

Essi Sjöblom

Producing a New Product for a Tradition Games Promotor

Helsinki Metropolia University of Applied Sciences

Bachelor of Engineering

Industrial Management

Bachelor's Thesis

30 April 2014

Author Title	Essi Sjöblom Producing a New Product for a Tradition Games Promotor
Number of Pages Date	30 pages + 1 appendix 30 April 2014
Degree	Bachelor of Engineering
Degree Programme	Industrial Management
Specialisation option	International ICT Business
Instructor(s)	Johan Chilov, Executive Manager Anna Sperryn, Lecturer Sonja Holappa, Senior Lecturer
<p>The main objective of this thesis was producing a new product for the case organization in this study.</p> <p>This project was carried out for 'Perinneleikit ry' – the association of traditional Finnish games.</p> <p>The case organization had a three-fold need. They needed a new product in order to keep their old customers reordering and to make the product line coherent as well as to match the image of the product with the organization's image.</p> <p>This study was started by studying the best practices of producing, product development and purchasing in order to develop a general understanding of the topic area. Based on this, a conceptual framework was generated. Then the conceptual framework was implemented and the producing process was analyzed.</p> <p>The outcome of this study was the conceptual framework for producing projects and also the new product for the case organization. Both outcomes generate several benefits for the case organization that lead to a possibility to grow the case organization's operations.</p>	
Keywords	Producing, new product, booklet, children, traditional games, purchasing

Tekijä Otsikko Sivumäärä Aika	Essi Sjöblom Uuden Tuotteen Tuottaminen Perinteisten Leikkien Promoottorille 30 sivua + 1 liite 30. Huhtikuuta 2014
Tutkinto	Insinööri (AMK)
Koulutusohjelma	Tuotantotalous
Suuntautumisvaihtoehto	Kansainvälinen ICT-liiketoiminta
Ohjaajat	Johan Chilov, Toiminnanjohtaja Anna Sperryn, Lehtori Sonja Holappa, Yliopettaja
<p>Tämän opinnäytetyön päätavoitteena on tuottaa kohdeorganisaatiolle uusi tuote.</p> <p>Projekti tehtiin Perinneleikit ry:lle, joka ylläpitää suomalaisia perinteisiä lasten leikkejä.</p> <p>Yhdistys tarvitsi uuden tuotteen ylläpitääkseen vanhojen asiakkaiden kiinnostusta, tehdäseen tuotelinjasta yhtenevän ja yhdistääkseen tuotteet organisaation imagoon.</p> <p>Opinnäytetyö aloitettiin opiskelemalla tuottamisen, tuotekehittämisen sekä hankinnan parhaita käytäntöjä, jotta saatiin muodostettua kokonaiskuva näistä aiheista. Tämän perusteella rakennettiin viitekehys. Sen jälkeen viitekehys toteutettiin ja tuottamisprosessi analysoitiin.</p> <p>Tämän opinnäytetyön tuloksia ovat viitekehys tuottamisprojektille sekä uusi tuote kohdeorganisaatiolle. Molemmat tulokset tuottavat yhdistykselle sellaisia hyötyjä, joiden avulla on mahdollista kasvattaa yhdistyksen toimintaa.</p>	
Avainsanat	Tuottaminen, uusi tuote, kirjanen, lapset, perinneleikit, hankinta

Contents

Abstract

Tiivistelmä (Abstract in Finnish)

Table of Contents

List of Illustrations

1	Introduction	1
1.1	Case Organization	1
1.2	Background of the Project	1
1.3	Business Goals & Research Objectives	2
1.4	Research Design	2
1.5	Structure of the Report	3
2	Description of Method and Material	4
2.1	Methodology	4
2.2	Data Collection	6
2.3	Rigor, Validity and Reliability	6
3	Best Practices	8
3.1	Producing	8
3.2	Product Development	9
3.2.1	Product Design	11
3.3	Purchasing	12
3.4	Decision Making and Risks in Producing and Purchasing	15
3.5	Cultural Production	17
3.5.1	Case: Producing a New Cultural Product	18
3.6	Conceptual Framework	18
4	Implementation & Analysis	20
4.1	Problems and modifications	20
4.2	Implementation of the Conceptual Framework	21
4.2.1	Need	22
4.2.2	Requirements & Quality	22
4.2.3	Obtain bids	23

4.2.4	Select a vendor	24
4.2.5	Managing the Production	24
4.2.6	Receiving & Inspection of the goods	25
4.3	Summary	25
5	Results & Conclusions	26
6	Discussion	29
6.1	Summary	29
6.2	Evaluation of the study	29
	References	31
	Appendices	
	Appendix 1. Request for tenders	

List of illustrations

Figure 1. The research design.	3
Figure 2. Action research. (Sagor, R. 1993:8)	4
Figure 3. The methodological progress of this study.	5
Figure 4. Main functions and production of a company. (Modified from Haverila, Uusi-Rauva, Kouri & Miettinen 2009:352)	8
Figure 5. Product development process according to Kahn.	10
Figure 6. Relationship between procurement and purchasing in this study.	13
Figure 7. Development of purchasing related to long-term value. (Modified from Barrat C. & Whitehead M. 2004:19)	14
Figure 8. Simplified one-stage decision tree showing a supplier selection decision. (Leenders, Johnson, Flynn & Fearon 2006:14)	16
Figure 9. The conceptual framework.	19
Figure 10. The previous and the new booklet.	21
Figure 11. The conceptual framework.	22
Figure 12. The complete product line.	27
Figure 13. The benefits of this study.	27
Table 1. Comparison of features in the old and the new booklet.	20
Table 2. Tenders received.	24

1 Introduction

This thesis aims at producing a new product for the case organization. The study focuses on best practices of producing and purchasing a new product from industrial and cultural point of views and reflects these practices on the producing process of this study.

1.1 Case Organization

This project was carried out for 'Perinneleikit ry' – the association of traditional Finnish games. Their target is to gather, revive and sustain different traditional Finnish games into booklets and to keep up the idea of traditional games through their homepage. The booklets are for children and adults. The main goal is to get children and adults together to play traditional games in the name of exercise and fun social activities.

The association sustains the games in forms of booklets and calendars. They also arrange events where the games are introduced to children. The case organization has produced five calendars and three booklets since 2009. This study focuses on the booklets. There are already three different booklets which have different themes, such as sports, indoor games and outdoor games.

The organization is a non-profit association. By selling booklets and calendars the events and other operations are funded.

1.2 Background of the Project

A new product was needed because the latest booklet was published in 2011, the existing booklets are out-dated and the design of the product line was incoherent. As mentioned earlier, there are three different booklets but these have been sold for several years now. Also, these old booklets' design is old-fashioned and too artistic, targeted for adults. The case organization has used a new artist for two of its latest calendars and for the most recent product; memory game. This made the product line look disorganized. These three negative impacts cause problems for sales and thus there are fewer resources to grow operations.

1.3 Business Goals & Research Objectives

The objective of this study is, first, to specify the problems of the older booklets and the needed modifications for the new product. Another objective is to study best practices of producing and purchasing a new product and to formulate the conceptual framework for this study. A further aim is to implement the conceptual framework in practice in order to produce a new booklet.

Since currently existing products are several years old and their design does not work in accordance with the image and business idea of the organization, the sales were not as high as they could be. This created problems for maintaining and growing the resources and was the business problem of this study.

To address this need, the study focuses on answering the following question:

How to produce a new quality booklet in order to enable the case organization to grow their operations?

The outcome of this project was, first, a conceptual framework for a producing project and secondly, a new quality product for the case organization.

1.4 Research Design

Figure 1 presents the research design of this project.

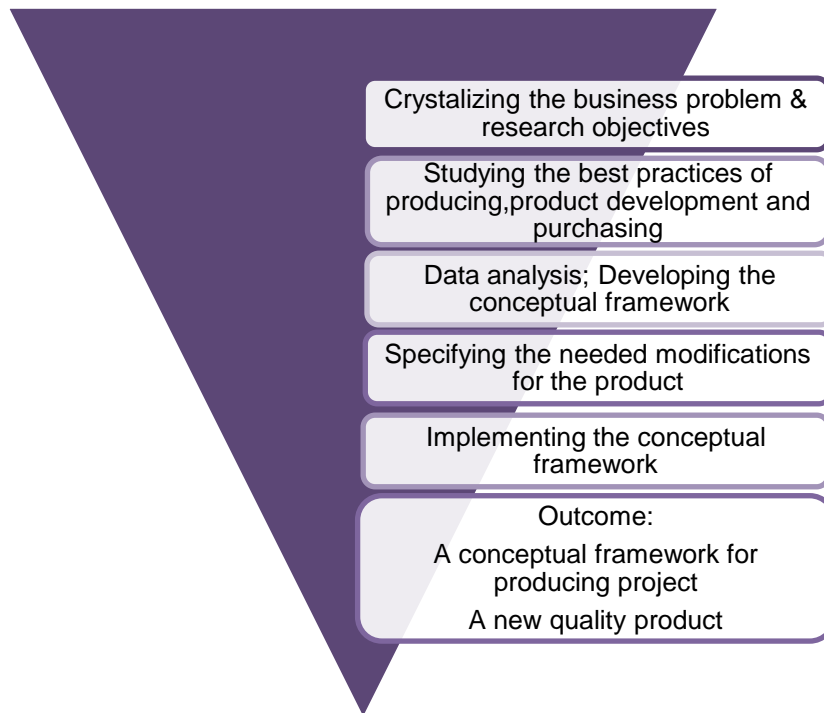


Figure 1. The research design.

As presented in Figure 1, to achieve the project outcome, this study is designed as follows. First, the business problem and the research objectives are identified. Second, best practices of producing, product development and purchasing from industrial and cultural point of views are studied. Based on the previous, the conceptual framework is developed. Then, the problems of the older booklets and the needed modifications for the new product are specified. After that, the conceptual framework is implemented and the producing project is analyzed. Finally, the outcome of the research project materializes as a conceptual framework for producing projects and a new quality product.

1.5 Structure of the Report

This study is written in six sections. Section 1, Introduction, presents the background, objective, business problem, research design and outcome of the study. Section 2 introduces the methods applied in the study and describes the data collection process. Section 3 overviews best practices related to producing, product development and purchasing and the generation of the conceptual framework. Section 4, Analysis, elaborates on the implementation of the conceptual framework. Section 5 interprets and explains the results and conclusions. Section 6, Discussion, evaluates the study and discusses possible future steps.

2 Description of Method and Material

This section describes the research method and data analyzed in this study. It also offers an explanation for the chosen research process.

2.1 Methodology

The research approach of this study is action research. Action research is experiential learning and reflective practice. It proceeds through the steps of planning, action and evaluating, as seen in Figure 2 below.

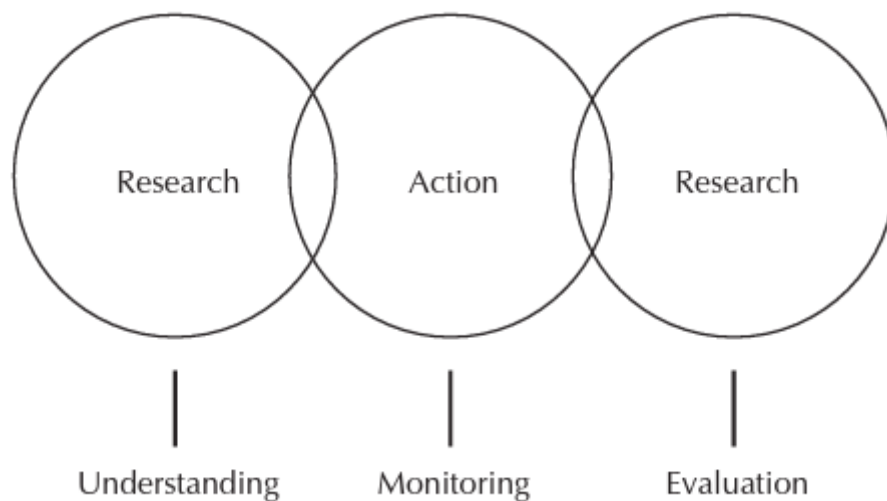


Figure 2. Action research. (Sagor, R. 1993:8)

In Figure 2 the terms are a little different but the meaning remains the same. First, the situation needs to be understood, the problem needs to be formulated and plans how to proceed need to be made. Then action takes place. This can be, for example, in the form of monitoring, collecting data, executing or producing. Finally, evaluation occurs, such as analysing data and reporting on results. (Sagor, R. 1993:10-11)

In this study the planning part includes rationalizing the need for the project, investigating best practices of producing and developing the conceptual framework. Action is executed in Implementation & Analysis where the conceptual framework is implemented. Finally, the evaluation is composed by explaining the results and scrutinizing the progress of this study.

The study applies best practices and practicalities of producing, product development and purchasing to the need of the case organization based on the background of this study. Figure 3 below shows the methodological progress of this study.

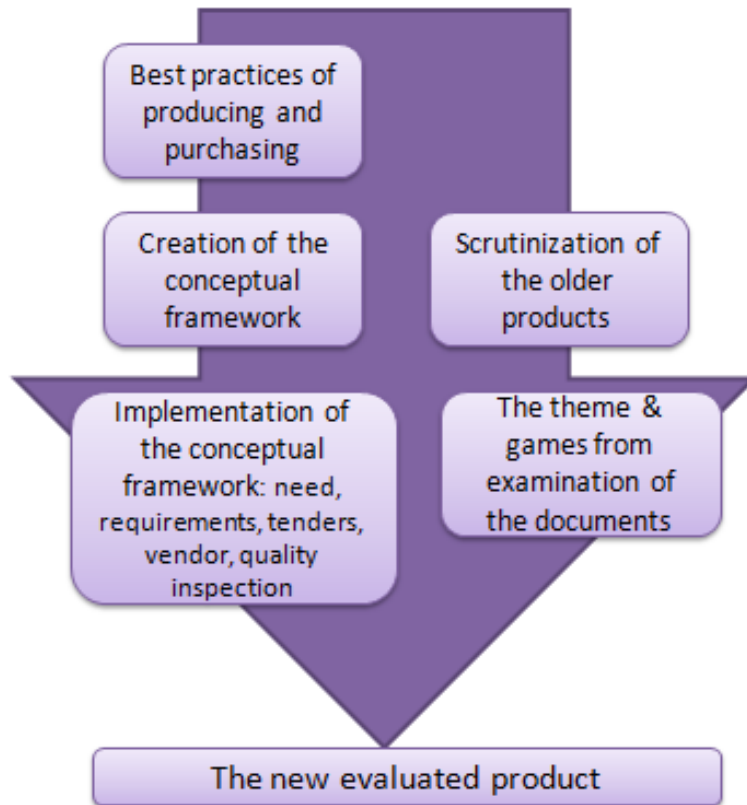


Figure 3. The methodological progress of this study.

First, best practices of producing, product development and purchasing processes and projects from an industrial and cultural point of view were studied in order to develop a general understanding. Secondly, based on the developed understanding, the conceptual framework was created. Thirdly, the older products of the case organization were scrutinized in order to obtain a comprehensive picture of the needed improvements for the new product. Then, the documents of the case organization related to plays were examined in order to find the right games for the new product and the theme for the booklet was innovated. After that, the conceptual framework was implemented; the need was recognized, technical and qualitative requirements were set, tenders were obtained, the vendor was selected and the purchase order was placed. Moreover, the quality of the production was revised and the goods were received and inspected. Finally, the new product was ready and it was evaluated.

2.2 Data Collection

The data gathered in this study comes from three main sources: internal documents, from examining the older products and from searching for vendors.

The data gathered from the case organization's internal documents focused on games. The case organization has a list of over 500 traditional children's games and the games were categorized, compared and some of them were chosen for closer scrutiny. Based on this data also the theme of the new booklet's games was generated. The data gained from examining the older products was used in decisions such as which attributes from the older products will be applied to the new product and which ones should be cut out. The data collected during the search for vendors was used in evaluating to which vendors the requests of tenders were sent.

2.3 Rigor, Validity and Reliability

To be able to correctly evaluate the results of this research, it needs to be considered from the point of view of *rigor*, *validity* and *reliability*. Rigor questions whether the study explored what it was supposed to explore, whether the methods of data collection are sufficient and whether the research is internally logical (Quinton & Smallbone 2006:138-140). Validity measures the appropriateness, the meaningfulness and the usefulness of the research. Reliability reflects on how consistent and repeatable it is. (Dooley 1995: 77-78)

This study's title is 'Producing a New Product for a Tradition Games Promoter' and it examines best practices of producing. It uses best practices in the producing process and its outcome is the new product for the case organization. The research question is 'How to produce a new quality booklet in order to enable the case organization to grow their operations?' so best practices of producing, product development and purchasing, including a quality aspect, were used as the basis of the project and the producing process of the study was explained in further detail. Also, the triangulation of the data collection and the explicit Research design -figure assure the rigor of this study.

The appropriateness of this study was ensured by fulfilling the main objective of this study and by answering to a need for action by the method of action research. The meaningfulness of this study was consolidated by relating to a current need of the case organization's core operations and by generating benefits that are easy to indicate. The outcomes of the project profit the case organization both immediately and in the future. Thus, the validity and usefulness in this study are verified.

The reliability of this study was formed with a consistent and progressive process and with a repeatable formulation of the conceptual framework.

3 Best Practices

This section explores the theoretical background and guidelines for producing, product development and purchasing. In addition, the conceptual framework of this thesis is presented.

3.1 Producing

Production is one of the core processes of a company where factors of production are transformed into goods offered to markets. In industrial production the aim is set for high productivity with detailed task division, differentiation and efficient manufacturing procedures. Production has traditionally been understood and defined based on manufacturing. Production and manufacturing has been comprehended as synonyms. This is natural, because manufacturing is one of the core processes of a company and an essential part of production. Nowadays the definition of production is generally used in a larger scale. It involves all the operations of a company that are needed in order to bring out a product or a service. (Haverila, Uusi-Rauva, Kouri & Miettinen 2009:351)

Figure 4 below presents the relationships between production and other main functions of a company.

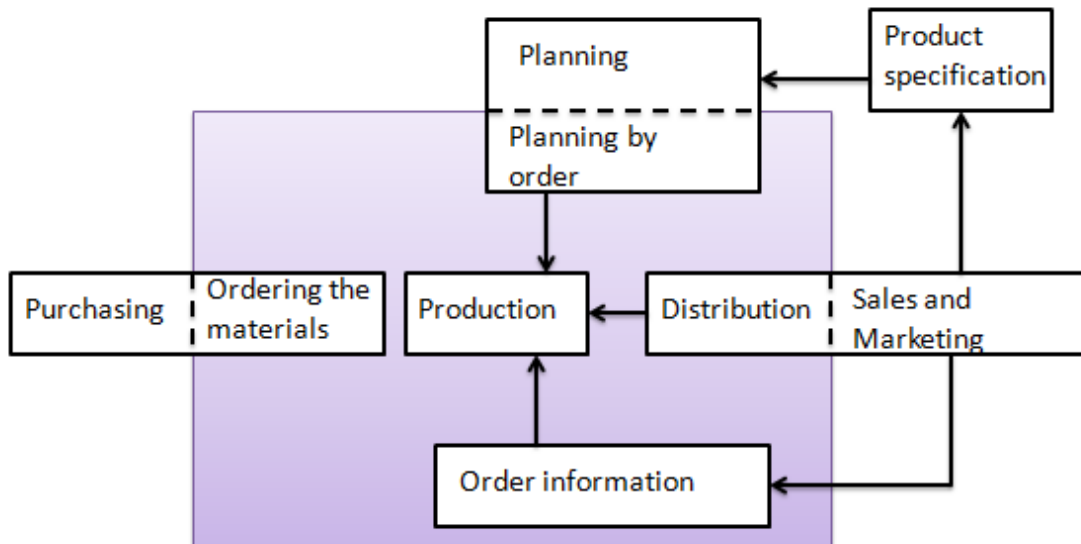


Figure 4. Main functions and production of a company. (Modified from Haverila, Uusi-Rauva, Kouri & Miettinen 2009:352)

As seen in Figure 4, production can be defined as an entirety composed of purchasing, manufacturing, distribution and product planning by order. The lines between the company's main functions and production cannot be drawn precisely. (Haverila, Uusi-Rauva, Kouri & Miettinen 2009:351)

There is a difference between producing and production. In this study the term production is comprised as a large unit of organization and producing as an activity.

Producing as projects is essentially different from other forms of producing. Projects are often wide and complex and most of the time they include nonrecurring operations. The broader planning of the production consists of planning timetables and resources of different delivery projects. (Haverila, Uusi-Rauva, Kouri & Miettinen 2009:437)

Schedule, responsibilities and budgets are indicated for a project. Projects require coordination of different stages and precise control of scheduling. Features affecting project management are long duration, several stages, complexity and large amount of coincidental stages and actions. To make a complex project simpler, the project can be divided to smaller parts to divide the responsibilities of management and execution. Available resources affect the timing and duration of the different stages of a project. (Haverila, Uusi-Rauva, Kouri & Miettinen 2009:436-437)

3.2 Product Development

Since producing is a wide aspect, this section discusses product development.

The new product development process is a series of interdependent and frequently overlapping operations that transform an idea into a prototype and on to a marketable product (Burt D. N., Petcavage S. D. & Pinkerton R. L. 2012:106). Product development is one of the most important elements of an organization and is crucial to the continued success of most firms (Nishiguchi 1996:5). Figure 5 shows a product development process described by Kahn.

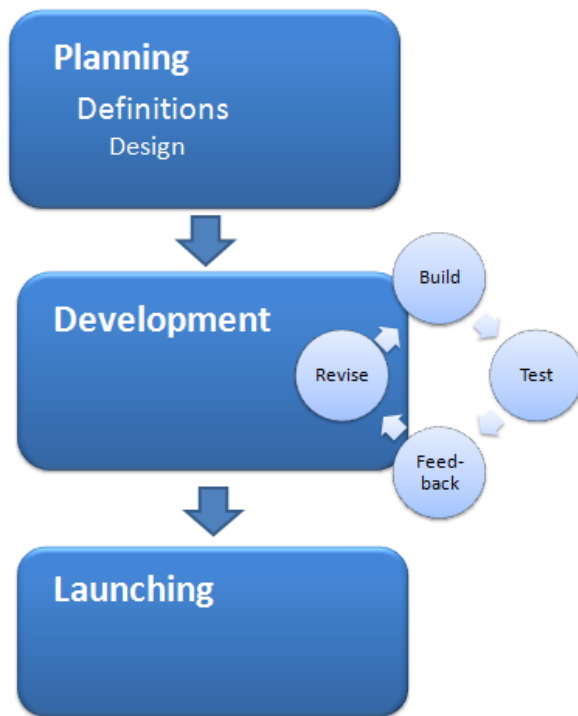


Figure 5. Product development process according to Kahn.

As seen in Figure 5, a product development process starts with a planning stage. Securing a sharp, early, stable, and fact-based project and product definition during the planning stage is crucial. How well the project and product are defined before the development stage begins, is a major success factor. This impacts positively on both profitability and reduced time to market. The project and product definition needs to include a definition of the project's scope, a specification of the target market, a description of the product concept and benefits delivered to the user. In addition, a delineation of the positioning strategy, including the target price, a list of the product's features, attributes, requirements, design, and specifications, is needed in the project and product definition. (Kahn K. B. 2012:12)

The planning stage is followed by a development stage. Spiral development is based on agile development, which is used in the information technology industry. Building takes place in a series of iterative steps or loops whereby successive versions of the product are shown to the customer to seek feedback and verification. These loops are a series of "build-test-feedback-revise" iterations:

- Building something, even if it is only a model or representation of the product.
- Testing it: presenting it to the customer or user and measuring interest, liking, preferences and purchase intent, likes and dislikes.

- Getting feedback: determining the customer's reactions first-hand and, most important, if there is anything that must be fixed or changed.
- Revising: the product update definition based on this feedback, and preparing for the next iteration of build-test-feedback-revise, but this time with a product version one step closer to the final product. (Kahn K. B. 2012:13-14)

The final stage is the launching stage. A well integrated and properly targeted launch does not occur by accident. It is the result of a tuned marketing plan, properly backed and resourced and proficiently executed launch. There are five requirements for an effective market launch plan. Firstly, the development of the market launch plan is an integral part of the new product process. Secondly, the development of the market launch plan must begin early in the new product project. Thirdly, a market launch plan is only as good as the market intelligence which it is based on. Then, the launch must be properly resourced, in terms of both people and money. Finally, the ones who will execute the launch should be engaged in the development of the market launch plan. (Kahn K. B. 2012:16)

Many of the major questions concerning product development continue to be contested, despite the existence of some common themes across product development research. (Nishiguchi 1996:5)

These best practices of product development can be used in the development of a totally new product and an enhanced version of a previous product, such as this study.

3.2.1 Product Design

As Figure 5 indicates, design is part of the planning-stage in product development. The activity of product design is relevant to any company manufacturing products, and especially consumer products (Rodgers P. & Milton A. 2011:6). In this study the product is a consumer product.

Design is the progression of an abstract idea to something physical that has a function (Burt D. N., Petcavage S. D. & Pinkerton R. L. 2012:105).

The full integration of design into the industrial production process saw product design become an identifiable objective, one that has evolved to an important role in the wider process of developing new products of all types. In some cases this is for high-volume production, but it can also be for smaller quantity production. (Rodgers P. & Milton A. 2011:6)

The design stage is also the optimum point at which the majority of the cost of producing an item can be reduced or controlled. If costs are not minimized during the design stage, excessive price may be built in permanently, resulting in expensive, possibly non competitive, products that fail to realize their full profit potential. (Burt D. N., Petcavage S. D. & Pinkerton R. L. 2012:105-106)

In the book publishing industry the design stage of a book producing project consists of the selection of a format, development of the page layout and choosing an appropriate type. The designer is also responsible for the relationship between the illustrations and text, the design of the binding and the dust jacket of a hardback or the cover of a paperback, the form and presentation of the title-page, and so forth. (Feather 2003:118)

The next chapter discusses purchasing, since the producing process of this study includes many parts related to purchasing.

3.3 Purchasing

The success of any production activity is largely dependent on the purchasing of materials of the right quality, in the right quantities, from the right source, at the right time and at the right price. (Chunawalla 2008:13)

The terms *procurement* and *purchasing* are overlapping and generally used as synonyms in some contexts. The relation of these two terms in this study is shown in Figure 6.

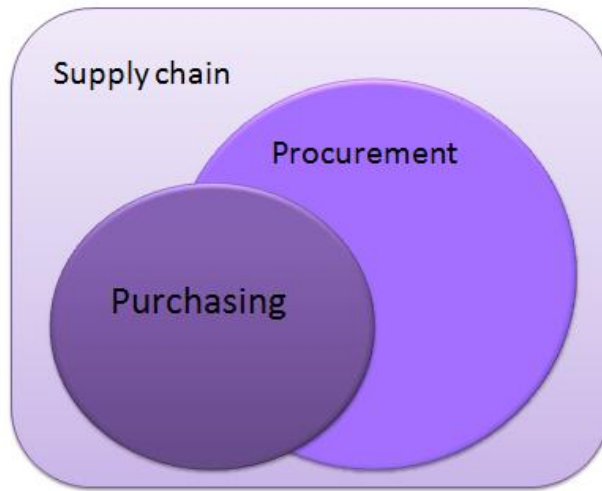


Figure 6. Relationship between procurement and purchasing in this study.

As shown in Figure 6, procurement is addressed as a department in supply chain. Purchasing is treated as an activity within procurement and it also ranges outside of procurement.

Supply needs to be forward-looking. Strategic planning in purchasing can be apprehended as the ability to relate effectively to outside environments – social, economic, political, legal and technological – to anticipate changes, to adjust to changes, and to capitalize on opportunities. Identification and classification of the risks, impact assessment, and a risk strategy are required for managing risks. (Leenders, Johnson, Flynn & Fearon 2006:526-528)

The supply process has many similarities with a communications process; such as determining what needs to be communicated, to whom, and in what format and timeframe (Leenders, Johnson, Flynn & Fearon 2006:61). The purchasing process of an organization starts from specifying a problem, need or possibility. Then it needs to be defined how the problem will be solved by exploring the solution options and analyzing the pros and cons. The next step is the most critical step of the purchasing process because then other influential people join the process. When the solutions have been identified and defined the potential vendors will be searched. After that, the tenders are requested and analyzed. Then the tenders are revised, the vendor is selected and the actual purchase order is placed. After receiving the materials they need to be inspected and the invoice needs to be paid. Finally, the purchasing routines are defined and after that delivery feedback will be given to the vendor and the relationship will be maintained. (Haverila, Uusi-Rauva, Kouri & Miettinen 2009:243; Chunawalla 2008:16)

By having an effective and efficient purchasing process an organization can become increasingly sophisticated. As the purchasing process develops, it can move from a strategy of implementing the simplest way of boosting immediate short-term value through increasingly higher-level operations bringing longer-term value. Figure 7 presents the progression from cost cutting to improving reputation and the consequent rise in long-term value of an organization. (Barrat C. & Whitehead M. 2004:18)

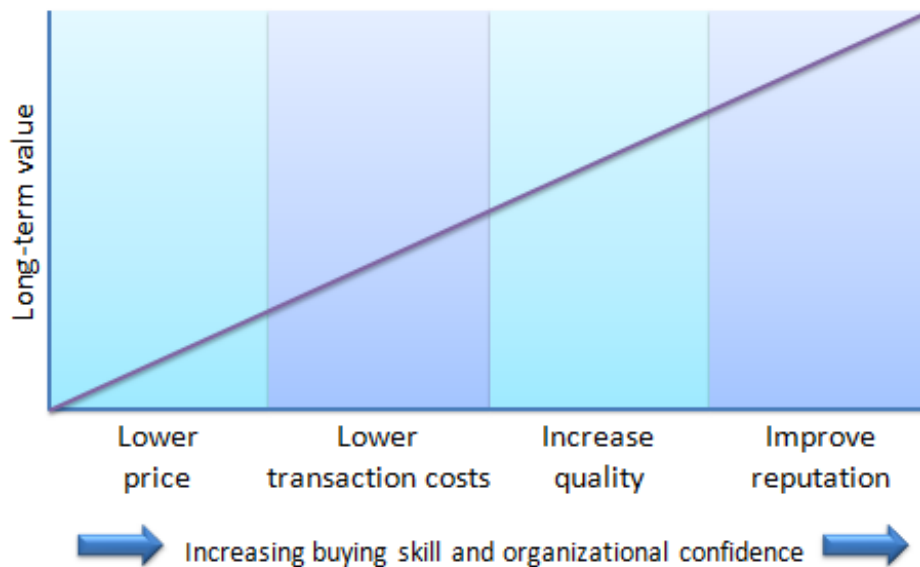


Figure 7. Development of purchasing related to long-term value. (Modified from Barrat C. & Whitehead M. 2004:19)

The value and quality aspect concerns also the product. Quality can be defined as fitness for use, which implies quality of design, quality of conformance, availability and adequate field services (Juran 1974:27). Alternatively, Garvin has identified five approaches to define quality. The first one is the transcendent approach where quality is absolute and universally recognisable. This concept is loosely related to a comparison of product attributes and characteristics. The second one is the product-based approach where quality is a precise and measurable variable. In this approach differences in quality reflect differences in the quantity of some product characteristics. The third one is the use-based approach where quality is defined in terms of fitness for use or how well the product fulfils its intended functions. The next one is the manufacturing-based approach where quality is 'conformance to specifications' which means targets and tolerances determined by product designers. The last one is the value-based approach where quality is defined in terms of costs and prices. In other words, a quality

product is one that provides performance at an acceptable price or conformance at an acceptable cost. (Garvin 1984:25-38)

When the requirements have been set for the product, in order to reach the desired level of quality, the requests for tenders have been sent and several tenders have been received, it is time to choose the vendor to cooperate with. There are strategic considerations contributing to the decision, such as price, differentiation of product, security of supplies and reliability of delivery, quality and added value in terms of specialization, production facilities, packaging, transportation, after-sales services and so forth. (Lysons K & Farrington B. 2012:410)

The purchasing process in a project is quite similar to normal purchasing, but the requirements come from the project team and the purchase need to be scheduled according to the project's schedule. In projects of all sizes the placement of purchase orders in the right order and at the right time is crucial to the progress of a project overall (Ward 2008:5).

The theory above addressed purchasing as procurement, as a unit in an organization. That's why this process description needs to be modified for this particular project.

3.4 Decision Making and Risks in Producing and Purchasing

This section covers decision making and risks in producing and purchasing.

There is a variety of questions in purchasing that need to be answered. Should we make or buy? Should we wait or act? What price are we ready to pay? How much do we order? How do we want the goods to be transferred? Should we make a long-term or a short-term contract? How about standardizing? Do we need one or multiple suppliers? All these questions have a major impact on the organization, customers and end-users. These decisions are made in a context of uncertainty and involve risk. (Leenders, Johnson, Flynn & Fearon 2006:13)

Risks need to be continually assessed in the supply chain and risk/reward opportunities need to be balanced when making supply decisions (Johnson, Leenders & Flynn 2011:19). Procurement is familiar with the day-to-day challenges presented by meeting targets, such as the difficulties of accurately predicting trends and ensuring that a

product is delivered on time. The long-term risks are not that obvious. For example, the pressure on meeting requirements, resulting in reactive management, can often mean that the supply base is not able to proactively invest in developing the skills and the infrastructure to enable it to meet the set commercial targets sustainably. (Impactt & Traidcraft Exchange 2008:6)

Figure 8 illustrates a choice between alternatives, related to an organization's own demand, under uncertainty. The decision needs to be made between price and ability to supply.

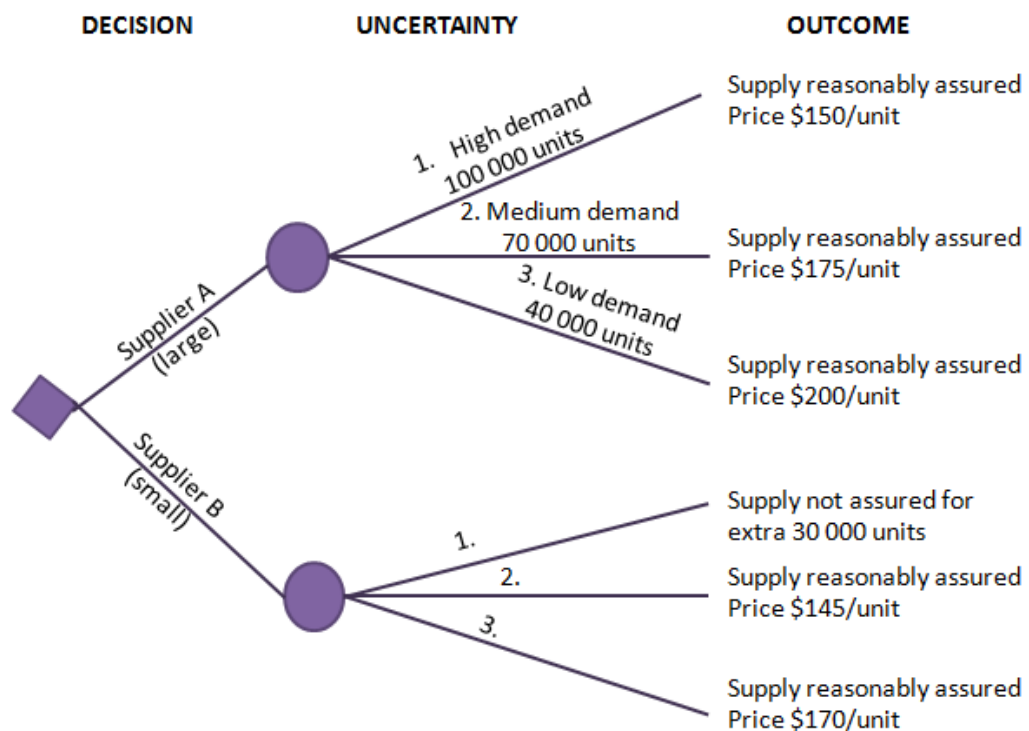


Figure 8. Simplified one-stage decision tree showing a supplier selection decision (Leenders, Johnson, Flynn & Fearon 2006:14).

There are two different suppliers, three different scenarios and six different outcomes in Figure 8. Suppliers differ in size; small and large. The scenarios are the same for both suppliers; high, medium and low demand. The outcomes show the price per unit and assurance of supply. A smaller vendor is able to offer a smaller price but in case there is a need to make extra units the supply is not assured. In case the orders are known to be big a bigger vendor can assure the supply and lower the price.

There is a variety of decisions in a purchasing and producing process that have an impact on the organization, customers and end-users. These decisions often involve risk. Risks can be predicted, but most of the time it is about balancing between risks and rewards, such as the previous example.

3.5 Cultural Production

This section explains cultural production and uses book publishing sector as an example.

The term 'culture' is broad and has many different meanings. David Throsby has defined culture in a way that is suitable for this study. Culture is emphasising the group, operating through shared values and cooperative behaviour (Throsby 2001:158). Traditionally defined cultural industries are music, dance, theatre, concerts, literature, art, book and magazine publishing, television and radio, newspapers and film, advertising, tourism and architectural services and so on(Throsby 2001:112-113). As mentioned earlier there are many meanings and definitions when it comes to culture and the previous definitions are debatable and not conclusive.

Next the book publishing sector of cultural production is explicated.

There are four parties in the supply chain of a book; author, publisher, distributor and reader. Further aspects of this process are editorial, design, production, promotion, marketing, sales and distribution (Shannon & Weaver 1949). Firstly, the author produces the contents for the book. Secondly, the text needs to be read by the publisher. Then bigger issues need to be discussed, but the smaller ones take place after a copy-editing and design process. After that the text is ready to go into production; typesetting, printing and binding. Then the edition is ready for the warehouse and the bookshops. During this publishing core process, the promotion, marketing and sales team has been doing their part in order for the books to spend as little time as possible in the warehouse or the bookshops. (Feather 2003:117-120)

The term culture is broad and it is easier to name cultural industries. The next section describes cultural producing through a case.

3.5.1 Case: Producing a New Cultural Product

This section discusses the case of Rhino Records, which “releases” past hit music – about 15 releases a month (Ayers 2006:158). The case is handled from the point of view of new product and industrial supply chain.

Rhino Records rely on a “fixed” supply chain into which they launch new products. The supply chain processes for each product are common, but each new product has some variation that must be incorporated into the procedure. The expected sales volume and promotion budgets vary widely from one product to another. Timing is also critical if the product is to take advantage of external events, such as Oscar awards, or of a developing market opportunity. (Ayers 2006:158)

The supply chain is a central, vital process for Rhino Records. It is likely to be stable – no bigger changes fundamentally, but yet susceptible to continuous improvement modifications. Individual new products do not vary significantly from each other and each product has a lot in common with those that preceded them. Speed and efficiency continues to be important in the producing process. (Ayers 2006:158)

This case was appropriate to point out in this study, since it has many similarities with this producing project. Both, the case and the project are about producing a new cultural product but it is not so different from the previous ones. Also, in both cases the process needs to be as standardized as it can be, since speed and efficiency are important objectives.

3.6 Conceptual Framework

This section explains how the conceptual framework was developed.

As mentioned earlier, when defining a project and a product a number of aspects need to be recognized. These include the scope, intended customers and users, benefits delivered to them, description of the product concept and a list of the product’s features, attributes and requirements. These are explained in the Problems and modifications -section. When the conceptual framework was generated, there were three important aspects; product, vendor and overall quality. The aspect of product implies the

need and the estimation of the quantity as well as the technical properties, quality and contents of the booklet. The vendor aspect is the most comprehensive since it includes price and payment terms, delivery time, certainty and its terms and lastly the quality of the service. Finally, the aspect of overall quality consists of setting quality standards, choosing the right vendor and managing the quality of the goods as often as possible. The quality is managed with inspections. Inspection is the most common method of attaining standardization, uniformity and quality and it is the cost art of controlling the product quality after comparison with the established standards and specifications (Naidu, Babu & Rajendra 2006:1).

Figure 9 shows the conceptual framework generated by the author.

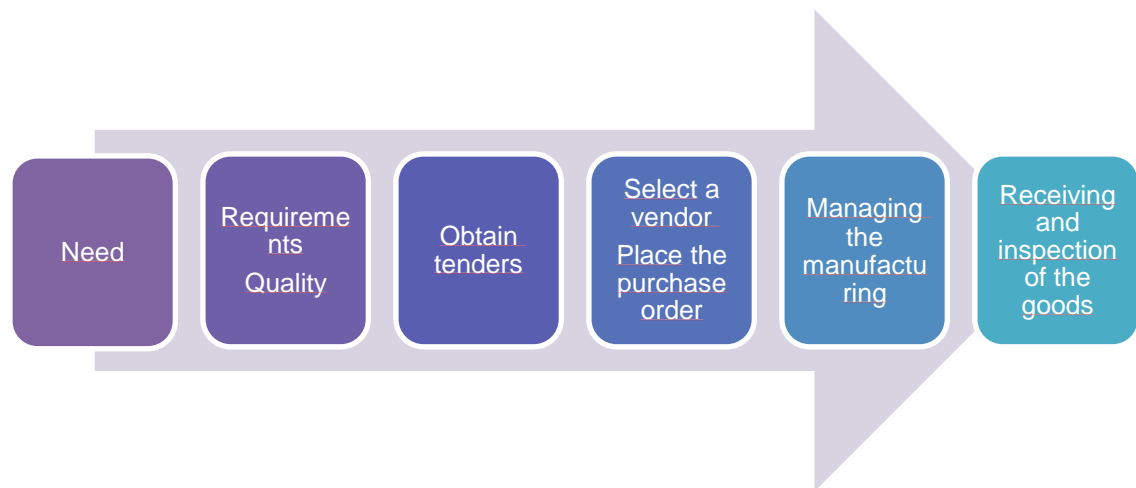


Figure 9. The conceptual framework.

The conceptual framework, as seen in Figure 9, consists of six steps. First, the need and the quantity are recognized. Secondly, the requirements are listed and the quality standards are set. Then, the requests for tenders are sent to the selected vendors. Based on the received tenders the vendor is assigned and the purchase order is placed. After the manufacturing, in this case the printing, has started it is reviewed and checked if the quality standards meet. When the goods have been received they are inspected.

The conceptual framework has been modified from best practice examples to fit this particular project. This framework is used throughout the process of producing the new booklet.

4 Implementation & Analysis

This section analyzes the process executed in this study. It explains the problem points of the older booklets and describes the needed modifications for the new product as well as the implementation of the conceptual framework and the reasons behind the decisions.

4.1 Problems and modifications

In this section the plans and definitions are recognized. The scope of the project has been indicated at the start of the project and it covers the producing of the new booklet. The case organization had defined the customers and users to consist of companies and consumers with mostly children as end-users. The features and requirements of the products are explained in Table 1.

Table 1. Comparison of features in the old and the new booklet.

Feature	Old booklet	New booklet
Size	A5	A5
Paper of pages	200g Multi Art Silk	200g Multi Art Silk
Paper of cover	300g Multi Art Silk	300g Multi Art Silk
Binding	Stitching	Stitching
Text	Not hyphenated	Hyphenated
Design	Artistic, out-dated	Fun, up-to-date
Theme	Sports	Energy levels

There are no problems with the contents of the older booklets or with the technicalities, as Table 1 shows. The size of the booklet remains the same A5 since it fits well in children's hands. The quality of the paper is the same because it has been very durable in the use of the end-users. Figure 10 shows the previous booklet with the theme of sports on the left and on the right the new booklet with the theme of energy levels.



Figure 10. The previous and the new booklet.

As seen in Figure 10, the biggest problem is that the previous booklets are outdated. The design is too artistic and appears to be targeted for adults though most of the end users are children aged 6-10. The design is also a problem in terms of product line. The case organization has three booklets with the old design but the calendars, diplomas and memory games have been designed by a different artist. The new design has been praised by the customers. The new design is colourful, interesting and most importantly up-to-date. Thus the new artist will be designing the new product, as well. The font of the text is the same as in the new artist's previous works. Since most of the end users are aged 6-10 and are learning to read, the text is hyphenated.

The theme of the games in the new booklet was innovated by the author and it is about energy levels. There are five different stages of energy levels; the highest is high-tempo and mostly running and the lowest leads to total relaxation. The theme helps to find the right games for the right situation. It may also help the hyperactive children to calm down.

4.2 Implementation of the Conceptual Framework

Figure 11 shows the conceptual framework that describes the producing process.

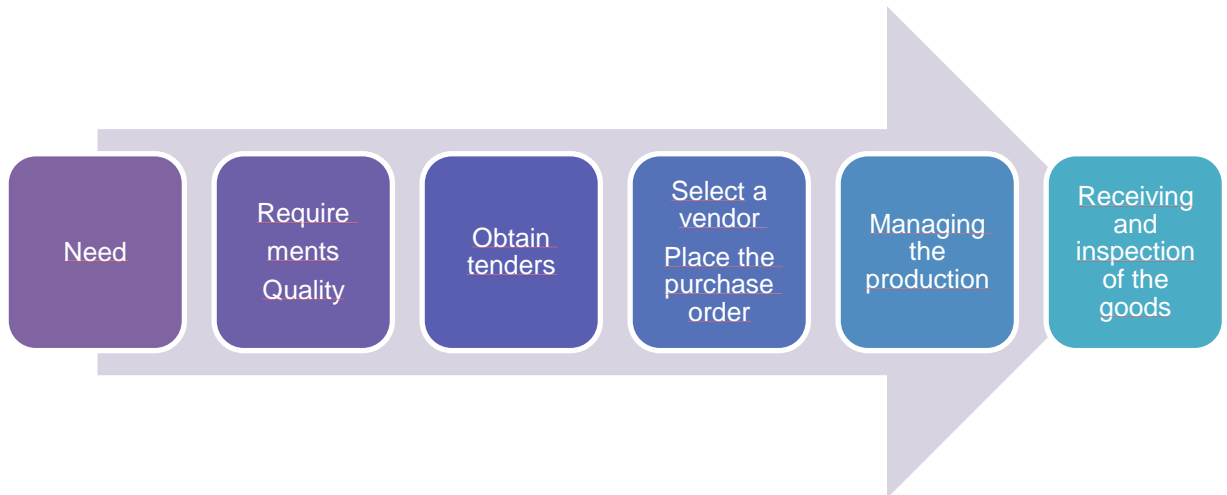


Figure 11. The conceptual framework

There are six sections in the conceptual framework that are analyzed next and also explained in detail.

4.2.1 Need

The need for this project has already been indicated in the Background of the project section and in the business problem of this study. First, the case organization needs a new up-to-date booklet, since the old ones are too artistic and the design is outdated, which does not boost the image of the association serving children's needs. Secondly, a new booklet is needed to make the product line coherent. Finally, a new product is called for to keep up old customers' interest and to gain more sales. Thus there will be more resources for the case organizations' operations.

4.2.2 Requirements & Quality

Requirements and quality in this stage concerns the product, its technicalities, contents, design and quality from the end-user perspective. The technicalities, such as quality of the paper, size of the booklet and the printing manner, were provided by the case organization. Most of the requirements were decided while examining the older products and the only aspect regarding the technicalities that was decided by the author was the vertical orientation of the booklet. The contents, the plays, were picked from the case organization's database and the theme was innovated by the author. The

theme is about energy levels; the highest energy level is all about running and rejoicing while the lowest leads to total relaxation. The instructions of the plays are hyphenated, which is a new enhancement compared to the older booklets. The same artist who had designed the latest other products, such as calendar and memory game, was used in this booklet also in order to make the product line coherent. As the basis of his designs he uses characters from old children's stories and alters them for a more up-to-date, fresh image. The quality of the product is assured by focusing on the product's end-users, i.e. children.

4.2.3 Obtain bids

The vendors who were sent the requests for tenders were chosen by the size and the location of the company. The size was preferred to be medium or large since supply assurance and the importance of the relationship were considered fundamental. The case organization needs to be an important customer to the vendor in case of complexity in supply so the case organization's order is the vendor's first or second priority. The location has an influence on supply assurance and the delivery time. The demanded locations for the vendors were Finland and Estonia. Since the case company does not have a big inventory the biggest order size is 10 000 units and reorders are made every second month or even more often. This affects the vendor's location since the assurance of the supply needs to be high and the delivery time needs to be optimal.

The requests for tenders (in Appendix 1) were sent out to four Finnish vendors; two of them were located in Helsinki near the case organization and two located in Orivesi and Kouvola. From Estonia two vendors were chosen and one of them was the case organization's current vendor. All the vendors were sized medium-large. Table 2 shows the vendor, its location and the tender's price with sales tax 0% since with Finnish vendors the sales tax needs to be paid first hand but can be deducted later and with Estonian vendors the sales tax does not need to be paid at any stage.

Table 2. Tenders received.

Country	City	Company	Price € (sales tax 0 %)
<i>Estonian</i>	<i>Tallinn</i>	<i>AS Aktaprint</i>	<i>1304</i>
Estonian	Tallinn	Sysprint	1785
Finland	Helsinki	Nordprint	1595
Finland	Helsinki	Trinket	1826
Finland	Orivesi	Oriveden kirjapaino	2990
Finland	Kouvola	Scanweb	2020

In table 2 is seen the prices ranging from 1304 € to 2990 €. Also the effect that the distance between the case organization and the vendor has on the price can be seen in the table 2.

4.2.4 Select a vendor

As mentioned earlier, the strategic considerations contributing to the decision of selecting the vendor are aspects such as price, differentiation of product, security of supplies and reliability of delivery, quality and added value in terms of specialization, production facilities, packaging, transportation, after-sales services and so forth. Since the risks in this project are related to the requirements of the product, the vendor's ability to supply and scheduling, the selected main criteria for the vendor were price, quality, delivery time and certainty and service. Since the case organization's current vendor was known to deliver in time, quality and with no uncertainty and to have good service in general and, on top of all this, were able to offer the best price, it was an obvious choice to continue with them.

4.2.5 Managing the Production

When quality was addressed, the five approaches for quality were presented and one of them was the manufacturing-based approach where quality is 'conformance to specifications' which means targets and tolerances determined by product designers.

In order to check the quality of the product, vendor's service and the overall quality of the process, the management of the production was handled by an inspection of the facilities and the printing quality. A trip to the vendor occurred at an early stage of the production. The printing work started during the trip so if there had been any problems they would have been easier to repair. Since the quality met the set requirements, targets and tolerances, the trip was about keeping up the relationship.

4.2.6 Receiving & Inspection of the goods

The goods were delivered in a week to the case organization's office, as promised. The uniformity and the quality of the goods were attained by the method of inspection. The quality and the quantity of the goods were inspected and everything was correct and met the set standards and requirements.

4.3 Summary

Overall, the implementation of the conceptual framework was straightforward. The need for the project was clearly recognized and specified. The requirements and quality for the product and expected service were at an acceptable level. Tenders were requested and received and the results were surprisingly wide ranged. The case organization ended up continuing the cooperation with the existing vendor, since they fulfilled all the selected criteria. The production and the goods were checked for quality by inspection.

5 Results & Conclusions

This section introduces the results, the conceptual framework and the new product, with conclusions arising from the results.

As mentioned earlier, the first objective of this study was to specify the problems of the older booklets and the needed modifications for the new product. These were explained and gathered in Table 1. The biggest change was the design that completed the product line. Another objective was to study best practices of producing and purchasing a new product from an industrial and cultural point of view in order to formulate the conceptual framework for this study. The conceptual framework was based on best practices that were wide enough and fitted the purpose. The final aim was to implement the conceptual framework in practice and as a result to produce a new booklet. Implementation of the conceptual framework flowed naturally, since it was kept simple, and the new product was completed.

The outcomes of this study were the conceptual framework, which can be used in a producing project similar to this, and the new product, which enables the case organization to gain more sales in order to grow their operations.

The new product, 'Levosta lenton' -booklet, has received good feedback from the case organization's supervisors and sales people. Some old customers who have declined previously wanted to buy the new product just for curiosity. The new booklet made the product line look coherent, as seen in Figure 12.



Figure 12. The complete product line.

As seen in Figure 12, the new product fits the product line well. The appearance of the products is colourful, fun and targeted for children, in line with the image of the case organization.

As stated earlier, the benefits of this study are easy to point out and those are shown in Figure 13 below.

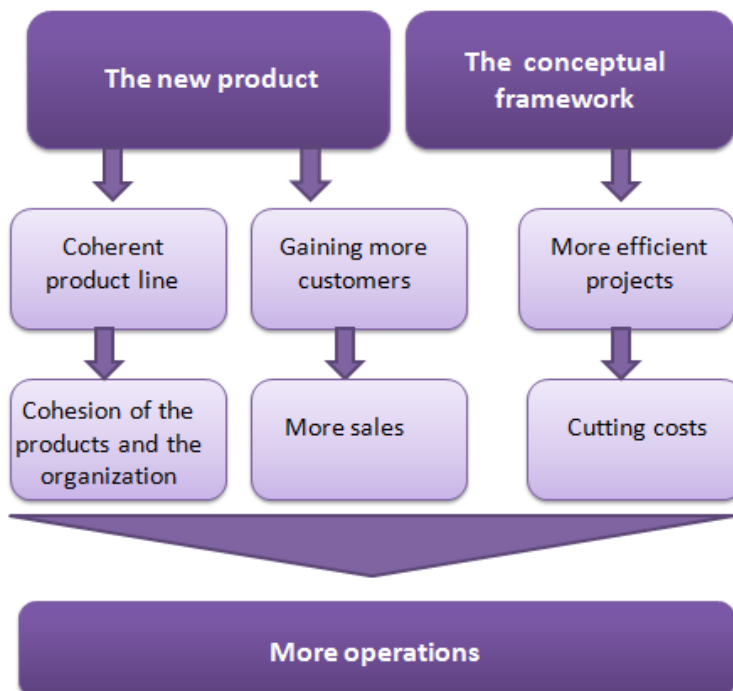


Figure 13. The benefits of this study.

The new product makes the product line coherent and this leads to matching images of the products and the case organization. Also, the case organization gains more customers since old, once refused, customers are reordering. With these two aspects affecting the sales positively the case organization is able to grow their operations, which is their ultimate goal. In addition, the conceptual framework generated in this study helps the case organization with future purchases and productions. It makes the projects more efficient and effective. Thus, the costs of each project are decreased and the case organization has the opportunity to allocate more resources to increasing operations. At the moment, most of the projects are related to events, but at least a new calendar and a diploma need to be produced yearly.

6 Discussion

This section summarizes this study from the formulation of the research question to the readymade product. This section also evaluates the study and discusses the future steps.

6.1 Summary

The case organization needed a new product in order to keep their old customers reordering, to make the product line coherent and to match the image of the product to the organization's image. Based on the introduced business problem, the research question "How to produce a new quality booklet in order to enable the case organization to grow operations?" was conducted.

To achieve a general understanding of producing, product development and purchasing, best practices related to these topics were studied. Based on the theories studied, the conceptual framework was generated. After that, the problems of the older booklets and the needed modifications for the new product were specified. Then, the conceptual framework was implemented and the producing project was analyzed. Finally, the main outcome of the research project was the conceptual framework created for producing projects and the new quality product.

6.2 Evaluation of the study

This study examined best practices of producing, product development and purchasing from an industrial and cultural point of view. The theory matched the need for this project and it was possible to develop the conceptual framework that was essential for this study.

The framework steered the project and the outcome, i.e. the new product, met the set standards. The new booklet fits the product line and has managed to bring back some lost old customers.

However, best practice -section could have been more in detail. It could have involved for example standard definition of fit for use -concept, product specification, negotiation

strategies and contents of the contract. Also, the scheduling of the project was not as optimal as it could have been. The project started in September, but since the designer was unavailable until December, the project was on hold for a while, and the new product was launched in February. Also, the quality of the first units of the new product was not as high as the requirements were set, but those were given for the salespersons for examples. The quality of the products delivered for the customers was more up to standard.

The future steps with the outcomes of this project are that the conceptual framework makes future producing and purchasing processes more explicit and that the new booklet raises the sales so that the case organization's operations could grow. The case organization is going to purchase some marketing materials and clothing, which are new items, and the conceptual framework of this study makes the processes faster and easier.

This study did not benefit only the case organization but also the author. The study deepened the author's knowledge and understanding, especially regarding the theoretical part. Also the author gained useful insight into the case organization's operations.

References

- Ayers, J. B. (2006). *Handbook of Supply Chain Management*. Florida: Auerbach Publications.
- Barrat, C. & Whitehead, M. (2004). *Buying for Business*. West Sussex: John Wiley & Sons Ltd.
- Burt, D. N., Petcavage, S. D. & Pinkerton, R. L. (2012). *Proactive Purchasing in the Supply Chain*. USA: The McGraw-Hill Companies, Inc.
- Chunawalla, S. A. (2008). *Materials and Purchasing Management*. Mumbai: Himalaya Publishing House.
- Dooley, D. (1995). *Social Research Methods*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Feather, J. (2003). *Communicating Knowledge – Publishing in the 21st Century*. Munich: K. G. Saur.
- Garvin, D. A. (1984). 'What does product quality really mean?', Sloan Management Review.
- Haverila, M. J., Uusi-Rauva E., Kouri I. & Miettinen A. (2009). *Teollisuustalous*. Tampere: Hämeen Kirjapaino Oy.
- Impactt & Traidcraft Exchange (2008). *Material Concerns – How responsible sourcing can deliver the goods for business and workers in the garment industry*. Department for International Development. Available:
http://www.traidcraft.co.uk/Resources/Traidcraft/Documents/PDF/tx/policy_reports/Material_Concerns_3_page_view.pdf [Accessed: 15.04.2014]
- Johnson, Leenders & Flynn (2011). *Purchasing and Supply Management*. New York: McGraw-Hill.
- Juran, J. M. (1974). *Quality Control Handbook*. New York: McGraw-Hill

Kahn, K. B. (2012). *The PDMA Handbook of New Product Development*. New Jersey: Wiley.

Leenders, Johnson, Flynn & Fearon (2006). *Purchasing and Supply Management with 50 Supply Chain Cases*. New York: McGraw-Hill.

Lysons, K. & Farrington, B. (2012). *Purchasing and Supply Chain Management*. England: Pearson Education Limited.

Naidu, N.V.R., Babu, K.M. & Rajendra, G. (2006). *Total Quality Management*. New Delhi: New Age International (P) Ltd., Publishers.

Nishiguchi, T. (1996). *Managing Product Development*. North Carolina: Oxford University Press.

Quinton, S. & Smallbone, T. (2006). *Postgraduate Research in Business*. Oxford: SAGE Publications Ltd.

Rodgers, P. & Milton, A. (2011). *Product Design*. London: Laurence King Publishing.

Sagor, R. (1993). *How to Conduct Collaborative Action Research*. Virginia: Association for Supervision & Curriculum Development (ASCD).

Shannon, C. E. & Weaver, W. (1949). *The Mathematical Theory of Communication*, Illinois: University of Illinois Press.

Throsby, D. (2001). *Economics and Culture*. New York: Cambridge University Press.

Ward, G. (2008). *Project Manager's Guide to Purchasing Contracting for Goods and Services*. Hampshire: Gower Publishing Ltd.

Request for tenders

Perinneleikit ry

Jääkärintie 8
00150 Helsinki
Essi Sjöblom

Tarjouspyyntö

8.1.2014

Sysprint

Soo 4

10414 Tallinna

Painovalmis kirja

Perinteisiä lasten leikkejä ylläpitävä yhdistyksemme pyytää tarjoustanne painovalmiin kirjan painamisesta sekä toimittamisesta. Tuotteemme tulisi olla seuraavanlainen:

- Sivuja 20 + kansi
- Koko A5
- Suunta pysty
- Kansi 300g
- Sivut 200g
- Värät 4/4
- Stiftaus

Toimitusaika ja määrä

Valmiin tuotteen tulisi olla toimipisteessämme Jääkärintie 8, 00150 Helsinki alustavasti viikolla 6.

Ensipainos 5000 kpl. Aiempia painoksiamme on painettu jo yli 100 000 kappaletta. Toinen painos tilataan varmasti.

Toivomme tarjouksenne olevan meillä viimeistään 13.1.2014.

Ystävällisin terveisin

Perinneleikit ry

Essi Sjöblom

09 4289 0569

myynti@perinneleikit.fi