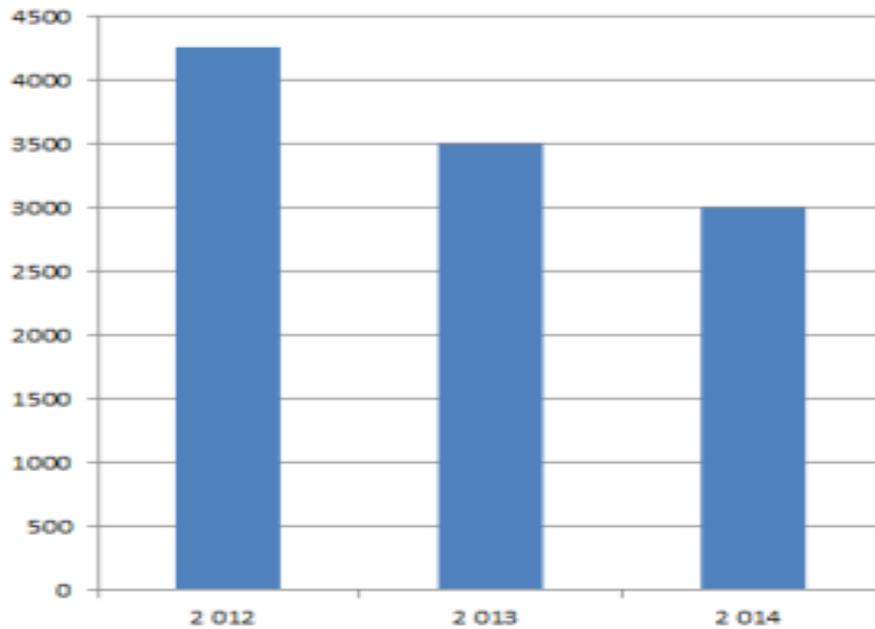


Figure 6. The number of suppliers in 2012-2014 (Altia 2011).

## 5.5 Identified savings potential

As shown in figure 7, the greatest savings potential, 2,6 million euros, was in marketing materials and events. This meant that 0,5 million euros target, which was set at the beginning of the project, equaled 2,7 million euros increase in net sales in trading. Alternatively, 1,8 million euros in brand net sales would have had the same impact on EBIT. It was clear, that the procurement process in this category needed to be enhanced. The employees were ordering materials in several sources, and this needed to be rationalized.

The second largest category in savings potential was professional services as legal services and business development (Appendix 2.). The category's savings potential was 1,4 million euros. The uncertainty in some of this category's spend

was due to the invisibility of the procurement process phases. Real-estate materials and services had the third largest savings potential, 0,8 million euros.

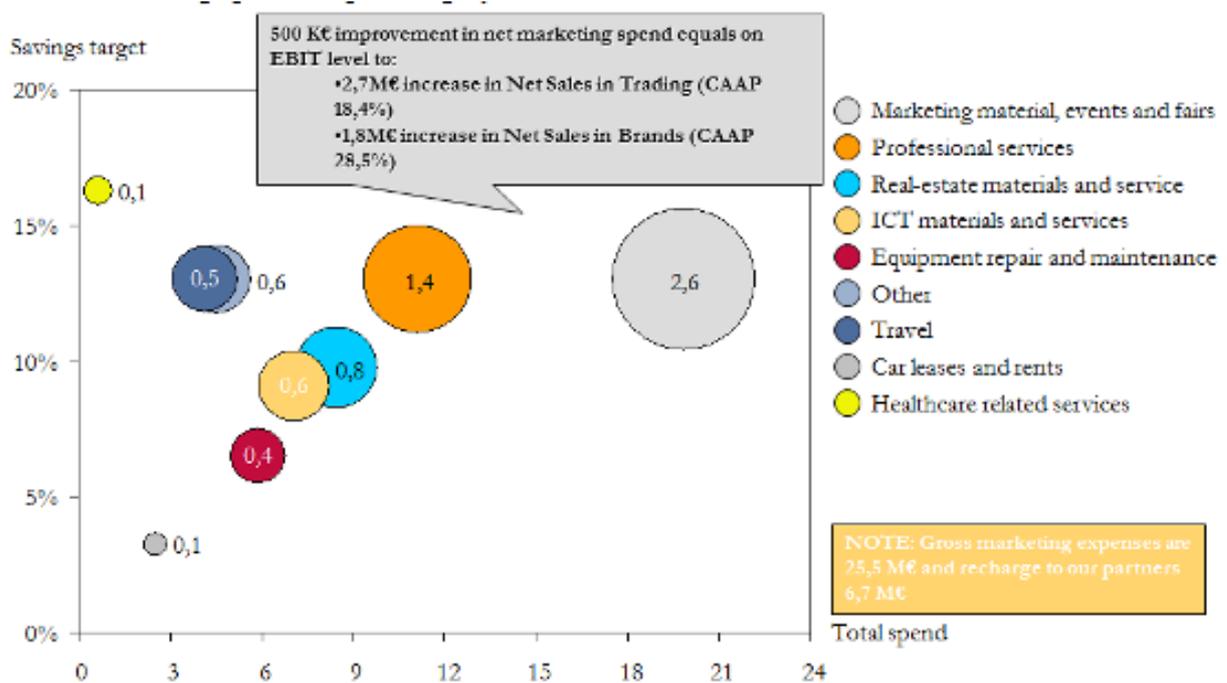


Figure 7. Identified savings potential per category (Altia 2011).

## 5.6 Altia's pilot project – marketing materials and advertising

The company decided to choose marketing materials category as their pilot project. First, the company defined the whole marketing material costs, which were in 2012 13,36 million euros in total. Added up with advertizing costs, the sum was 24,9 million euros in total. The company split the marketing material costs in to different types of costs, and got the following result:

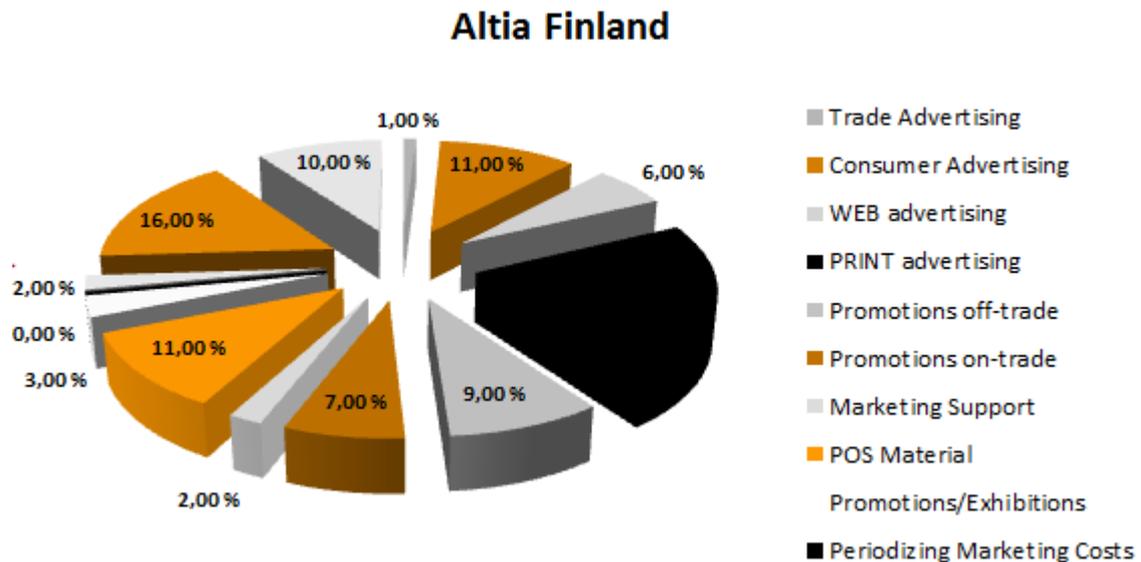


Figure 8. Marketing material cost split 2012 (Altia 2011).

As the figure 8 shows, most of the expenditures, 22 percent, were formed in print advertising. The sum of consumer advertising covered 16 per cent of the whole marketing material costs. 11 per cent of the costs came from POS –material promotions and exhibitions due to the fact that marketing and advertising in Finland were mainly executed in printed form and happened in different types of professional events. Altia noted that most of the costs came from these three key areas of marketing in Finland. The company needed to focus their savings targets to these areas.

Production costs for print-, TV- and POS- materials were high in Finland due to the fact that materials produced especially to Finnish markets could not be used in other countries. The volumes of these materials were small which raised the production costs.

#### 5.6.1 Action plan in managing marketing material costs

Altia planned to take actions in managing its marketing material costs by optimizing the quantities ordered and by limiting the selection of POS- materials (Appendix 1). Limited selection of marketing materials allowed the company to concentrate on the most effective campaign and brand building tools. By using the

printed marketing materials for longer time period meant focusing on better material design, so the materials would suit better for larger number of customers.

## **5.7 Means and possibilities**

In order to cut down marketing material and advertising costs, Altia had to select suppliers and cut down number of them. New contracts and frame agreements were planned to negotiate during the years 2012-2013. New ERP-system possibilities were explored so that the procurement process could be managed more effectively in terms of cost management and product lead times.

### **5.7.1 Supplier selection**

Due to the fact that the company had multiple supplier sources and several thousand suppliers, the company started to rationalize its number of suppliers. Cutting down the number of suppliers was one of the company's main targets during the pilot project execution.

The suppliers selected were preferably ones with the ability to take part in procurement processes. The involvement to the Altia's processes made a certain level of technology accessed by the supplier possible. Altia's procurement process plan required some level of commitment from the suppliers. It was discussed in the company, whether this strategy decision would eliminate some of the key suppliers. To avoid losing strategically important suppliers, the company stated that if supplier involvement would not be possible in described way, supportive systems needed to be developed by Altia.

### **5.7.2 Contract negotiations**

Key target for the contract negotiations was to get lower product prices and better payment terms from selected suppliers. Successful contract negotiations were one of the main objects in pilot project execution. Most of the company's contracts, 63 per cent, had a payment term of thirty days, and the company wanted the time to be extended due to the cost-effectiveness of their process.

### **5.7.3 Choosing the suitable ERP system**

At the beginning of the project, Altia had multiple different ERP-systems. It was clear, that the procurement process was slow and ineffective and lacking visibility, so the company decided to select one system which would suit with their SAP. The company estimated that an ERP- system using SAP as a platform was the easiest and most cost effective way to build a new ERP-system.

## 6 CONCLUSIONS

Need for cost cutting in organizations drives them to develop new approaches on sourcing strategies. The competitive advantage can be achieved by the ability to use different procurement tools as aid in cost reduction. Thus, the implementation of new procurement process system or enhancing the existing one can be seen as one of the organization's core competence.

The literature study shows, that the e-procurement exploitation of indirect procurement processes is a key tool in forming a successful indirect sourcing strategy. Even so, most of the companies do not recognize the importance of e-procurement. Literature suggests that electronic procurement is seen difficult and ineffective among the employees. On the other hand, employees are willing to use new technologies in general as seen in expansion of ICT-materials bought by organizations. This indicates that vast amount of information flows throughout the organization and its processes, and therefore there is a need for a new strategy development in procurement processes.

Furthermore, the predictability of indirect procurement costs and process visibility are one of the reasons why company starts to pay attention to its procurement processes and starts to develop them. It seems that the companies are using e-procurement system, but do not know how to use it effectively. The lack of full system exploitation is likely a result of insufficient e-procurement system education.

Although the benefits of adopting a new e-procurement in organization are clearly shown, the project might be difficult to execute in terms of resources such as time and money. New ERP-system adoption processes are proven to be expensive and it is not always clear for the managers and employees why the new system adoption is necessary for the company's success.

Altia started their Smart Buy- project with significant saving targets in mind. The aim was to execute the project during years 2012-2014. The company's indirect procurement processes needed to be improved due to the fact that the company's

indirect procurement costs were high and needed to be cut down in order to gain profitability.

The company concentrated on the pilot project and was then extended in other product categories as well. The project execution plan showed that major changes needed to be made, and it seemed that the project plan was well prepared. As presented in the literature, the company had emphasized the importance of functional ERP- system needed as a part of successful sourcing strategy. When achieved, the suitable indirect sourcing plan would improve Altia's indirect cost management and give competitive advantage.

It should be noted that the extensive conclusions of how the company's pilot project objectives were achieved could not be made properly due to the limited amount of empirical data collected and due to the deficiency of collecting methods, but an overall view can be seen.

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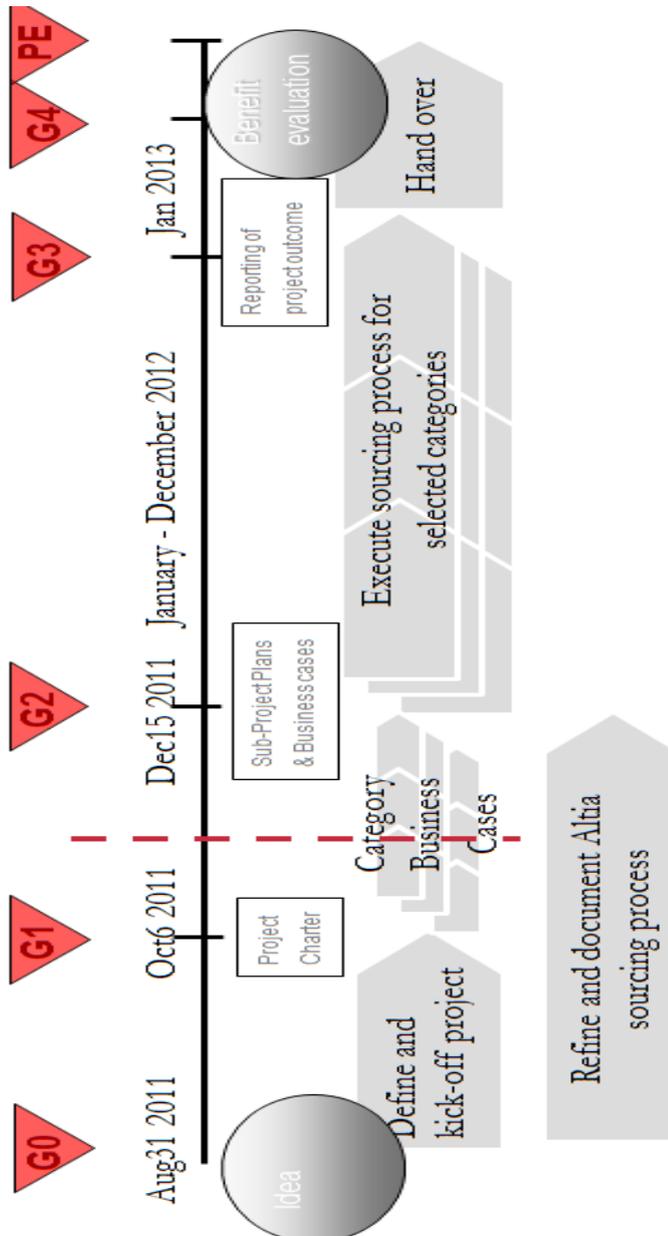
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# APPENDICES

Appendix 1. The Project Timeline (Altia 2011).



## Appendix 2. Professional services (Altia 2011).

|                           |                      |
|---------------------------|----------------------|
| <b>Purchased Services</b> | Auditing fees        |
|                           | Auditing services, o |
|                           | Business development |
|                           | Cabinet services     |
|                           | Construction plannin |
|                           | Fronf office service |
|                           | Information services |
|                           | Keg services         |
|                           | Legal services       |
|                           | Logistics administra |
|                           | Management of mainte |
|                           | Other planning and c |
|                           | Other services       |
|                           | Payroll services     |
|                           | Personnel recreation |
|                           | Personnel special da |
|                           | Personnel training c |
|                           | Purchased services   |
|                           | Recruitment services |
|                           | Scrapping services   |
|                           | Service agreement    |
|                           | Service fees         |
|                           | Storage services     |
|                           | Tax free compensatio |
|                           | Temporary staff serv |
|                           | Translation services |

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