



# **Degree Thesis**

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*Management Consulting*

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<b>Abstract:</b>	
<p>Management consulting has been an interest from early times, since the beginning of the first management consulting firm in 1886 to the present this practice has evolved and progressed to being one of the most sought after industries in the world. After World War Two this practice moved beyond the confines of the United States spreading into Europe. The most important role management consultant's play are objectively analyzing a situation and accentuating the issues and opportunities they present, then providing solutions to use those issues and opportunities to their client's best interests. All the information is carefully processed, analyzed and presented, the goal being to provide an optimal solution and strategic plan for the company.</p> <p>This thesis includes the description of the management consulting process. Using a technique called the "Hypothesis Driven Problem Solving Process", a hypothesis is used to generate possible solutions, which are studied and then proved.</p> <p>Consulting was done for SBX Oy with the objective to expand their business and operations. Using a framework and structure modified to suit the company, the company was broken down functionally providing a basis for further analysis, then using the hypothesis driven approach, solutions were materialized which were then proved or disapproved. In addition to management consulting, the importance of effective management is shown. It was found that SBX Oy could be improved in several functional areas, and that business and operations could be expanded. The findings and proposed solutions from the project were prepared and submitted to SBX Oy in the form of a consulting report.</p>	
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## **FOREWORD**

I would like to express my gratitude to Mr. Badal Karis Durbo, for willing to supervise my thesis, and the advice and support he has given me. I would also like to thank the managing director of SBX Oy, for this opportunity, his advice and support.

I would also like to thank my sister for her support.

Thank you for your opinions, advice and help.  
Neil Diamond Ghulam

# 1 INTRODUCTION

## 1.1 Management Consulting

Management consulting is the process, in which a consultant studies and analyzes the structure and functioning of a company or an organization as a whole, finding opportunities and creating strategies for the company to continue growing and operating efficiently, as well as identifying problems in organizational structure.

Management has been a topic of interest from early times, and as the study of management grew, the concept of management consulting was formed. In 1886 Arthur D. Little formed the first Management Consulting firm after his name. After World War Two, a number of Management Consulting firms came into being, serving both the public and government sectors, notably the “Boston Consulting Group” and “McKinsey”. This industry grew at a considerable rate and was widely accepted in the US compared to Europe due to cultural factors. Specifically due to the concept that in the US managers were not expected to know everything so buying in expertise to enrich the company was seen as normal, where as in Europe it was the opposite and managers were supposed to be competent in all areas. It was after World War Two when the United States started developing international trade that the concept of Management Consulting started emerging in Europe (Wikipedia 2001).

Consulting is carried out in various ways, for instance; an expert can be brought in to solve a defined problem, providing specific skills and expertise to finding a solution and implementing it. On the other hand a consultant may be brought in with more general skills, to study the company and find opportunities for the company and then provide advice for better operations and function. This consultant may also bring in other experts to help find the optimal solution.

Consulting, however done, provides information, advice and skills for a company to grow.

The consulting industry has grown rapidly over the last three decades. Total global revenues exceeded the 330 billion dollar mark in 2008 (Plunkett Research 2005). There is a vast range of consulting firms, all the way from diversified firms that offer all types of services to firms that provide general strategy consulting and specialized technical consulting.

Management Consulting continues to grow as private, government and non-profit agencies are turning to management consulting, and the need for specialized and professional information increases.

## **1.2 Background**

Lots of companies undervalue the importance of proper management and regular evaluation of current management processes and procedures. Ignore it long enough and companies, especially the small older ones can get stuck in a procedural rut.

The business appears to be doing alright, costs are covered, rent is paid, salaries are paid, and some turnover is left on hand. Therefore an assumption is made that business is ok, and will continue to be fine. They rarely strive to improve the company or increase revenue and make progress from the company's present standing. Having one major client bringing in revenue is enough, sometimes even losing other potential clients by not effectively marketing the business and its services.

Based on the company being studied in this thesis the mistakes being made by management and what can be done to improve the situation will be seen.

However whether it is lack of interest, lack of motivation or just poor management skills, any company that seems to be in this situation can improve its workings and reach its full potential by objectively focusing and improving its management process.

For companies that are stuck in daily procedure, it is often hard to break away from daily routine and objectively assess their present state and situation. Therefore it is more useful to bring in a management consultant who can objectively study and assess the company objectively. It is recommended to bring in an “external consultant” as an external consultant has more freedom and objectivity in contrast to an internal consultant who is part of the company. An external consultant has the advantage of seeing things as new, and freely giving his opinion as compared to an internal consultant, who is not only partially biased as having worked in the company for so long but also fears to openly share his opinion, and may be intimidated by top management.

Performing management consulting services for the company being studied, this thesis will cover the management consulting process, and show how management consulting can improve the working and functionality of the company as a whole.

The company’s name has been changed to “SBX Oy”, for privacy reasons.

### **1.3 Objectives for this paper**

1. To show that management consulting can improve companies by providing them with strategic advice and solutions.
2. To improve SBX Oy in regard to its daily operations and functioning.
3. To show the importance of proper management in industries in regard to operations.

## **1.4 SBX Oy**

SBX Oy is a small production\subcontracting company. It has been operating over the last 40 years, and has been under its current management for over the last 25 years. It is a relatively small company that hires around 2 persons for the work load including the manager. The company does work according to this capacity, with an average revenue of around 20,000 Euros per year. It is one of very few companies performing this type of services in the Helsinki region, therefore has a considerable advantage in this business industry.

Currently the work being done here is the production of window silencers (kovamentiliti). In addition to building the silencer part, the assembly of the whole product is also done here, including the labeling and packaging.

Having studied the company and its operations extensively for the last six months, and having worked for this company over the last 3 years, has given a lot of knowledge and depth to understanding its operations, issues, and opportunities.

## **1.5 Procedure of Study**

- Study the company and its operations.
- Study and observe its opportunities, advantages and weaknesses.
- Decided on the improvements that can be made.
- Formulate a plan to achieve those improvements.
- Presentation of the findings, solutions, and an implementation strategy.

## **2 INITIATING THE PROJECT**

### **2.1 Initiation**

This is the start of the entire project where the client and consultant come together to start the project. It is necessary that both client and consultant understand what the other party is offering and agree on those terms. In this case, the client and consultant met informally several times to discuss the opportunity and see what could be offered and how it would benefit the client. It was necessary for the consultant to understand what the client expected, and for the client to understand what could be expected from the consultant. Often one or both sides do not understand what is plausible and what can be expected in realistic terms. This leads to complications throughout the project, with one or both parties failing to live up to the others expectations. However this was not an issue and both parties clearly understood each other, reaching a collaborative agreement.

### **2.2 Preliminary study**

Once the basics of the project were agreed upon by the client and consultant, the project continued into studying the company's current situation, and a prediction of the future market value of the business. The company's future, objectives and goals were also studied, based on a three year time line. This preliminary study consisted of attaining the basic information required to start the project. This information was then organized and studied to achieve an overview of the possible opportunities and issues pertaining to the company and its future. It was also studied as to how these opportunities could be capitalized upon and issues dealt with, and as to why the company is not currently making any progress.

This study was documented for preparation of the project proposal, and defining of the objectives and scope of the project.

### **2.3 Defining objectives and scope**

From the preliminary analysis and information, it was agreed that the consultant would provide value adding services, increasing the value of the company as a whole, and enhancing its operations. It was necessary that the client understood the objectives of this project and what the consultant was going to be able to provide. Both parties need to be extremely clear on the details, therefore great care was taken in defining the objectives, which were reviewed and discussed with the client several times before being finalized.

The outcome was the following objectives for the consulting project:

1. Evaluate the current operations of SBX Oy.
2. Identify issues inhibiting possible growth and expansion
3. Identify possible areas of expansion.
4. Identify possible areas for improvement of operations.
5. Summarize the findings in brief for management.

### **2.4 Project proposal & timeline**

After several more meetings and discussions with the client the project proposal was created. The project proposal successfully managed the client's expectations with a clear representation of the consultant and what they would be offering the client.

Following is the original project proposal:

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# Consulting Project Proposal

**SBX Oy: support for expansion of Management and Operations.**

## **Expected Requirements:**

SBX Oy is a small but stable firm with an advantage of being the only type of company in its industry in the Helsinki region. The consultant has been invited to work with the firm and explore opportunities for possible expansion of the business on which the firm might capitalize on.

## **Overall Aim:**

The main aim of this project is to give SBX Oy a range of possible opportunities and directions to take in order to expand its business and revenues. And possibly expand into new market sectors.

## **Objectives:**

The consulting project aims to:

1. Evaluate the current operations of SBX Oy.
2. Identify issues inhibiting possible growth and expansion
3. Identify possible areas of expansion.
4. Identify possible areas for improvement of operations.
5. Summarize the findings in brief for management.

## **Outcomes:**

As a result of this consulting exercise SBX Oy will be able to:

1. See their company from an external point of view.
2. Dedicate resources towards exploiting possible market opportunities.
3. Improve their daily operations.
4. Increase their business market and revenues.
5. Deal with issues slumping growth, and expansion.

## **Our approach:**

Our approach will be to emphasize the importance of reliable and practical information, for the management of SBX Oy. Primary research will be done to understand the company and see how the company operates internally and within its business sector. This data will then be used to investigate possible issues and opportunities, and how they can be dealt with and capitalized upon.

The findings will then be used to give a clear path for the future development of SBX Oy. All information will be summarized for management purposes, and will be used to develop a strategy for the company's growth and business expansion.

## **Time plan:**

May 2009:	Initial meeting to discuss requirements.
June 2009:	Initial proposal presented and reviewed.
June 2009:	Final project proposal accepted permission to proceed.
July 2009:	Progression of project: study of the company
July 2009	Study of company & operations
August 2009:	Study of opportunities and issues.
August 2009:	Research on possible solutions.
September 2009:	Research on possible solutions.
October 2009:	Preparation of final report.
October 2009:	Presentation of findings to client.

## **2.5 Planning the study**

A detailed schedule for the project was created which was given to the client, in addition to this, information logs and other systems were created to keep track of the progress including a project log.

Information regarding what type of decisions need to be made, and who will be making those decisions were also recorded, including how much of involvement was required from the client and how to obtain that involvement and communication.

## **3 PROJECT PROGRESSION**

### **3.1 Collection of information**

Most of the information collected was primary data, collected by the consultant, at the work place. Having prior access to the company having worked there, proved to be very insightful, and helped to fully understanding the procedures, products and functioning. All this information was documented and stored for analysis.

### **3.2 Interaction**

In addition to the observation and collection of data, regular interaction took place between the client and the consultant in the form of informal conversations and meetings. It was an important objective from the consultant's side that the client be kept updated on the progress, and what was happening in regard to the project.

### **3.3 Consulting Process**

#### **3.3.1 Introduction**

In the following sections the methods, processes and analysis techniques used in the process of consulting for our client will be explained. The techniques and how they were maximized and used to isolate issues and opportunities will be explained. It will be shown how these techniques were used to solve problems, draw out results and were combined into comprehensive, implementable solutions for our client.

#### **3.3.2 The process**

The consulting process used in this paper is based on the “Hypothesis Driven Problem Solving Process” (Rasiel & Friga 2002, p.15-21). A technique used by top consulting companies in the industry. It is based on the logic of using a hypothesis to identify a certain path, and then trying to prove or disapprove that hypothesis, thus confirming or scrubbing a proposed solution. After the initial hypothesis is made, this is structured using a “Logic Tree” that shows every component related. This structuring is based on framing the problems and issues. Once this is done, from the logic tree all potential issues and opportunities are extracted, using each of them as a starting point and inserting them into another structure called an “Issue Tree”. This “Issues Tree” starting at the head of the issue, branches out into sub issues. Based on the initial issue, hypotheses based on sub issues are drawn out which they are then directly researched and either proved or disapproved, therefore solving the problem, or finding alternate solutions. Once a hypothesis has been proved, and solutions confirmed the interpreted results are combined into a comprehensive report that suits the company in terms of implementation (Rasiel & Friga 2002, p.1-29).

This process is explained in more detail below.

### **3.3.3 Structure & Framework**

The basis of good consulting depends on a solid foundation that consists of a structure and framework. In consulting, structure and framework are the basis of solving a problem, without it all reason, thoughts and ideas get lost in a web of chaos with no directive showing which way to go. Using a structure makes clear what the issues are and how to apply the hypotheses, and how to do the research and analysis to solve the problem. Using structures and framework not only give u direction, but they support your work, they provide evidence for your ideas, and help others see it in a clear and distinct manner (Rasiel & Friga 2002, p.2-10).

### **3.3.4 Logic tree**

Once the structure and framework of a problem are in position a tool called the “Logic Tree” is used to break out the problems into a hierarchical listing of all its possible components to the problem. Starting from the top, the issue is broken down into its components, these broken down components can then be further broken down into one or more possible components and so on progressively down till the whole problem has been expanded into all possible components (Rasiel & Friga 2002, p.11-14).

### **3.3.5 Hypothesis**

Once the problem has been reduced to its basic components by use of appropriate frameworks, the next step is to form a hypothesis as its possible solution. Forming a hypothesis right away instead of going through all possible solutions, saves immense amounts of time, and guides your research and analyses as directly as possible. This process is very effective and efficient in getting you started right away. Once an initial hypothesis is created, the “Quick and Dirty Test”, is applied right away to the hypothesis

immediately proving if it is worth to follow up on or not. This QDT is simply: for the hypothesis to be true, the assumptions that are made need to be true, if they are not, then the hypothesis is false and a new hypothesis needs to be considered (Rasiel & Friga 2002, p.21-24)

Once the QDT is done, you have your initial hypotheses, these hypotheses needs to be tested and analyzed more thoroughly to be satisfactorily accepted and if necessary even refined. This is done by using an Issue Tree.

### **3.3.6 Issue Trees**

An Issue Tree is very similar to a Logic Tree; however an Issue Tree is a series of questions directly related to the hypothesis. The issue is broken down further into sub issues, and they are further broken down into more sub issues as far as necessary to prove or disapprove the hypothesis.

By creating an Issue Tree of issues and sub issues, you map out a clear path for your analysis. It also allows you to move forward quickly answering questions and moving on or taking out branches that are false (Rasiel & Friga 2002, p.24-29).

### **3.3.7 Research**

Until now the work is simplified with a clear path. A work plan for the issue tree is drawn up showing the questions that need to be answered, what type of analyses need to be done, possible data sources, and the possible end products for the analyses. The analyses and research needs to be done objectively. The gathering of data needs to be done effectively and efficiently as possible using the right strategies and tools, knowing which data is relevant. Based on the research being done, the proper infrastructure needs to be laid out, using proper techniques and knowledge management to carry out the research.

### **3.3.8 Summary**

Once the research is carried out, the data is analyzed and the results are extracted, stripping it down to a comprehensive report that is suitable for the client in terms of implementation and client's objective and strategy. Great care needs to be taken to ensure that the consulting report not only supports the company, but also displays a clear picture of the solutions that are being proposed.

These procedures and techniques have been used by countless top consulting organizations and consultants. These techniques will now be used to provide consulting for our client.

## **4 ANALYSIS**

### **4.1 Introduction**

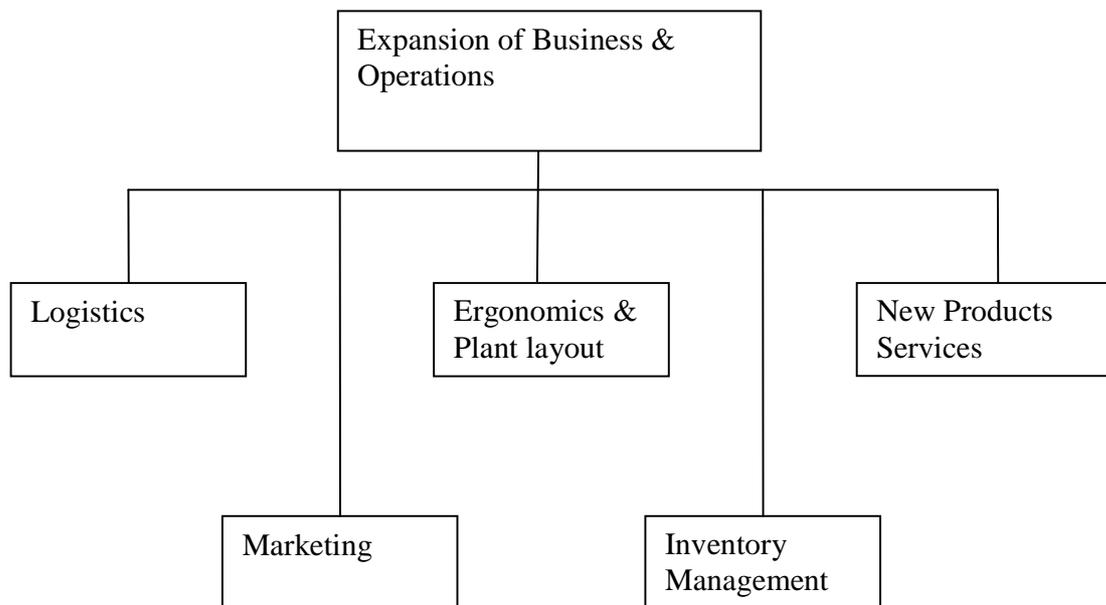
In this next section the process of analyzing our clients company will be done. Starting with the fundamental layout of the company an appropriate structure and framework was laid out in order to study operation and functioning of the company in an attempt to improve and expand business and operations.

### **4.2 Logic Tree Framework**

Using a logic tree to frame the problem, starting right at the top at the business core unit, the business was broken down into its components based on a functional perspective. Although there were numerous other perspectives that this logic could be based on, it was

chosen to base it on functionality due to the objectives of this assignment, which were to improve operations and functionality.

Using a logic tree to break the company into its components resulted in a clear understanding of the company. As can be seen below, the logic tree drawn out for improving our client's core business unit is based on its functionality, using the hypotheses that the expansion of the business and improvement in its operations can be done by changing and improving key functional areas that include: Logistics, Marketing, Ergonomics\Plant layout, Inventory Management, and an Introduction of new Products and Services.



*Figure 1 Logic Tree for Core Business Unit.*

From the above logic tree, the possible hypotheses were drawn out, and subjected to a QDT as follows:

### 4.3 QDT (Quick & Dirty Test)

A QDT is a short simple test immediately proving or disapproving a hypothesis, as explained earlier, it is simply analyzing if the made assumptions are true or false. If the assumptions are true, the hypothesis is further considered and analyzed, if false it is immediately disregarded, thus saving immense amounts of time by not unnecessarily going in directions that are bound to end up at dead ends (Rasiel & Friga 2002 p.22)

**Hypothesis 1:** A change in current logistics will improve operations.

**QDT:** Improvement in logistics, getting the most out of it, reducing transportation costs, improving the flow of materials, and internal logistics, will improve the overall operations and functionality.

**Result:** Hypothesis one, stating that a change in logistics will improve operations, is positive, passing the QDT.

**Hypothesis 2:** An increase in marketing, and objective advertising, will improve operations and help expand the business.

**QDT:** The current marketing situation in the company is fairly low, almost non existent. Any marketing done will promote the company and the services being provided, bringing in customers, therefore expanding the business.

**Result:** Hypothesis two, stating that marketing will improve operations and business, is positive, passing the QDT.

**Hypothesis 3:** A change in the current plant layout and material flow, and an improvement in ergonomics will improve operations and the process of production.

**QDT:** The current flow of raw materials and finished products are all mixed up with no specific flow or system. Forming an optimized layout and flow system, will increase productivity. Improvement in the work conditions, and ergonomics of production, will increase productivity by optimizing the production.

**Result:** Hypothesis three, stating that a change in plant layout and ergonomics will improve operations and the production process is positive, passing the QDT.

**Hypothesis 4:** A change in the current inventory management process and system will improve operations and increase productivity.

**QDT:** Tied up inventory, unknown inventory at a given time, and having to retake inventory every few weeks all hold up operations to some extent. Improving the inventory management system to an electronic online database, will not only keep the client informed of the inventory situation, but saves time, and helps control the flow of inventory in and out efficiently.

**Result:** Hypothesis four, stating that a change in the current inventory management system to an electronic online database, will improve operations and productivity is positive, passing the QDT.

**Hypothesis 5:** An introduction of new products and services will help expand the business and its operations.

**QDT:** New products and services provided for a market in need will provide a flow of revenue, and clients, increasing the market share, and expanding operations and business in that industry.

**Result:** Hypothesis five, stating that in introduction of new products and services in the market will expand business and operations is positive, passing the QDT.

As all the above hypotheses have sufficiently passed the QDT applied to them, they can now be subjected to further detailed analyses.

## **4.4 Further Analysis**

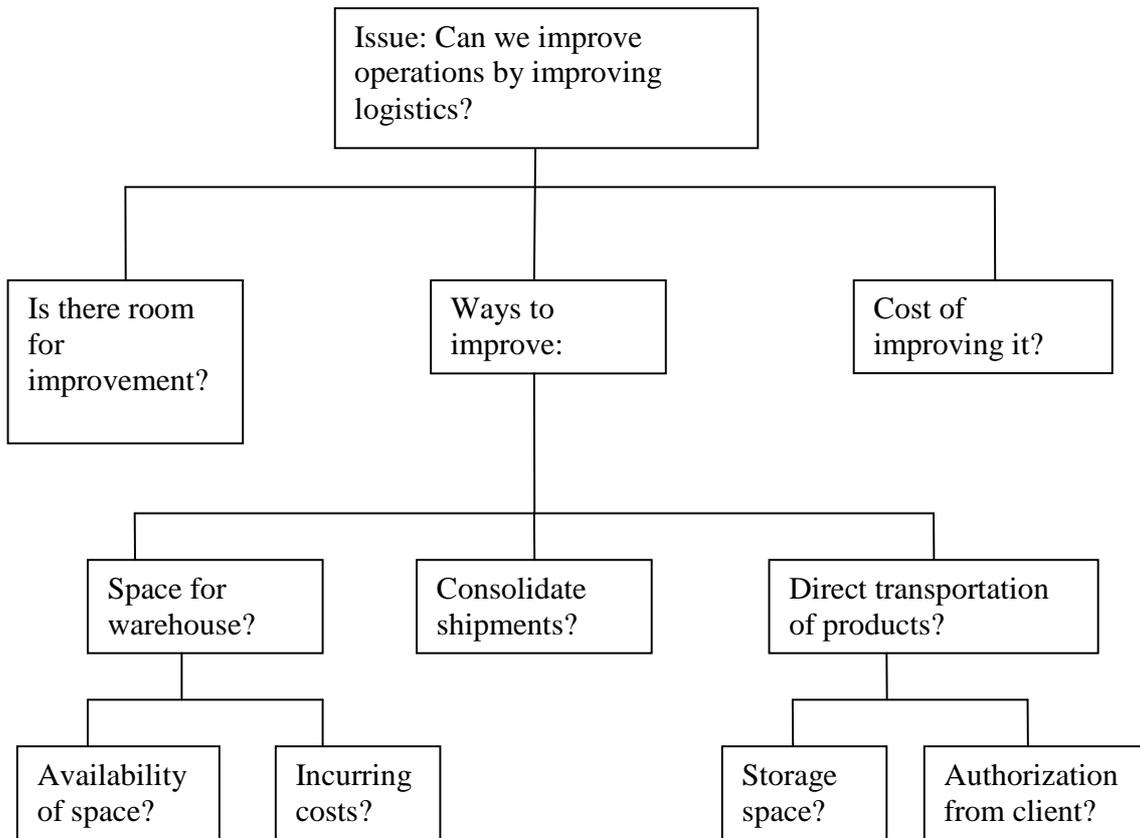
### **4.4.1 Hypothesis 1**

A change in current logistics will improve operations.

#### **4.4.1.1 Issue Tree (Initial)**

In order to sufficiently answer the issue as to whether improving logistics will improve operations, and if improving logistics is possible in context to improving operations it is necessary to answer a number of other sub issues all leading to the main issue. In order to objectively analyze this issue and its sub issues it is necessary to map it out in the framework of an issue tree.

This issue tree starting with the main issue at its core, branches out into mutually exclusive sub issues. Figure 2.1 shows the issue tree for the first hypothesis.



*Figure 2.1 Issues Tree for Logistics.*

As seen in Figure 2.1 the core issue, as to whether an improvement in logistics will improve the operations of the company as a whole, are broken down comprehensively into its sub issues that need to be true in order to prove the hypothesis.

These include answering:

1. If there is room for improvement?
2. How this can be done?
3. If the proposed ways of improving logistics are possible?
4. If resources are required?

This issue tree is worked out and organized into a work plan that acts as a guide to analyzing the issue tree in a comprehensive and systematic manner.

#### 4.4.1.2 Work Plan

The work plan for hypothesis one is shown below in Table 2.2. It identifies the issue and sub issues with a hypothesis as the answer, including the analyses that need to be done, data sources, the end product of the analysis, and a timeline.

Having a work plan provides a plan for systematically going through the analyses, data research and producing the required end product.

*Table 2.2 Work Plan for Logistics*

<b>Issue/Hypothesis</b>	<b>Analyses</b>	<b>Data Source</b>	<b>End Product</b>	<b>Responsibility</b>	<b>Due Date</b>
Can logistics improve operations?				Neil	
Is there room for improvement?	Study current logistics situation	SBX Oy	Executive Summary	Neil	9 Jul
Availability of warehouse	Study SBX Oy, Plant	SBX Oy	Map	Neil	18 Jul
Area space?	Study plant	SBX Oy	Map, Chart	Neil	9 Jul
Costs?	Investment costs	SBX Oy, Management	Spread Sheet	Neil	18 Jul
Costs being saved?	Current logistics expenses	Finances, Management	Spread Sheet	Neil	18 Jul

#### 4.4.1.3 Data Interpretation

Based on the end results of the analyses it was shown that:

1. By keeping the finished product at the production facility and then dispatching it to the required end user when required, would cut down on unnecessary transportation costs by almost 33%.
2. In order to store the finished products till called for dispatch it is necessary to have the space for storage. There was a room that was not being used which was suggest that it be turned into a storage unit.
3. As the room was already present, no extra costs for storage would incur.
4. The movement of these products could be done easily by means of loading them onto a pallet and then transporting them by means of a manual hydraulic forklift.

Transport	Point A	Point B	Weight (Kg)	Price (Euro)
1	Client	SBX Oy	500	26.80
2	SBX Oy	Client	500	26.80
3	Client	End Consumer	500	26.80
Total				80.4

Three way transportation = 80.4 Euros.

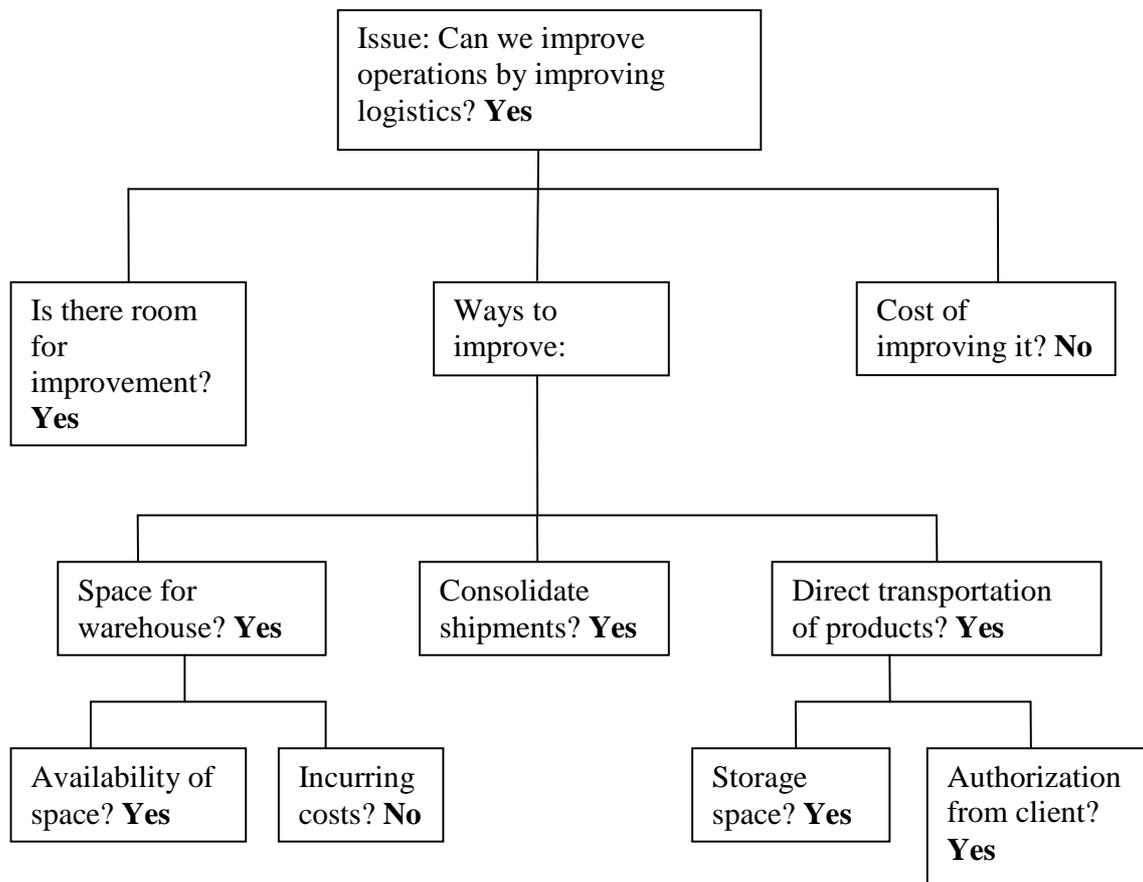
Two way transportation = 53.6 Euros

$((80.4 - 53.6) / 80.4) * 100 = 33 \%$ .

By cutting out transport 2, and sending the finished product to the end consumer directly costs are cut by 33 %.

#### 4.4.1.4 Issue Tree (Final)

Having followed a comprehensive and systematic work plan, researching, analyzing and interpreting the relevant results, the sub issues, and issue were answered in Figure 2.3, thus either proving or disproving the hypothesis.



*Figure 2.3 Solved Issue Tree for Logistics*

The above issue and sub issues in Figure 2.3 have been answered positively in regard to the initial hypothesis, thus proving the hypothesis.

#### **4.4.1.5 Results**

After having answered the sub issues and issue, the hypothesis stating that “changing the process of logistics will improve operations and functionality” is proved as true.

By means of the research and analyses done, the following conclusions were made:

There is plenty of room for improving the present situation of logistics; this can be done by keeping the products at the ware house where they are produced, instead of sending them back to the client’s warehouse, thereby cutting down on costs. It is also possible to consolidate shipments, saving costs, and directly transporting the products to the end consumer, without sending it through multiple unnecessary channels (Ericsson 2008)

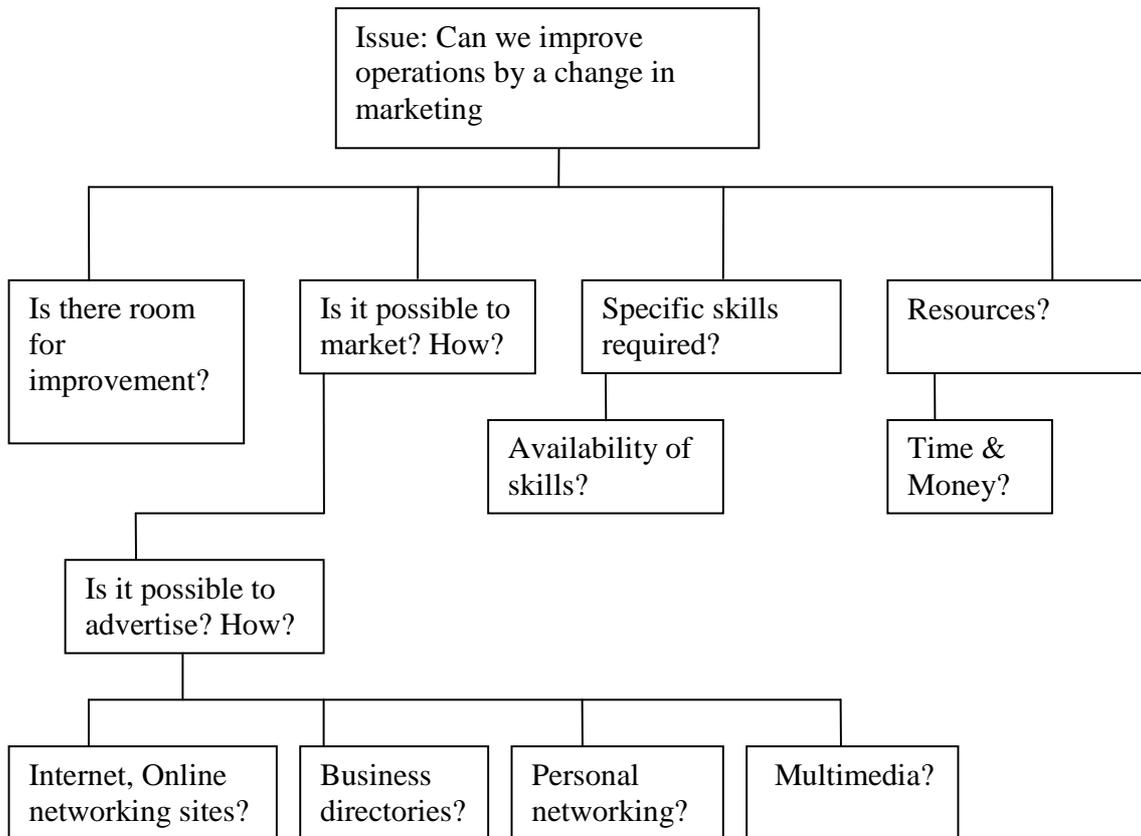
#### **4.4.2 Hypothesis 2**

An increase in marketing, and objective advertising, will improve operations and help expand the business

##### **4.4.2.1 Issue Tree**

In order to sufficiently answer the issue as to whether marketing will improve operations, and if increasing marketing is possible in context to improving operations it is necessary to answer a number of sub issues all leading to the main issue. In order to objectively analyze this issue and its sub issues it is necessary to map it out in the framework of an issue tree.

This issue tree starting with the main issue at its core, branches out into mutually exclusive sub issues. Figure 3.1 shows the issue tree for the second hypothesis.



*Figure 3.1 Issue Tree for Marketing.*

As seen in Figure 3.1 the core issue, as to whether an increase in marketing will improve the operations of the company as a whole, are broken down comprehensively into its sub issues that need to be true in order to prove the hypothesis.

These include answering:

1. If there is room for improvement?
2. How is additional marketing possible?
3. Possible methods of marketing?
4. Possibility of the proposed methods of marketing?
5. If skills required?
6. If resources required?

This issue tree is worked out and organized into a work plan that acts as a guide to analyzing the issue tree in a comprehensive and systematic manner.

#### 4.4.2.2 Work Plan

The work plan for hypothesis two is shown below in Table 3.2. It identifies the issue and sub issues with a hypothesis as the answer, including the analyses that need to be done, data sources, the end product of the analysis, and a timeline.

Having a work plan provides a plan for systematically going through the analyses, data research and producing the required end product.

*Table 3.2 Work Plan for Marketing.*

<b>Issue/Hypothesis</b>	<b>Analyses</b>	<b>Data Source</b>	<b>End Product</b>	<b>Responsibility</b>	<b>Due Date</b>
Can a change in marketing improve operations?					
Is there room for improvement?	Study current marketing procedures	SBX Oy	Summary	Neil	28 July
Marketing ideas?	Study potential marketing ideas	SBX Oy, Internet	List, Chart	Neil	4 Aug
Required skills?	Study processes & personnel	SBX Oy, Internet, Management	List	Neil	28 July
Required resources?	Study marketing investment costs and procedures	Internet, Management	Spread sheet	Neil	17 Aug

#### 4.4.2.3 Data Interpretation

Based on the end results of the analyses it was shown that:

1. Marketing done in the form of advertisement can significantly increase revenue.
2. A marketing plan needs to be drawn up and followed.
3. The costs of marketing will be considerably low as most of the marketing can be done using low cost alternatives.
4. The required skill is present at the company.
5. It is possible to advertise by using online networking sites, the internet, business directories, and personal networking.
6. The option of advertising using multimedia was scrubbed out due to its return on investment being too low and too long, and the investment costs being too high.

Investment cost.

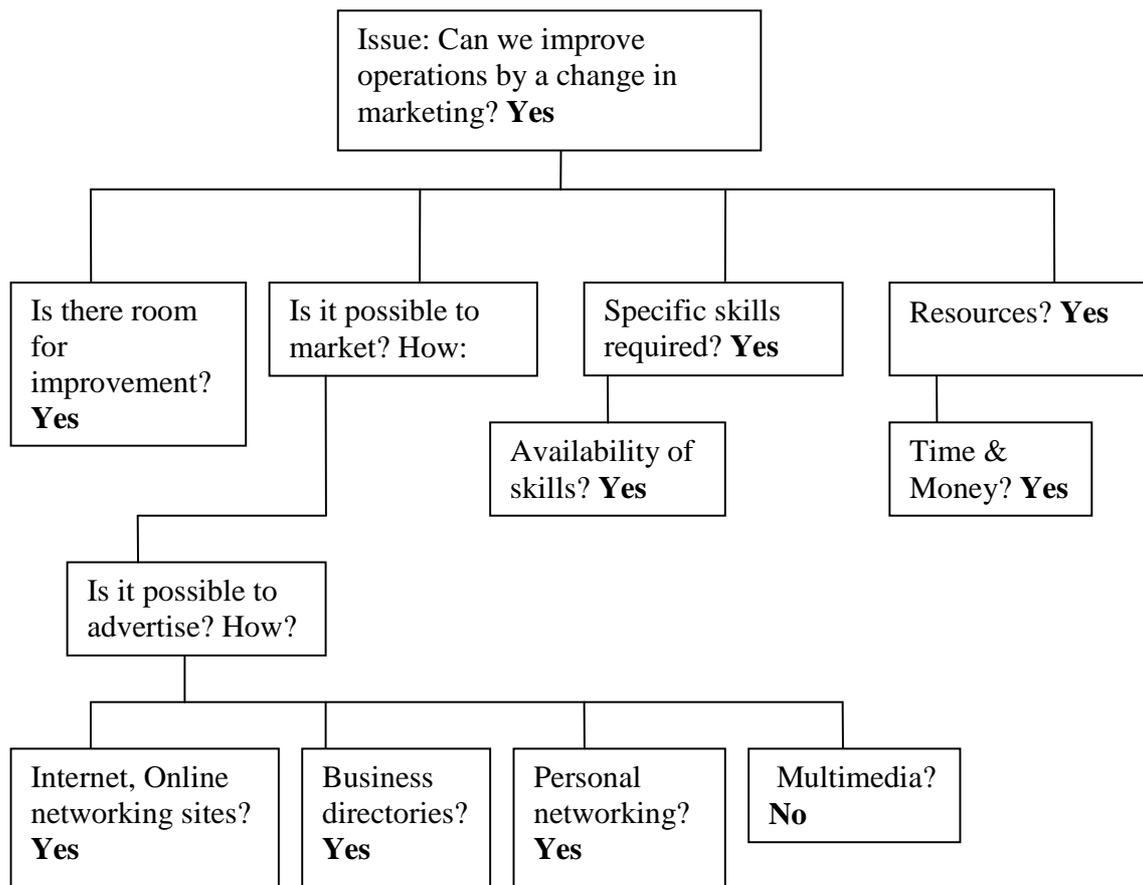
Item	Cost (Euros)
Online Networking	150
Business Directories	250
Personal Networking	200
Miscellaneous	400
Total Investment	1000

Estimated Net Profit = 5000 – 1000 = 4000 Euros

Return on Investment =  $(4000 / 1000) * 100 = 400 \%$ .

#### 4.4.2.4 Issue Tree (Final)

Having followed a comprehensive and systematic work plan, researching, analyzing and interpreting the relevant results, the sub issues, and issue were answered in Figure 3.3 thus proving or disproving the hypothesis.



*Figure 3.3 Solved Issue Tree for Marketing.*

The above issue and sub issues in Figure 3.3 have been answered positively in regard to the initial hypothesis, thus proving the hypothesis.

#### **4.4.2.5 Results**

After having answered the sub issues and issue, the hypothesis stating that “improving marketing will improve operations for the company” is proved as true.

By means of the research and analyses done, the following conclusions were made:

Currently there is no marketing being done at all, thus providing no means for advertisement. It is important that a marketing plan be drawn up and followed, specifically focusing on advertising the company to its relative industry, providing accessible information, and putting the company within the reach of the market (Jobber 2001,p.2-24, 33-52, 228-303; Kotler 2003, p.1-7, 16-19, 25, 27-29, 46-48, 53-56, 60, 68-69, 83-85, 99-100).

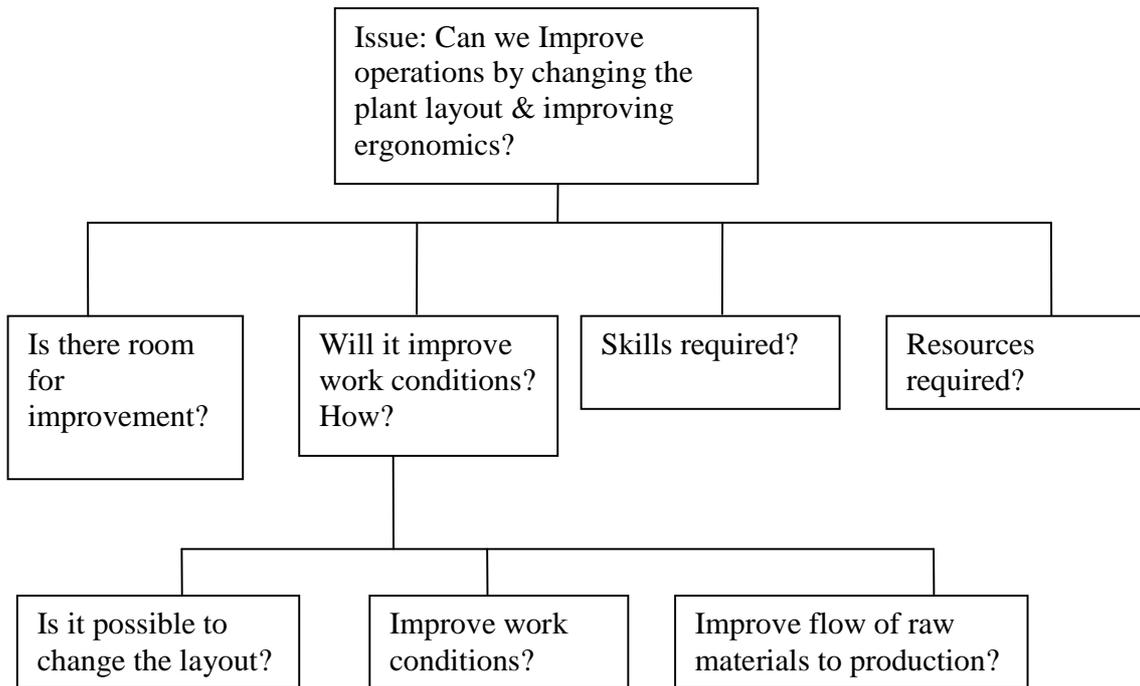
#### **4.4.3 Hypothesis 3**

A change in the current plant layout and material flow, and an improvement in ergonomics will improve operations and the process of production.

##### **4.4.3.1 Issue Tree**

In order to sufficiently answer the issue as to whether improving the plant layout and work ergonomics will improve operations, and if improving them are possible in context to improving operations it is necessary to answer a number of other sub issues all leading to the main issue. In order to objectively analyze this issue and its sub issues it is necessary to map it out in the framework of an issue tree.

This issue tree starting with the main issue at its core, branches out into mutually exclusive sub issues. Figure 4.1 shows the issue tree for the third hypothesis.



*Figure 4.1 Issues Tree for Plant Layout & Ergonomics.*

As seen in Figure 4.1 the core issue, as to whether an improvement in ergonomics and plant layout will improve the operations of the company as a whole, are broken down comprehensively into its sub issues that need to be true in order to prove the hypothesis. These include answering:

1. If there is a possibility to improve the situation?
2. What changes are possible?
3. If the proposed changes are possible?
4. If skills are required?
5. If resources are required?

This issue tree is worked out and organized into a work plan that acts as a guide to analyzing the issue tree in a comprehensive and systematic manner.

#### 4.4.3.2 Work Plan

The work plan for hypothesis three is shown below in Table 4.2. It identifies the issue and sub issues with a hypothesis as the answer, including the analyses that need to be done, data sources, the end product of the analysis, and a timeline.

Having a work plan provides a plan for systematically going through the analyses, data research and producing the required end product.

*Table 4.2 Work Plan for Plant Layout & Ergonomics.*

<b>Issue/Hypothesis</b>	<b>Analyses</b>	<b>Data Source</b>	<b>End Product</b>	<b>Responsibility</b>	<b>Due Date</b>
Can a change in plant layout and improvements in ergonomics, improve operations?		SBX Oy		Neil	
Is there room for improvement?	Study current state	SBX Oy	Summary	Neil	24 Aug
Required skills?	Study internal logistics & personnel	SBX Oy	Chart	Neil	24 Aug
Required resources?	Study the change taking place	SBX Oy	Chart	Neil	31 Aug
Possibility of a layout change?	Study the plant layout, remapping	Plant layout	Layout maps	Neil	31 Aug
Improvement in work conditions & ergonomics?	Study the production process	Production techniques	Layout maps & charts	Neil	31 Aug

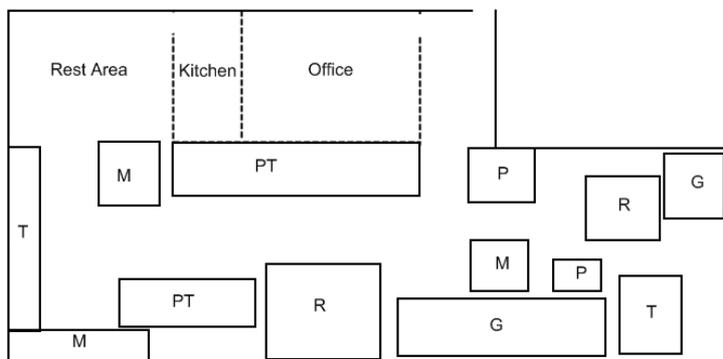
### 4.4.3.3 Data Interpretation

Based on the end results of the analyses it was shown that:

1. A redesign of the plant optimized for the smoother flow of material, and production would increase productivity.
2. This could be done easily without any specific skills or resources required.
3. The production process puts a great amount of physical stress on its workers, any improvement in ergonomics, from the seating position to the movement of materials at the production table, would greatly benefit the workers.
4. Automating certain processes, specifically the gluing process, would improve the ergonomics.

#### Present Layout

Present Layout

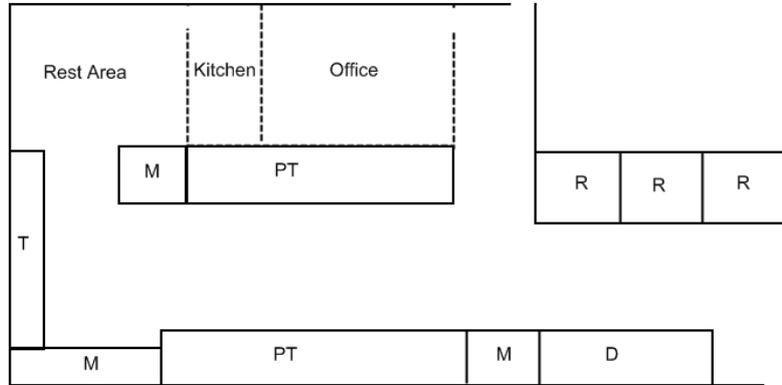


#### Letter Code

G = Garbage  
M = Machinery  
P = Products  
PT = Production Table  
R = Raw Materials  
T = Tools

## Proposed Layout

Proposed Layout

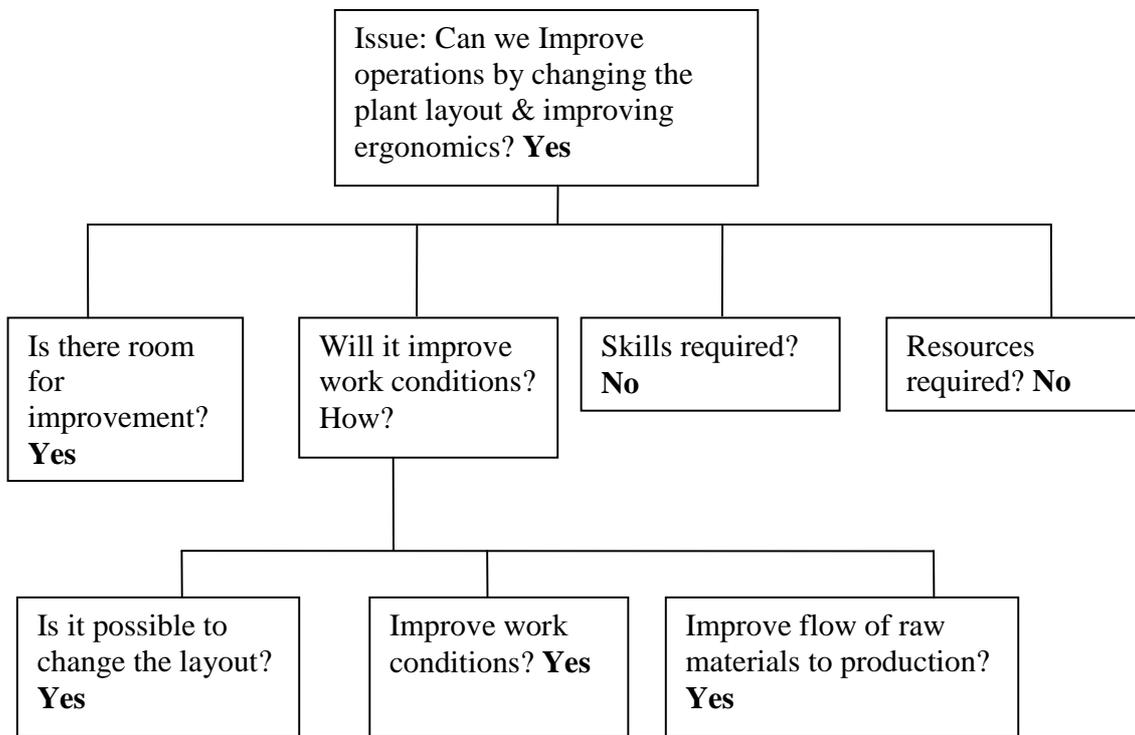


### Letter Code

PD = Product Dispatch  
M = Machinery  
PT = Production Table  
R = Raw Materials  
T = Tools

### 4.4.3.4 Issue Tree (Final)

Having followed a comprehensive and systematic work plan, researching, analyzing and interpreting the relevant results, the sub issues, and issue were answered in Figure 4.3 thus either proving or disapproving the hypothesis.



*Figure 4.3 Solved Issue Tree for Plant Layout & Ergonomics.*

The above issue and sub issues in Figure 4.3 have been answered positively in regard to the initial hypothesis, thus proving the hypothesis.

#### **4.4.3.5 Results**

After having answered the sub issues and issue, the hypothesis stating that “changing the plant layout and an improvement in ergonomics will improve operations and functionality” is proved as true.

By means of the research and analysis done, the following conclusions were made:

The plant layout is currently not optimized for production. With a new design for the layout of the plant, it is possible to optimize production, and the flow or materials within

the plant. In addition to this, a lot can be done to improve ergonomics, thus improving the interaction between workers, and the production process. These include simple things like the automation of certain process and providing lifts for carrying heavy material etc (Ericsson 2008).

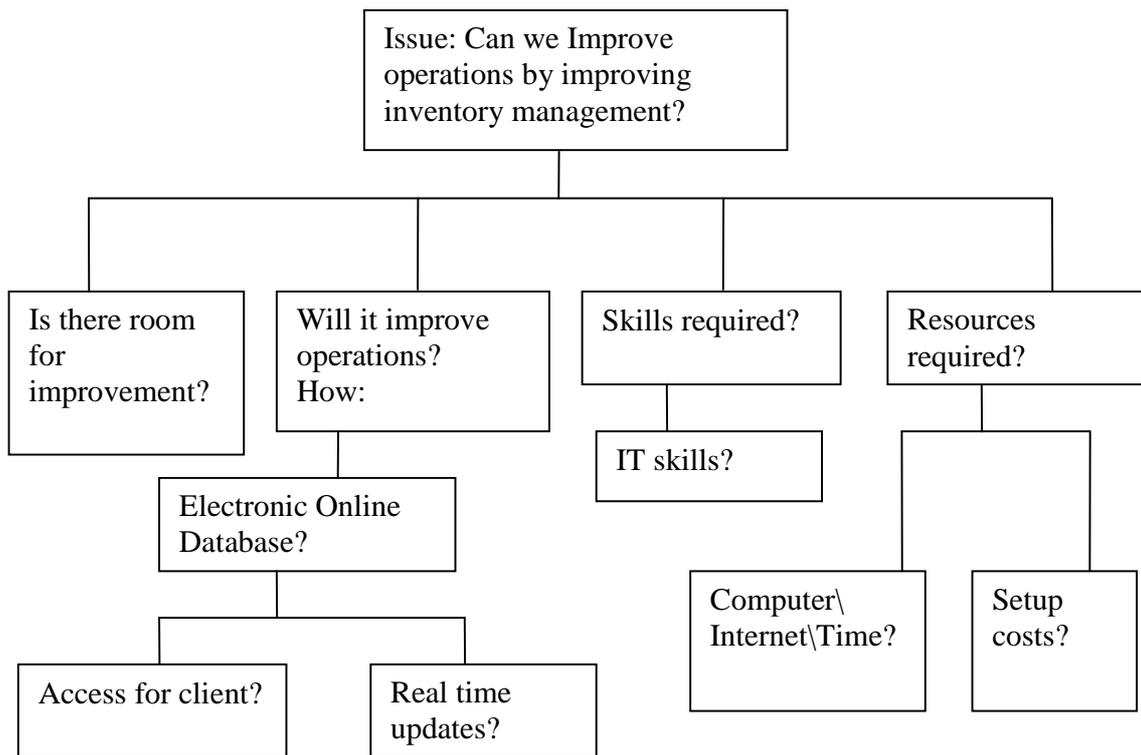
#### **4.4.4 Hypothesis 4**

A change in the current inventory management process and system will improve operations and increase productivity.

##### **4.4.4.1 Issue Tree**

In order to sufficiently answer the issue as to whether improving the inventory management process will improve operations, and if improving the inventory management process is possible in context to improving operations it is necessary to answer a number of other sub issues all leading to the main issue. In order to objectively analyze this issue and its sub issues it is necessary to map it out in the framework of an issue tree.

This issue tree starting with the main issue at its core, branches out into mutually exclusive sub issues. Figure 5.1 shows the issue tree for the fourth hypothesis.



*Figure 5.1 Issue Tree for Inventory Management.*

As seen in Figure 5.1 the core issue, as to whether an improvement in the inventory management system will improve the operations of the company as a whole, are broken down comprehensively into its sub issues that need to be true in order to prove the hypothesis.

These include answering:

1. If there is a possibility to improve the system?
2. What difference will it make?
3. If the proposed change is possible?
4. If it works for all parties involved?
5. If it is reliable and accessible?
6. If skills are required?
7. If resources are required?
8. If resources for investment are present?

This issue tree is worked out and organized into a work plan that acts as a guide to analyzing the issue tree in a comprehensive and systematic manner.

#### 4.4.4.2 Work Plan

The work plan for hypothesis four is shown below in Table 5.2. It identifies the issue and sub issues with a hypothesis as the answer, including the analyses that need to be done, data sources, the end product of the analysis, and a timeline.

Having a work plan provides a plan for systematically going through the analyses, data research and producing the required end product.

*Table 5.2 Work Plan for Inventory Management.*

<b>Issue/Hypothesis</b>	<b>Analyses</b>	<b>Data Source</b>	<b>End Product</b>	<b>Responsibility</b>	<b>Due Date</b>
Can an improvement in inventory management improve operations?		SBX Oy		Neil	
Is there room for improvement?	Study current state	SBX Oy	Summary	Neil	4 Sep
Required skills?	Study setup process	Internet, SBX Oy	Chart	Neil	4 Sep
Required resources?	Technical specifications	Internet	Chart	Neil	4 Sep
Client Access?	Technical specifications	Internet, Client	Summary	Neil	9 Sep
Setup costs?	Technical equipment, process of setup	Internet, Contractors, Cost of equipment	Spread sheet	Neil	9 Sep

#### 4.4.4.3 Data Interpretation

Based on the end results produced by the analyses it was shown that:

1. The current inventory management system is unreliable, inaccurate, and highly time consuming.
2. Updating to an electronic, online database, is relatively simple, using open source software, and requires a medium level of skill that is present in the company.
3. An electronic online database can be updated real time, and is accessible by all parties concerned.
4. The investment costs are minimal, as the company already has the required hardware, and just requires the initial setup and programming.

#### Investment Costs

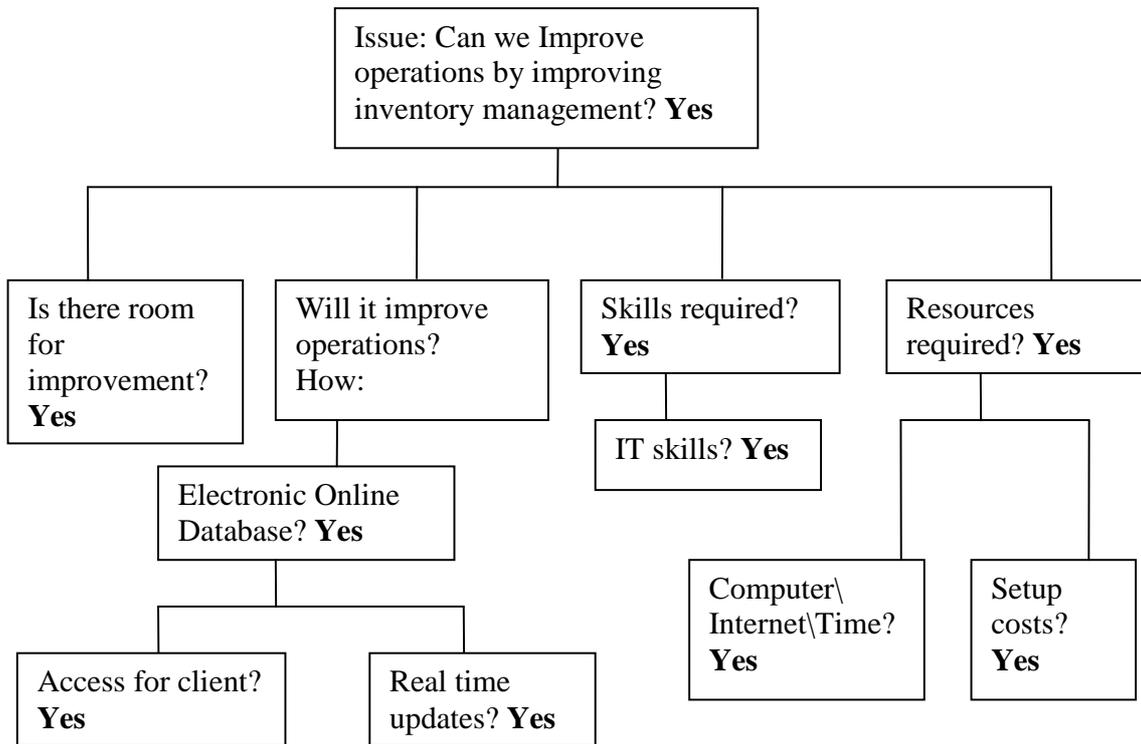
Item	Cost (Euro)
Initial Setup	1200
Training	500
Maintenance	500
Total	2200

Estimated Net Profit =  $3000 - 2200 = 800$  Euros

Return on Investment =  $(800 / 2200) * 100 = 36 \%$ .

#### 4.4.4.4 Issue Tree (Final)

Having followed a comprehensive and systematic work plan, researching, analyzing and interpreting the relevant results, the sub issues, and issue were answered in Figure 5.3 thus either proving or disproving the hypothesis.



*Figure 5.3 Solved Issue Tree for Inventory Management.*

The above issue and sub issues in Figure 5.3 have been answered positively in regard to the initial hypothesis, thus proving the hypothesis.

#### **4.4.4.5 Results**

After having answered the sub issues and issue, the hypothesis stating that “an improvement in the inventory management system will improve operations and functionality” is proved as true.

By means of the research and analysis done, the following conclusions were made: Inventory management being an important process of manufacturing needs to be up to modern standards, and provide full accessibility at all times. Therefore it should be upgraded to an electronic online data base providing all parties concerned full

accessibility with real time updates, saving costs, and keeping a constant tab on current inventory, providing information whenever necessary (Ericsson 2008).

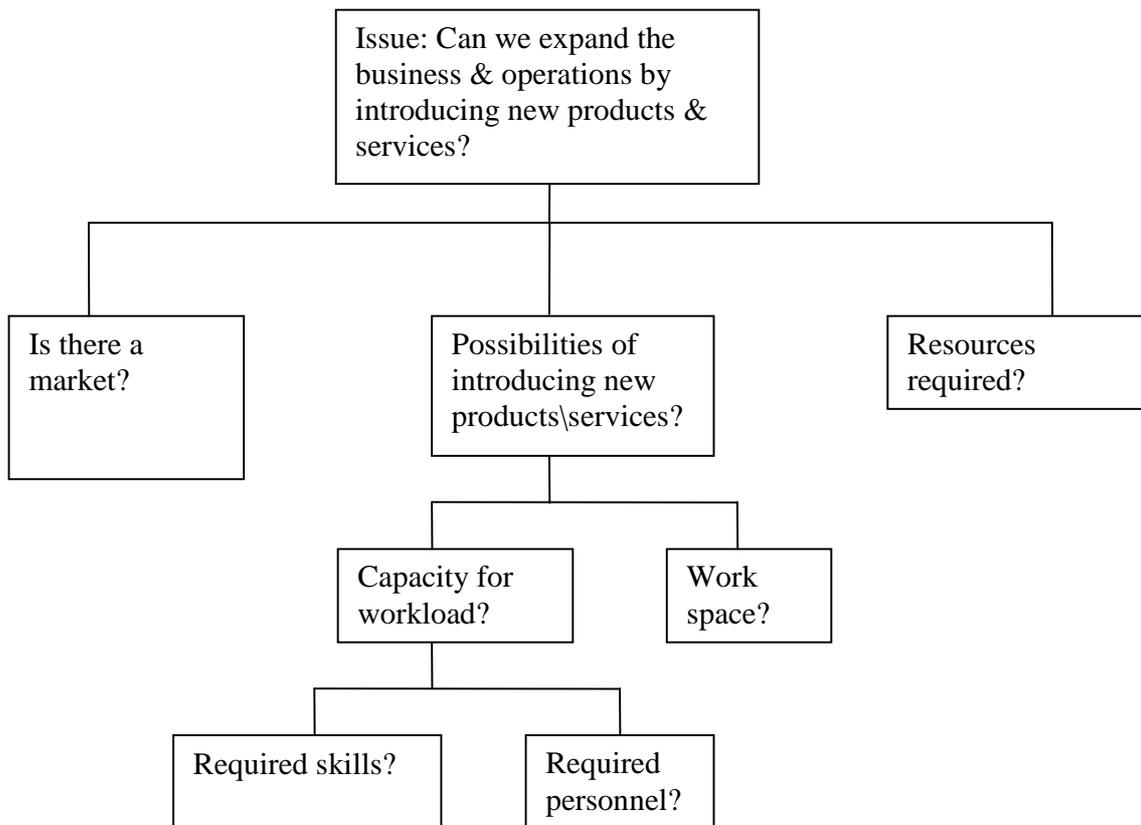
#### **4.4.5 Hypothesis 5**

An introduction of new products and services will help expand the business and its operations.

##### **4.4.5.1 Issue Tree**

In order to sufficiently answer the issue as to whether introducing new products and services will improve operations, and if introducing new products and services are possible in context to improving operations it is necessary to answer a number of other sub issues all leading to the main issue. In order to objectively analyze this issue and its sub issues it is necessary to map it out in the framework of an issue tree.

This issue tree starting with the main issue at its core, branches out into mutually exclusive sub issues. Figure 6.1 shows the issue tree for the fifth hypothesis.



*Figure 6.1 Issue Tree for New Products/Services.*

As seen in Figure 6.1 the core issue, as to whether introducing new products and services will improve the operations of the company as a whole, are broken down comprehensively into its sub issues, that need to be true in order to prove the hypothesis. These include answering:

1. If there is a market to be entered?
2. If there are resources to introduce new products and services?
3. The possibility of successfully marketing and introducing the proposed products/services?

This issue tree is worked out and organized into a work plan that acts as a guide to analyzing the issue tree in a comprehensive and systematic manner.

#### 4.4.5.2 Work Plan

The work plan for hypothesis five is shown below in Table 6.2. It identifies the issue and sub issues with a hypothesis as the answer, including the analyses that need to be done, data sources, the end product of the analysis, and a timeline.

Having a work plan provides a plan for systematically going through the analyses, data research and producing the required end product.

*Table 6.2 Work Plan for New Products\Services.*

<b>Issue/Hypothesis</b>	<b>Analyses</b>	<b>Data Source</b>	<b>End Product</b>	<b>Responsibility</b>	<b>Due Date</b>
Will introducing new products\services expand business & operations?				Neil	
Is there a market?	Study market industry	Internet, Interviews, Industry Information	Summary	Neil	14 Sep
What possible products\services?	Study market & industry situation	Internet, Industry	List	Neil	14 Sep
Required skills?	Study proposed products\services & personnel	Interviews, Industry, Management	Chart	Neil	14 Sep
Required resources?	Study proposed products\services	Industry, Management	List	Neil	25 Sep
Require personal?	Study SBX Oy, Management	SBX Oy, Management	Chart	Neil	25 Sep
Work space?	Study SBX Oy	SBX Oy	Map	Neil	29 Sep

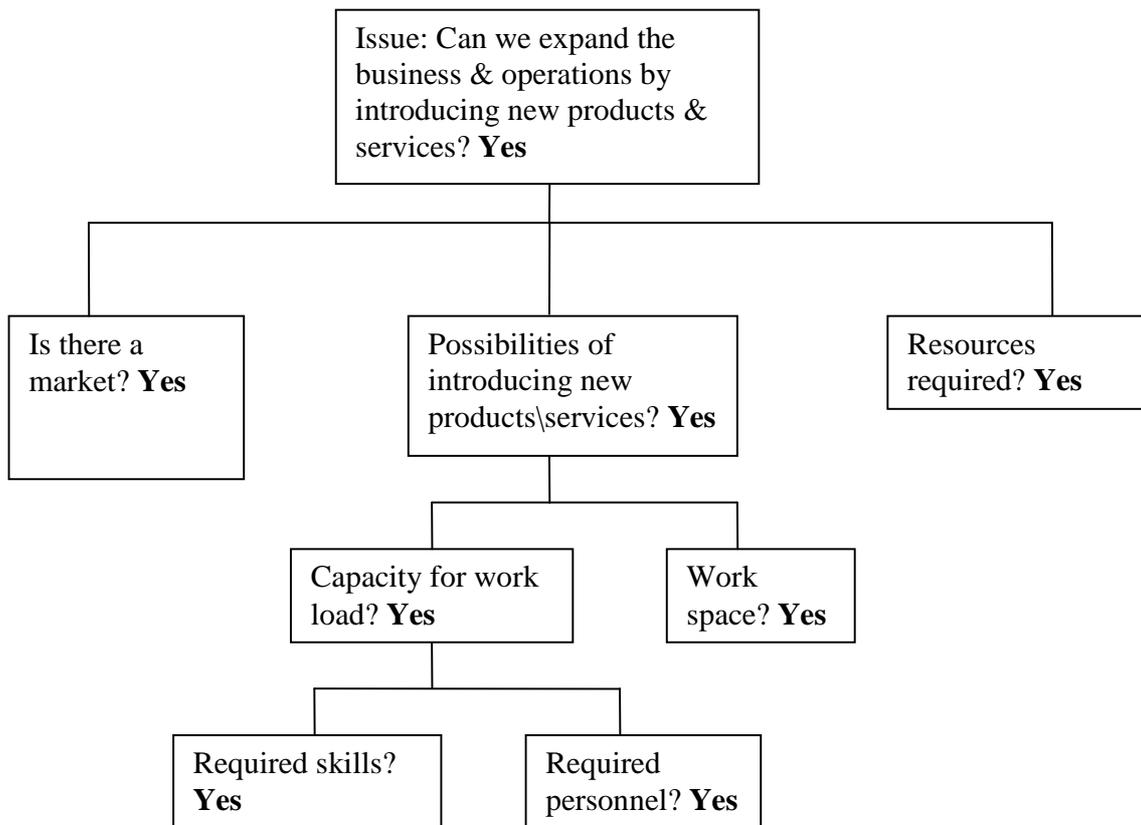
#### **4.4.5.3 Data Interpretation**

Based on the end products of the analyses, it was shown that:

1. Although it may be hard to create new products, providing new services is a high possibility.
2. Although the economy is at a low point, with a very slow projected build up, there is a need for certain services within the industry, and providing these services will expand the company's operations.
3. The ideas for these products and services will need some intensely productive brainstorming sessions, from the company personnel, or could be generated by using an outside source.
4. The development of these ideas will need specific skills, however as both the skills of engineers and businessmen are present within the company, this should not be a problem
5. Depending on the products\services that are being developed the costs will have to be calculated, however, any investment into new products\services will return a decent rate of investment, including the advantage of expanding the companies business.
6. However it may be necessary to bring in more personnel depending on the type of product\service being provided.

#### **4.4.5.4 Issue Tree (Final)**

Having followed a comprehensive and systematic work plan, researching, analyzing and interpreting the relevant results, the sub issues, and issue were answered in Figure 6.3 thus either proving or disproving the hypothesis.



*Figure 6.3 Solved Issue Tree for New Products\Services.*

The above issue and sub issues in Figure 6.3 have been answered positively in regard to the initial hypothesis, thus proving the hypothesis.

#### **4.4.5.5 Results**

After having answered the sub issues and issue, the hypothesis stating that “an introduction of new products\services will expand the business and expand operations” is proved as true.

By means of the research and analysis done, the following conclusions were made: Currently only 50% of the business's potential is being used, it should be increased to at least 80%. An introduction of new services and products should be done, ranging from subcontracting and assembly of other products, to consulting in this sector. This would utilize the company's potential of doing business, while expanding operations, and increasing its revenue (Kotler 2003, p.126-127, 138-139, 149-150, 171-174, 181-182, 185-186; Ettlief 2006, p.95-126, 263-304; Grant 2002, p.64- 101).

## **4.5 Summary**

The Hypothesis Driven Problem Solving Process, proved extremely efficient by starting on the right road leading to most likely solutions, instead of going down roads that would have proved counter productive later, wasting time, and resources. Structuring the problem in a designed framework led the whole process objectively, providing a path to follow in proving the hypothesis. The above succinct representation of the analyses done is mostly based on "Pareto's Principle" also known as the 80\20 rule that states that 80 % of the information came from 20 % of that data (Rasiel & Friga, p.86-87). Focusing on that data, it was possible to extract the most relevant findings and solutions.

## **4.6 Project Management & Monitoring**

Managing and monitoring this project efficiently was an important part of the consulting process. It is very easy to get sidetracked by the vast amount of work, especially if tunnel vision develops. However it is of utmost importance to understand which jobs hold priority and to keep on schedule continuously noting the progress being made. The whole process was documented daily, on a journal providing for references to go back and find relevant information when required. Keeping a project log and a log of monitoring the project proved immensely helpful in managing the project and keeping up to date.

## **5 CONCLUDING THE PROJECT**

### **5.1 Consulting Report**

The consulting report is the final document presented to the client, containing a comprehensive summary of all the work done during the consulting process. This includes a brief reference regarding the client, the objectives, the findings with its suggested solutions and suggestions how to proceed.

It is important that this report be tailored to suit the client's capabilities and understanding. The consulting report is a directive to follow an action. It should be created keeping the clients limitations in mind. It should reiterate the message over and over, calling the client to follow through with the necessary actions. It should also provide a basis for further research if necessary, and also the possibilities for a follow up and further interaction between the consultant and client.

The consulting report can be seen in appendix 1.

### **5.2 Presentations**

One of the end products of the whole consulting process was giving a formal presentation of the findings and proposed solutions to the client. This is a very important process as this is the basis for communicating all the previous work done; this presentation lays the foundation for the consulting report. It is very important to know and understand the audience, how they will understand the presentation and the impression they will be getting. It is important that the presentation be tailored as specifically as possible to the audience, with a precise structure building up to the end result, providing them with data and information that are relevant, and images that make an impact and provide a clear picture.

The presentation of the findings was approximately twenty minutes in length. Having worked previously with the client, there was a clear understanding of the audience. It was relatively simple to formulate a presentation that appealed to their business oriented approach. The presentation consisted of an introduction, following the project proposal restating the objectives and aims, after which the research process and analysis were briefly explained and then concluding with the findings and evidence to back up our proposed solutions. At the end they were provided with information to follow through with the suggestion, and an offering for a complete follow up and further consulting regarding the implementation of the suggested solutions if required.

## **6 CONCLUSION**

For a company to stay in business especially in the current age, with buyouts, economic failures, and intense competition, it is important to stay on top of the game, be up to date on the current situation, and strive continuously to increase its operations. In order for this to take place management plays a very important role in the organizing and leading of any company. Whether they are corporations, small industries, or even government organizations and non profit organizations, for any company or organization to continue making progress it is imperative that management understand their role and strive to lead their organization objectively.

Sometimes it is necessary to get advice pertaining to the leading and progress of the company and in certain cases it proves helpful to bring in external support in the form of consultants. These consultants, working partly with the company's management, study the company and provide information and advice that helps expand the business and company or provide solutions to any other objective that may be required. This consulting helps improve operations, and provide insightful information which pertains to improving the management perspective of the company.

The goal of this study was to show how management consulting helps improve companies and organizations. Using SBX Oy as a case study the process of management consulting was studied with its findings and results, proving that management plays an important part in the progress of industries, and companies can greatly benefit from consulting.

During the consulting process it was found that there was a deficiency in the following areas of the company; Logistics, Marketing, Plant Layout, and Inventory Management. In addition to this, it was noted that although the company was making enough profit to stay in business, it was only using 50 % of the company's potential of doing business, and having 98 % of incoming revenue from a single source client. Management practices were extremely low with no business plan or objective. Using the "Hypothesis Driven Problem Solving Process", research was carried out as to suitable solutions, which resulted in the following findings:

1. The logistics process can be improved by storing the goods at the production warehouse till dispatched, consolidating shipments and dispatching products once every ten days.
2. Marketing of the company needs to be done actively, and sufficient information regarding the company should be accessible to the industry.
3. The plant layout should be redesigned for production and smoother flow of materials within. The ergonomics of the production process should also be improved.
4. The inventory management system should be updated to an online electronic database, providing real time access to all parties concerned.
5. In order to expand the business, more services should be offered to the industry. A strategic business plan, clear on the company's objectives should be written and used as a guide to lead the company.

Following the above suggestions the company would be able to cut costs, improve daily operations and expand the business.

The management consulting report provided by the consultant to SBX Oy provided the necessary information to improve the company's business and operations. By following these suggestions the company can decrease operational costs, improve daily operations and production, increase the functioning of the company, and increase business and revenue. Therefore the important role played by management consultants in the improvement of companies and organizations can clearly be understood. From this study the role of effective and efficient management can also be seen. It is imperative for companies, that managers understand the goals and objectives of the company and take the initiative to stay up to date with current market data, knowledge and workings of the industry.

Managers play a very important role in leading their company, and bringing in consultants to consult on an issue or the company in general provides the manager with insightful valuable information which can be used in the company's development.

This consulting project turned out to be quite complex, however it was an insightful experience into the world of management and consulting. Being given the opportunity to consult for an industry has provided invaluable experience, in the field of management and consulting. The goal was to consult professionally for SBX Oy, and use that process to write this paper, however it was a lot more work than initially anticipated. This area of consulting turned out to be a very vast area, and it was impossible to fit everything into this paper, therefore focus was put on the consulting process for SBX Oy, using it as a guide to stay within the parameters of the subject. This paper can provide a basis for further study into the following areas: Process and Techniques for Consulting, Data Analysis, Knowledge Management, Data Gathering, and Relevancy of Data.

Over all the process of consulting for SBX Oy and writing this paper have been extremely satisfactory, giving a greater understanding and appreciation for consultants and the role played by managers.

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**APPENDIX**

**Appendix 1: Consulting Report SBX Oy.**

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# **CONSULTING REPORT**

**SBX Oy**

**Jori Pitkanen, Managing Director**

**Consulting**

**Neil Diamond Ghulam**

**October 2009**

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## **Executive Summary**

During the consulting process done over the last several months, for SBX Oy in order to improve the current situation for operations and functionality, and expand the business and its operations, the following observations were made:

1. The current situation of logistics is hardly at its potential, an improvement in the logistics process would make a significant improvement in operations.
2. Hardly any marketing is being done to promote the company's services, any amount of objective marketing and advertising will help expand operations and increase the company's client database.
3. The current layout of the plant is not effective or optimized for production.
4. The current inventory management system is out of date, slow and unreliable, with no real time updates, or immediate access.
5. Currently the main service providing for 98% of revenue generated is a single source client. Which is utilizing only around 50% of the company's potential.

After the research and analyses were done the following conclusions and recommendations were made:

1. Improve the logistics process, by cutting down on unnecessary transportation of goods, and storing unshipped products at the production warehouse.
2. Create a marketing plan and increase advertising.
3. Redesign the plant, and increase the importance given to ergonomics in the production process.
4. Update the inventory management system to an electronic online database, accessible to all parties involved.
5. Introduce new products and services to the market.

A detailed report of this summary follows.

# Introduction

This report is a succinctly summarized briefing for the management personnel of SBX Oy.

## SBX Oy

SBX Oy being a small production\subcontracting company, has been operating over the last 40 years, and has been under its current management for over the last 25 years. A relatively small company that hires around two persons, including the manager, does work according to this capacity, making an average revenue of around 20,000 Euros per year.

It is the only company offering this type of services in the Helsinki region, therefore has a considerable advantage point in the business sector.

Currently the work being done is the production of window silencers (kovamentiliti). In addition to building the silencer part, the assembly of the whole product is also done here, including the labeling and packaging.

Lots of companies undervalue the importance, and necessity of proper management and regular evaluation of current management processes and procedures. It is necessary for all companies to stay up to date with the industry and management processes, continually monitoring and benchmarking its progress with their business plan

The following report is a product of the consulting done for SBX Oy in order to reach the following objectives.

## Objectives:

The consulting project aims to:

1. Evaluate the current operations of SBX Oy.
2. Identify issues inhibiting possible growth and expansion.
3. Identify possible areas of expansion.
4. Identify possible areas for improvement of operations.
5. Summarize the findings in brief for management.

Based on the above objectives this consulting project aims to produce the following outcomes.

## **Outcomes:**

As a result of this consulting exercise SBX Oy will be able to:

1. See their company from an external point of view.
2. Dedicate resources towards exploiting possible market opportunities.
3. Improve their daily operations.
4. Increase their business market, and revenues.
5. Deal with issues slumping growth, and expansion.

## **Research & Analysis**

### **Methodology**

The research and analysis done is based on the “Hypothesis Driven Problem Solving Process”. This project was started by creating a specific framework and structure for the company. Then based on that structure the company was broken down into its components, individually studying and analyzing each component objectively. Using the hypothesis driven problem solving process, all possible issues, and opportunities were analyzed using an issue tree, creating hypotheses which were immediately accepted or rejected, the ones that were accepted were then subjected to further scrutiny thus ultimately proving or disapproving the given hypothesis for a given solution.

### **Findings**

It is very important for every business, to have a business plan. This not only acts as a guide but gives the company something to measure its progress against. In this consulting project we were required to provide consultation in order to improve operations and expand the business.

The research and analysis done over the last six months led us to the following findings:

### **Logistics**

1. The flow of material are irregular.
2. There are unnecessary costs as a result of unnecessary transportation of the products.

The above points indicate no steady system of logistics, which in turn raise costs, and do not assist in smooth operations at times.

Proposed solutions:

1. The final product should be shipped directly to the end consumer from the place of manufacturing instead of being sent back to the client causing one extra shipment.
2. The packed products would be stored at the warehouse where the products were manufactured.
3. Products need to be consolidated into single shipment as much as possible.
4. These Shipments need to be spaced out evenly at an average of one shipment every 10 days or so.

In following the above suggestions, transportation costs would be cut down by 33 %, in addition to providing a smoother flow of goods.

### **Marketing**

1. No marketing is being done.
2. No advertising is being done.
3. No effort is being made to publicize the company.

The basic contribution to increasing business and operations of a company is the amount of knowledge the public and related industries have. However it was found that no active marketing plan exists, and no marketing or advertising is being done.

Proposed solutions:

1. An active marketing plan be drawn up and implemented.
2. Active advertising of the company be started.
3. Contacts need to be made
4. Information regarding the company needs to be easily found and accessible.

Considering the state of the economy and its progress, an active marketing plan effectively implemented would start showing results by the third quarter of 2010. These results would include increased revenue as well as clients.

### **Plant Layout & Ergonomics**

1. The current plant layout is not effective.
2. The layout is not optimized for production.
3. The workspaces for production are not optimal.
4. The production process is not ergonomically.

The flow of material within a plant, and the layout of the plant play a considerable part in efficient productivity. The work conditions of workers and their comfort also play a very important part in productivity. It was noticed that the plant layout was unorganized, thus

hindering productivity in many areas. Also paying attention to the production process would help improve the ergonomics of production, thus increasing productivity.

Proposed solutions:

1. Redesign the plant layout for production.
2. Organize the flow of materials for production.
3. Improve work conditions and ergonomics.
4. Automate certain processes.

Redesigning the plant layout, and organizing the materials storage and distribution, will increase productivity. An improvement in the work conditions would increase comfort for workers, also increasing productivity. Some complex processes of production if automated, would decrease the stress on workers, and increase the production process by almost 30 % thus cutting costs by almost 15 %.

### **Inventory Management**

1. Inventory is done manually every four months.
2. It is roughly documented on scrap paper.
3. No record is available
4. No immediate access is available.

Inventory is an important step in keeping track of the flow of materials. Not only does it track costs, but is also necessary in balancing incoming materials with outgoing materials. Having no reliable records of inventory or the knowledge of the amount of materials in any given state, at any give time, is major drawback for operations.

Proposed solutions:

1. Create an online electronic database for inventory.
2. Provide real time updates.
3. Provide full accessibility to relevant parties.

Updating the inventory management system to an electronic online database, is a low cost investment that will provide a reliable data source for information regarding goods received and dispatched, and the current value of raw materials, and products present at the plant. This information will be accessible to the client providing them with the information to coordinate transportation, and control the flow of incoming materials, saving immense amounts of time and money.

## **New Products/Services**

1. A single service being provided for a single client accounts for 98% of the revenue generated.
2. This single service accounts for only 50% of the company's potential for doing business.
3. No active plan exists to increase business and operations
4. No effort is being made to increase revenue.

One requirement for companies that wish to successfully continue operations and expand their business is to continually make an effort to progress. This requires a strong understanding of where the company is headed and where it should be going. This requires a strong understanding of where the company is headed and where it should be going, including entrepreneurial and innovative thinking and decision making.

It was noted that no active business plan or strategy for expanding the business and operations exists.

Proposed solutions:

1. Create a business plan with clear objectives.
2. Increase the potential of the company's possibilities to at least 80 %.
3. Increase customer base.
4. Offer more products\services.

A strategic plan, with the introduction of new products and services will put the company in a position to increase its operations within the industry. Due to the current economics restraints this could prove challenging, however with the right marketing plan, offering needed services to the industry, and the right strategic implementation combined with the marketing of new products and services would put the company in a position to achieve its potential.

## Conclusions & Recommendations

Over the last six months, having studied researched and analyzed SBX Oy, it was discovered that while have immense potential and a significant place in the industry as one of the very few companies of its type, it is only utilizing 50 % of its business doing potential. It is proposed that management focus on creating a business plan that strategically ensures fulfillment of the objectives of the company, doubling as a guide for the business.

Based on the analysis done over the last six months as part of this consultation, the following recommendations are being made:

1. Improve the logistics process, by cutting down on access transportation of goods, and storing unshipped products at the production warehouse.
2. Design a marketing plan and increase advertising.
3. Redesign the plant, and increase the importance on ergonomics regarding the production process.
4. Update the inventory management system to an electronic online database, accessible to all parties involved.
5. Introduce new products and services to the market.

Having found that SBX Oy holds immense potential we hope that our consulting will have proved beneficial. We will be extremely pleased to provide further information if necessary.

We would be happy to provide a follow up and any further consulting required in the implementation and strategic planning. We look forward to working with you again.