# Pricing Strategy Fun-ie-Fit Centre

Jasper van Halen s1019112 International Business Administration Management & Government University of Twente

# **Pricing Strategy Fun-ie-Fit Centre**

# [Limited version]

This version does not contain any information about the cost structure of the Fun-ie-Fit centre or the prices the centre should charge in order to meet its objectives. This information is intentionally left out from this version of the paper

J. J. W. van Halen International Business Administration Management & Government University of Twente

External Supervisor: Jan Anema

Internal Primary Supervisor: Dr. X. Huang

Internal Secondary Supervisor: H.C. van Beusichem

# Management Summary

## Why this research?

Stichting De Klup Twente is an organisation that facilitates activities for people with a disability. In early 2013 Stichting De Klup became the proud owner of the Fun-ie-Fit centre, located in the Meester Siebelinkhuis, at Berlagelaan 2 in Almelo. Fun-ie-Fit is a health-centre designed to make exercising more attractive by using exergaming. The initial purpose of the centre was to encourage people with a disability to participate more in sports. By creating an attractive environment with high-tech equipment, people are stimulated to play games and still enjoy a work-out. Another reason for establishing the centre was to generate more revenue for Stichting De Klup Twente. This research provides advice about the pricing strategy and several organisational aspects that influence the way the Fun-ie-Fit centre can generate enough revenue to break-even.

## Recommendations

Based on the analyses and the results from the questionnaires and interviews it is possible to make several recommendations about the pricing strategy of the Fun-ie-Fit centre and how this can help to ensure break-even. These recommendations are listed below:

- Based on the three analyses the prices of the Fun-ie-Fit centre should fall in the following ranges: the price for the Fun-ie-Fit centre should be at least € X per hour with € X being the maximum price. The price for the Fun-ie-Fit centre should be at least € X per customer per hour with a maximum of € X per customer per hour.
- The prices for special event or special occasions should be higher than prices for more frequent and regular customers. The prices for special events should be at least € X per hour with a maximum of € X per hour. Prices for individual customers will depend on the number of customers present during an event. The price per customer per hour should at least cover the minimal costs of € X per hour, this being € X per customer per hour with 10 customers. Prices may be lower per person per hour if the number of customers is increased, but it should still cover the minimum price of € X per hour.
- The number of weeks open per year should be as close to the maximum as possible, because
  more weeks open per year would spread the costs over more weeks and thereby reducing
  the stress on the capacity the price and the required number of customers per week to
  break-even.
- The Fun-ie-Fit centre should also extend its opening hours, especially during the evenings.
  The questionnaire showed that most people prefer to make use of the Fun-ie-Fit centre in
  the afternoon and the evenings. It is also recommended to be open on Sundays instead of
  Saturdays due to customer preferences.
- Another recommendation is to look at the costs of the Fun-ie-Fit centre and how these could be reduced. Especially the costs of staff, cleaning and depreciations are high cost posts for the centre. It can also be recommended to keep a close eye on the assumptions made in the budget forecast because this can either reduce or increase the total costs in the future.
- Generating revenue by selling consumptions has the potential to have a real impact on generating extra revenue for the Fun-ie-Fit centre. Every consumption that is sold generates a profit and contributes to covering the costs of the Fun-ie-Fit centre.
- The special events can be an important source of revenue for the Fun-ie-Fit centre because prices for these events will be higher than normal and additional revenue can be gained from selling drinks, snacks and dinner. This only works when the centre is able to keep the costs down by working with volunteers.
- The final recommendation is to try to renew or continue the contracts with the current sponsors. The sponsoring is a direct way to generate revenue and can cover a substantial part of the costs of the Fun-ie-Fit centre.

# Motivation

The recommendations stated above are based on the economic-value, competitor- and cost-analysis. These analyses combine the most used pricing methods to come up with the prices that Stichting De Klup Twente should charge to the customers of the Fun-ie-Fit centre in order to break-even. This research also provides insight into some organisational aspects that can change the revenue-streams of the Fun-ie-Fit centre.

## **Consequences**

The Fun-ie-Fit centre now has the necessary information to determine its prices and to use this during the coming years to start working towards a financially independent organisation. By balancing the prices between the different pricing objectives the centre should be able to break-even and facilitate a gaming experience for both abled and disabled persons.

# **Preface**

Before you lies the thesis and final project of the bachelor course International Business Administration at the University of Twente, by Jasper van Halen. This thesis is an advice for Stichting De Klup Twente regarding the pricing strategy of the Fun-ie-Fit centre in Almelo. The paper aims to provide insight into the value the centre delivers to customers, it analyses the costs of the Fun-ie-Fit centre and shows how competitors structure their prices. The paper also focuses on identifying different customer segments and how the Fun-ie-Fit can be made more attractive for customers and users.

During the research I had a lot of help from the management of Stichting De Klup Twente. The director, Jan Anema, and business manager, Hans van Riet, were always available for questions or to discuss about different organisational and price strategies. I would also like to thank the other staff members of De Klup, there were many who helped me with my research and it was always very pleasant to work in Almelo. Besides the people from Stichting De Klup Twente, I would also like to thank Dr. X. Huang for all her help with setting up my research and providing both positive and critical feedback about my work.

I hope you enjoy reading my thesis,

Jasper van Halen

# Content

| 1. Introduction   | 8  |
|---|----|
| 1.1 Stichting De Klup Twente  | 8  |
| 1.2 The Fun-ie-Fit centre   | 8  |
| 1.3 Relevance   | 9  |
| 1.3.1 Scientific Relevance  | 10 |
| 1.4 Problem Statement   | 10 |
| 1.5 Research Question   | 11 |
| 1.6 Research Method in Brief  | 12 |
| 1.7 Scope   | 13 |
| 1.8 Thesis Outline  | 13 |
| 2. Literature Review  | 14 |
| 3. Theoretical Framework  | 17 |
| 3.1 Hinterhuber's Framework   | 17 |
| 3.2 Determining Pricing Objectives                                      | 18 |
| 3.3 Economic Value Analysis   | 18 |
| 3.3.1 Conjoint Analysis   | 19 |
| 3.4 Cost-Volume-Profit Analysis   | 21 |
| 3.5 Competitive Analysis  | 22 |
| 3.6 Determine Price Ranges  | 23 |
| 4. Research Design  | 24 |
| 4.1 How to Identify the Pricing Objectives                              | 24 |
| 4.2 How to Perform the Economic Value Analysis                          | 24 |
| 4.2.1 Data Collection   | 24 |
| 4.2.2 Population & Sampling   | 25 |
| 4.2.3 The Six Steps in the Economic Value Analysis                      | 25 |
| 4.2.4 How to Perform the Conjoint Analysis                              | 26 |
| 4.3 How to Perform the Cost-Volume-Profit Analysis                      | 27 |
| 4.4 How to Perform the Competitive Analysis                             | 27 |
| 4.5 How to Identify different Users in the Fun-ie-Fit centre            | 28 |
| 4.6 How to Identify Stimuli for Participation of the Fun-ie-Fit centre? | 28 |
| 5. Results  | 29 |
| 5.1 Pricing Objectives  | 29 |
| 5.2 Results of the Economic Value Analysis                              | 30 |

|   | 5.2.1 Implementation of the Conjoint Analysis  | 31 |
|---|--|----|
|   | 5.2.2 Results of the Conjoint Analysis   | 33 |
|   | 5.2.3 Sum the reference- and differentiation value to determine the total economic value | 34 |
|   | 5.2.4 Use the Value Pool to estimate Future Sales at Specific Price Points               | 38 |
|   | 5.3 Results of the Cost-Volume-Profit Analysis   | 40 |
|   | 5.3.1 Impact of Input Variables on Pricing Strategy                                      | 43 |
|   | 5.3.2 Impact of Input Variables on Generating Revenue                                    | 45 |
|   | 5.4 Results of the Competitive Analysis  | 49 |
|   | 5.5 Determining Price Ranges   | 53 |
|   | 5.6 What types of different users make use of the Fun-ie-Fit centre?                     | 54 |
|   | 5.7 How can the participation of users of the Fun-ie-Fit centre be stimulated?           | 54 |
| 6 | . Conclusion and Discussion  | 56 |
|   | 6.1 Conclusion   | 56 |
|   | 6.2 Recommendations  | 58 |
|   | 6.3 Limitations  | 59 |
|   | 6.4 Future Research  | 59 |
| R | eferences  | 60 |
| Α | ppendix A: Agenda Fun-ie-Fit centrum   | 63 |
| Α | ppendix B: Exploitation Fun-ie-Fit centre 2012-2015                                      | 64 |
| Α | ppendix C: Survey Fun-ie-Fit centre  | 65 |
| Α | ppendix D: Kwiksurvey Fun-ie-Fit centre  | 73 |
| Α | ppendix E: Prices of the Competitors   | 77 |
| Α | ppendix F: Calculations of Parties and Events  | 78 |
| Δ | ppendix G: Pricing Objectives in Service Sector  | 79 |

# 1. Introduction

For my bachelor thesis I wanted to combine the theories that I learned at the university with the real world, because this would make the thesis more interesting and would allow me to work outside the 'safe' surroundings of the university. After a period of looking for external assignments I saw an assignment posted at the website of the Wetenschapswinkel, a small company located at the university that serves as a connection between the university and the community. The assignment was related to Stichting De Klup Twente and the Fun-ie-Fit centre and the goal was to come up with a plan how the centre would be able to work as an independent organisation. A plan in terms of the organisational structure and the financial stability of the centre.

The following pages will describe both Stichting De Klup Twente and the Fun-ie-Fit centre. After describing the organizations this paper will describe why it is both relevant for the Fun-ie-Fit centre and the academic world. The other paragraphs will handle the problem statement, the research questions, a brief description of the research methodology, the scope of this research and the thesis outline.

# 1.1 Stichting De Klup Twente

Stichting De Klup Twente is an organisation that facilitates spare-time activities for people with a disability who live in the region of Almelo. De Klup has about 450 volunteers and 8 professionals that organise and support the activities for their 800 participants (<a href="http://www.deklup.nl/stichting/">http://www.deklup.nl/stichting/</a>). De Klup organises a wide range of activities related to sports, music, education and social events. These activities can either be in the Meester Siebelinkhuis, the headquarters for all activities, or at other locations in and around Almelo.

Stichting De Klup Twente finds it very important that people with a disability get in contact with both people with and without a disability. This is essential to give people with a disability the feeling that they can participate in society and that they feel they matter. De Klup tries to stimulate this by organising a wide range of activities to ensure that there is something suitable for everybody.

To keep up to date Stichting De Klup Twente is always looking for new developments that can serve the needs and talents of both young and old and to increase the interest in the activities of De Klup for participants or to attract more volunteers. One of these new developments has to do with the health of people with a disability. Studies have shown that people with a disability exercise less, generally tend to have a poor health and start feeling old at an earlier stage in their lives than people without a disability. This also has to do with the fact that their disability hinders them in sports and therefor makes it less interesting to exercise and compete. That is why Stichting De Klup Twente, in cooperation with University Twente, the national E-sportbond and several businesses, established a new digital e-sport and e-health centre, named the Fun-ie-Fit centre.

# 1.2 The Fun-ie-Fit centre

The Fun-ie-Fit centre, located in the old gym-hall of the Meester Siebelinkhuis, was established in August 2012. The centre is equipped with a Gamewall with seven personal computers for playing tactical games, the Exergame Lab where the Eyeclick projects a game on the floor, the Exergamehall where four exergame-fields are equipped with the latest game-consoles and a Chat & Chillroom (or social-media room) were people can relax, chat and have a drink.

The personal computers in the Gamewall are mostly used by people who play more tactical games and is often used by the e-sport club Tactix. Tactix is an independent organization that rents the Funie-Fit centre to play games with its members. This organization focusses mainly on youth and people, without a disability, who enjoy serious gaming and gaming in a competitive environment.

The Exergame Lab, with the Eyeclick, is a game on the floor where people can play the game by using their feet, hands or other body parts which stimulates people to move more. The Eyeclick can also be used by people in wheelchairs, making it a suitable gaming device for almost everybody.

The Exergamehall takes up the largest part of the Fun-ie-Fit centre and consists of four fields where people can play exergames or ordinary games on the PlayStation 3 & 4, the Xbox 360 Kinect, the Xbox One, the Wii and the Wii U. The exergames are mostly played without the aid of a controller and require people to move parts of their body to play the game. In essence the person becomes the controller. This allows people to move or exercise while they play a game, where, unlike normal games, people tend to stay in one spot and only move their fingers to use the controller. The goal of exergaming is to stimulate people to move more and it can also be used to stimulate teamwork and playing together.

Finally the Chat & Chillroom, also known as the 'social-media room', allows people to catch their breath after playing the exergames or to have a drink and relax (<a href="http://funiefitcentrum.nl/">http://funiefitcentrum.nl/</a>).

The Fun-ie-Fit centre should be considered as a place where people, with and without a disability, can get in contact with each other and play games. By making the centre attractive with its facilities people can work on their condition, concentration and reaction by playing exergames. With these gaming facilities the Fun-ie-Fit centre wants to bring fun and fitness together (Anema, 2012)

Impression of the Fun-ie-Fit centre with from left to right: the Exergamehall and the Gamewall, the





Besides making exercising more attractive and stimulating people with a disability to participate more in society, the centre is also established to help to cover the cost of the Meester Siebelinkhuis, to attract new and young volunteers, to help in the development of programmes for special education and the fight against obesity, to offer places for internships and to allow people to get more working experience and reintegrate in the labour market.

# 1.3 Relevance

As mentioned before, the Fun-ie-Fit centre was established with the help and funding of a lot of organisations from the Twente region. With the financial support the Fun-ie-Fit centre has had the opportunity to focus on getting all the errors out of the system and to work with test-groups that would provide feedback about the gaming experience and other more practical aspects, such as the rules and regulations that have to be followed when people are in the centre.

However, this financial support will not last forever, that is why the management has set the objective that the Fun-ie-Fit centre has to be able to cover its own costs after three years. This means that by the end of 2015, or from 2016 onwards, the centre has to be able to operate independently from Stichting De Klup Twente to cover its own costs. Officially the centre is part of Stichting Vrienden van De Klup Twente and is not owned by Stichting De Klup Twente. This has to do with financial benefits that are gained due to different type of taxes. The centre is still considered a part of Stichting De Klup Twente, but the goal is that the centre should work with its own financial resources, staff and customers (Anema, 2012). This research should help Stichting De Klup Twente with advice about how the objective of an independent Fun-ie-Fit centre can be realised, especially as a financially independent organisation.

#### 1.3.1 Scientific Relevance

First of all, this paper is relevant for academics because the importance of pricing strategies will be discussed and the paper can be considered as an addition to the literature of pricing in practice. The relevance lies in the fact that pricing is considered to be the most neglected subject of both the marketing mix and marketing journals (Nagle & Holden, 1995 and Malhorta, 1996). This paper also demonstrates how pricing has an important impact on the break-even point of an organization.

The second reason why this research may benefit academics and managers is because this research uses an integrative framework that combines three pricing methods in one research with the help of the framework from Hinterhuber (2004). This approach was originally developed by Ohmae (1982) to be used as a guide for profitable pricing decisions, but can also be used to provide relevant insights for businesses to break-even. Besides this research there is only one small example available how the framework from Hinterhuber works (Hinterhuber & Liozu, 2012).

Anderson et al. (1992) argued that the conjoint analysis is a good way for determining the price of a product or service. Looking at the literature however, shows that the conjoint analysis is a tool that is mostly used for consumer and industrial goods and less for services (Wittink & Cattin, 1989). This makes the conjoint analysis used in this research meaningful for other researchers that want to use the conjoint analysis for determining prices in the service sector.

## 1.4 Problem Statement

The problem that will be handled in this paper focusses on the financial situation of the Fun-ie-Fit centre. In the assignment of Stichting De Klup Twente that was posted on the site of the Wetenschapswinkel, it said De Klup was looking for a financial plan which would serve as a guide to enable the Fun-ie-Fit centre to meet its financial objective of covering its own costs in the future. This objective is challenging because De Klup is a non-profit organization, 'a private organization serving a public purpose' (O'Neill, 1989) or as McCarthly et al. (1992) describe it: 'an organization to serve underserved or neglected populations, to expand the freedom of or to empower people, to engage in advocacy for social change, and to provide services'. This indicates that the main objective of Stichting De Klup Twente isn't to make profit, but to provide services for people with a disability in Almelo and region of Twente. However, Stichting De Klup Twente and the Fun-ie-Fit centre should be regarded as two different organizations even though they are so closely related. Stichting De Klup Twente generates most of its revenue (57,3%) from project-subsidies and subsidies from different councils and 42,6% of the revenue comes from services De Klup provides for its participants (Te Pas, 2013). This makes De Klup a combination of a 'donative' and 'commercial' non-profit organization (Hansmann, 1987). The Fun-ie-Fit centre is established with the help of project-subsidies and donations, but according to the business plans these subsidies will not be a part of the revenue of the centre after 2015. The Fun-ie-Fit centre should therefore be regarded as a 'commercial' non-profit organization, generating most of its revenue by sales from services. Potential profits can be used to organise more activities or help to cover the costs of Stichting De Klup Twente (Hansmann, 1987).

This bachelor thesis will provide Stichting De Klup Twente with advice about how it can meet its financial objective of covering the costs of the Fun-ie-Fit centre. With help of director Jan Anema the following problems have to be tackled in this paper:

How can Stichting De Klup Twente turn the Fun-ie-Fit centre in a professional organisation to ensure that:

- 1. There is enough revenue to ensure break-even
- 2. The various users are able to optimize the use of the Fun-ie-Fit centre

# 1.5 Research Question

In order to tackle the problems and challenges mentioned in the problem statement a research question is designed to provide guidance and direction for the research and to discover how the research should be structured to answer these questions. The main research question consists of two parts.

How can the pricing strategy of the Fun-ie-Fit centre be organized in order to hit break-even?; and How can the participation of different customers in the Fun-ie-Fit centre be stimulated?

# Why Focus on the Price-Strategy when Breaking-Even?

Covering the costs of the Fun-ie-Fit centre, or achieving break-even as it is called in the accounting literature, is based on the situation where the total revenue equals the total costs of a business (Drury, 2012). Literature often points to the cost-volume-profit (CVP) analysis when looking for the break-even point. This analysis is a tool used by organizations to help them make pricing decisions by examining the relationship between cost, volume and profits (Berry & Jarvis, 2006 & Heisinger, 2009). The full formula in the CVP analysis is:

Profit = Sales Volume x Price – (Fixed Costs + Variable Costs x Sales Volume)

Break-even: Sales Volume x Price = (Fixed Costs + Variable Costs x Sales Volume)

As the formula shows, there are four distinct forces that influence the break-even point and the amount of profit an organization makes. Table 1.1 demonstrates which force has the most influence on the amount of profit. The example will show what happens when there is an improvement of 10% in each of the four forces, assuming that all other factors remain constant.

Table 1.1: The Impact of Price on Profit and Revenue (Dolan & Simon, 1996)

|                        | Before |        | Profit (£) |        | Profit             |
|------------------------|--------|--------|------------|--------|--------------------|
|                        |        | After  | Before     | After  | improvement<br>(%) |
| Price (£)              | 100    | 110    | 30 000     | 40 000 | 33.3               |
| Sales Volume           | 1000   | 1100   | 30 000     | 35 000 | 16.7               |
| Variable Unit Cost (£) | 50     | 45     | 30 000     | 35 000 | 16.7               |
| Fixed Cost (£)         | 20 000 | 18 000 | 30 000     | 32 000 | 6.7                |

As Table 1.1 shows, price has the largest influence on making a profit and therefore the biggest impact on breaking even. Even if this experiment is done with other figures, it will still demonstrate that 'price drives profit like no other factor' (Dolan & Simon, 1996, p24) (this is only true if total revenue is more than the fixed cost and as long as the variable costs are less than the price). It is of course very unlikely that in the real world the other variables would remain the same, that is why the forces of profit should be regarded as accounting links rather than causal relationships. This doesn't mean the example is obsolete. The relationships can still be used to build scenarios and to determine how many sales an organisation can afford to lose when it raises its prices.

The formula in the CVP analysis also provides another insight. In the research by Diamantopoulos (2003), he argues that the dependent variable, the sales volume (q), reflects customer demand and is the function of the firm's own price (p) and the competitors price (pj), captured in function, q = f(p, pj). In the cost function however, the sales volume (q) is an independent variable for the firm's costs (c) in function: c = g(q), with (g) being the variable costs. This demonstrates that cost is a function of

price and shows the illogical use of cost-based approaches, according to which 'price is considered a function of cost, whereas the true causal relationship is just the reverse' (Simon, 1989). Some researchers already mentioned this more than sixty year ago, with Backman (1953) stating: 'the graveyard of business is filled with the skeletons of companies that attempted to price their products solely on the basis of costs'.

This does not mean that costs should be rendered unimportant when looking to break-even, on the contrary. Costs are very important, especially in determining the point where an organisation can hit break-even, but based on the findings mentioned previously, costs should not be used as a way to determine the price and thus the revenue stream of an organisation. Another reason why this research mostly focusses on the pricing strategy of the Fun-ie-Fit is because the management of Stichting De Klup Twente has not yet set prices for the customers of the Fun-ie-Fit centre and they lack the information necessary to make a decision about the pricing strategy. That is why this paper, in order to come up with an advice about covering the costs, will focus mainly on the pricing strategy of the Fun-ie-Fit centre. To answer the main research question related to breaking-even and the pricing strategy of the Fun-ie-Fit centre, the following sub questions are designed:

- 1. What is/ are the price objective(s) of the Fun-ie-Fit centre?
- 2. What is the economic value of the Fun-ie-Fit centre?
- 3. What is the influence of price changes on the revenue of the Fun-ie-Fit centre?
- 4. What does the competitive-environment of the Fun-ie-Fit centre look like?

# Stimulating Participation of Different Customers

One of the things that became clear from the objectives that the Fun-ie-Fit centre should fulfil was that the centre should be attractive to almost everybody. The centre should not only target people with a disability but also elderly people, young people, mothers, fathers, gamers, athletes and all other segments that may want to use the Fun-ie-Fit centre. This part of the research focusses on the wishes and needs of customers and what points should be addressed to stimulate people to use the Fun-ie-Fit centre. Two sub questions are designed to find out how the participation of different customers can be stimulated:

- 5. What types of different users makes use of the Fun-ie-Fit centre?
- 6. How can the participation of users of the Fun-ie-Fit centre be stimulated?

## 1.6 Research Method in Brief

This research will use the theory of Hinterhuber (2004) in order to come up with an advice about a pricing strategy that should ensure that the Fun-ie-Fit centre is able to cover its costs. In his paper Hinterhuber presents a framework for pricing decisions which consider the relevant dimensions and elements for sustainable pricing decisions. Based on the economic value analysis, the cost-volume-profit (CVP) analysis and the competitive analysis this research will come up with a price range for the Fun-ie-Fit centre. To determine the economic value of the centre for customers this paper will use the conjoint analysis to identify the value of certain differentiating factors and use reference prices to determine the value of the Fun-ie-Fit centre for different customer segments. In the CVP analysis the impact of several financial and organisational aspects will be analysed to estimate how changes can influence the break-even point of the Fun-ie-Fit centre. In the competitive analysis the paper will look for price trends in the market, direct and indirect competitors and competitive strategies.

# **1.7 Scope**

Several choices and assumptions will influence the results of this research but these choices and assumptions were made to limit the research and stop it from becoming too broad and take up too much time. Here we will mention the most important choices and assumptions that determine the scope of this research.

The research mostly focusses on the pricing strategy of the Fun-ie-Fit centre because the total revenue is the main concern of the management of De Klup. The paper focusses less on the number of customers and how new customers can be attracted because this would be an entire different part of the marketing mix, namely promotion.

The economic value analysis in this research is done with the help of current customers and members of Stichting De Klup Twente instead of new or potential customers. The researcher has chosen to use this sample because most of the respondents in this sample will know what the Fun-ie-Fit centre is, how it works and what it looks like. Research has shown the importance in a conjoint analysis of people knowing what it is they have to value.

## 1.8 Thesis Outline

The paper will start with a review of the pricing literature in the service industries and here we'll describe why the framework of Hinterhuber is chosen for this research. Chapter 3 will describe the theoretical framework that is used in this research. For each of the different steps and analyses this chapter will describe which choices have to be made in order to perform the research properly. Chapter 4 handles the research design and explains why certain choices were made in this research and why these are considered the best or most practical way. Chapter 5 discusses the results that are gathered from the interviews and questionnaires that were carried out and how this can lead to a price strategy for the Fun-ie-Fit centre. In the final chapter, chapter 6, the conclusion, recommendations, limitations and future research are described.

# 2. Literature Review

In order to get an idea which pricing strategies are used in the service industry, this paper will use scientific publications to get an understanding of the numerous pricing strategies in the service sector. Avlonitis & Indounas (2005) wrote a paper about the main pricing objectives and pricing methods in the service sector derived from service literature. Their comprehensive review of the literature of the pricing of services identified twelve pricing methods falling into three large categories, namely cost based, competition based and demand based. Table 2.1 summarizes these categories and methods.

Table 2.1: Pricing Methods in the Service Sector (Avlonitis & Indounas (2005)

| Category              | Method   | Description  | References  |
|-----------------------|--|--|---|
| Cost-based            | Cost-plus  A profit margin is added on the service's average cost            |  | Sclissel (1977), Goetz<br>(1985), Zeithaml et al.<br>(1985), Ward (1989),<br>Palmer (1994), Payne,<br>(1993), Bateson (1995),<br>Zeithaml & Bitner (1996) |
|                       | Target return pricing  | Price determined at the point that yields firm's target rate of return on investment | McIver & Naylor (1986),<br>Meidan (1996)  |
|                       | Break-even analysis  | The price is determined at the point where total revenue=total costs                 | Channon (1986),<br>Lovelock (1996)  |
|                       | Contribution analysis  | Only direct costs of a product determine the price                                   | (Schlissel & Chasin<br>(1991), Bateson (1995)   |
|                       | Marginal pricing   | Price is set below total and variable costs and only covers marginal costs           | Palmer (1994)   |
| Competition-<br>based | - Pricing similar to competitors or according to the market's average prices |  | Channon (1986), Payne<br>(1993), Palmer (1994),<br>Woodruff (1995),<br>Zeithaml & Bitner (1996)   |
|                       | Pricing above competitors  |  | Bonnici (1991), Meidan<br>(1996), Zeithaml & Bitner<br>(1996), Mitra & Capella<br>(1997), Langeard (2000)   |
|                       | Pricing below compe  | titors   | Payne (1993), Palmer<br>(1994), Zeithaml & Bitner<br>(1996)   |
|                       | Pricing according dor  | minant price in the market   | Kurtz & Clow (1998)   |
| Demand-based          | d Perceived-value Price based on the customers' perception of value          |  | Channon (1986),<br>Lovelock (1996), Zeithaml<br>& Bitner (1996), Hoffman<br>& Bateson (1997)  |
|                       | Value pricing  | Fairly low price set for high quality service  | Cahill (1994)   |
|                       | Pricing according to customer's needs  | Price is set so as to satisfy customers' needs                                       | Bonnici (1991), Ratza<br>(1993)   |

Since there are so many different pricing methods each of these methods have their advantages and disadvantages. The literature review was also useful to identify the major advantages and disadvantages of the three large pricing categories. These are listed in Table 2.2.

Table 2.2: Advantages and Disadvantages of the Three Main Pricing Categories

| Table 2.2. Auvan      | Definition  | Advantages Disadvantages  |  |
|-----------------------|---|---|--|
|                       |   |   |  |
| Cost-based            | Cost based-pricing approaches determine prices primarily with data from cost accounting (Hinterhuber, 2008)                     | -Easy and quickly to use (Oxenfeldt, 1961) -Predicting prices of other businesses (Drury, 2012) -Increases awareness of own costs (Ingenbleek et al., 2003) -Is fair to customers (Shipley & Jobber, 2001)      | -Doesn't take customers demand in account, -Assumptions made about future costs (Drury, 2012) -Calculations more difficult than assumed (Nagle et al., 2011) -Lower profitability (Myer et al., 2002 & Simon et al., 2003) |
| Competition-<br>based | Pricing approaches use anticipated or observed price levels of competitors for price setting (Hinterhuber, 2008)                | -Simple to administer<br>(Shipley & Jobber, 2001)<br>-Avoid price wars (Raju &<br>Zhang, 2010)<br>-Easy access to data<br>(Hinterhuber, 2008)   | -Become a passive price setter, -Game of chicken, low & not-profitable prices (Raju & Zhang, 2010) -Ignores opportunities -Based on 'old' data -Ignores firm's costs (Shipley & Jobber, 2001)                              |
| Demand-based          | Pricing approaches use<br>the value a<br>product/service delivers<br>to a segment for setting<br>prices. (Hinterhuber,<br>2008) | -Lead to higher income (Nagle et al., 2011) -Achieve superior new product performance -Better understanding price and value (Ingenbleek et al., 2003) -Difference in value- perception (Shipley & Jobber, 2001) | -Ignores costs and<br>competitors,<br>-Data from 'outside'<br>difficult to obtain (Shipley<br>& Jobber, 2001)  |

As the table shows, there doesn't seem to be a best practice for setting prices in the service industry, since all methods have their advantages and disadvantages. This is why researchers have tried to come up with a solution to exclude the disadvantages and include the advantages into one pricing strategy. Ohmae (1982) was one of the first who suggested that pricing decisions should be based on three perspectives, namely the company, the customer and the competition perspective. In 2001 Shipley & Jobber came with their contribution and introduced the 'Pricing Wheel'. The Pricing Wheel is a systematic sequential pricing process which was designed as a multistage process describing the issues and variables within an effective pricing process. The Pricing Wheel first determines the pricing objectives for the product, after which the demand, costs and competitors have to be analysed. These analyses will help in determining the price ceiling and the short- and long-term price floor. Another integrated pricing decision process was mentioned in a research by Hinterhuber (2004), which is closely related to the Pricing Wheel by Shipley & Jobber (2001). The framework designed by Hinterhuber first defines the pricing objectives, after which it preforms an economic value analysis, a

cost-volume-profit analysis and a competitive analysis. When these four steps are performed it is possible to determine a profitable price range according to the theory.

This research will work with the framework from Hinterhuber because this method provides a more detailed plan about the steps that need to be taken in order to come to effective pricing decisions and a good pricing strategy for the Fun-ie-Fit centre.

The theory from Hinterhuber mostly focuses on making a profit and therefore the economic value analysis, which should determine the price ceiling of the product or service, is the most important aspect of this theory. Since the Fun-ie-Fit centre is a non-profit organisation that focuses mostly on covering its costs and providing a service to the people of Almelo, the economic value analysis should not be the most important aspect of this research. In fact, the cost-volume-profit analysis should be the most important aspect because this will give the most information and input for the minimum price ranges when determining the break-even point of the Fun-ie-Fit centre.

# 3. Theoretical Framework

This chapter will describe the theories that are the foundation of this research. These theories will help to set-up and perform the research. This chapter describes how the research should be performed, which choices have to be made and how 'good' research can performed. This will mostly be done with the help of scientific literature relating to the three types of analysis that come forth from Hinterhuber's integrated framework (2004). First this chapter will explain which steps are involved in the framework. After that explanation we will describe how the steps can be performed based on the findings in the literature. The next chapter, about the research design, will tell more about the choices actually made in this research and why this leads to good results.

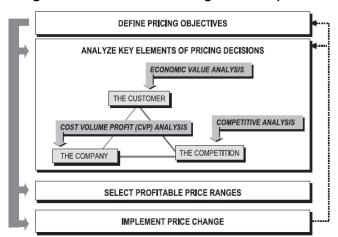


Figure 3.1: Integrated Framework for Pricing Decisions (Hinterhuber, 2004)

## 3.1 Hinterhuber's Framework

The first step in the framework provided by Hinterhuber is to determine the pricing objectives, as can be seen in Figure 3.1. The pricing objectives provide direction for the most appropriate pricing strategy for the Fun-ie-Fit centre. The next step is to undertake the three analyses:

- <u>The Economic Value analysis</u>: the understanding of the sources of economic value of a product to different clusters of customers;
- <u>The Cost-Volume-Profit analysis</u>: the understanding of the implications of price and volume changes on company profitability;
- <u>The Competitive analysis</u>: the understanding of trends in competitive pricing, product offerings and strategies.

The most logical starting point for the pricing decision process is to start with the economic value analysis, because this will provide information about the market and will set the price ceiling or the maximum price that can be charged in the segments. The next step is to perform the CVP analysis since this will set the price floor of the service (Shipley & Jobber, 2001). The last step involves the competition analysis. In the end these analyses are brought together in the advice for the pricing ranges of the Fun-ie-Fit centre.

# 3.2 Determining Pricing Objectives

The logical starting point for the pricing process is by determining the role the price has to fulfil. In the pricing wheel, by Shipley & Jobber (2001), one of the most critical tasks is specifying the pricing objectives and according to Oxenfeldt (1983), pricing objectives provide an organization with directions for action. These objectives have to be consistent with the company's broader objectives and strategies for the product or service. The most fundamental pricing objectives of service firms can be derived from the service pricing research by Avlonitis & Indounas (2005) (Appendix G).

# 3.3 Economic Value Analysis

The economic value analysis is a tool designed to comprehend and to quantify the sources of value of a given product for a group of potential customers (Hinterhuber, 2004). This is essential to make profitable pricing decisions. To quantify the economic value, the following six steps need to be undertaken:

- 1. Identify the cost of the competitive product and process that the consumer views as the best alternative
- 2. Segment the market
- 3. Identify all factors that differentiate the product from the competitive product and process
- 4. Determine the value to the customer of these differentiating factors
- 5. Sum the reference value and the differentiation value to determine the total economic value
- 6. Use the value pool to estimate future sales at specific price points

# <u>Step 1: Identify the Cost of the Competitive Product and Process that the Consumer views as the Best</u> Alternative

The cost of the best alternative for the customers will depend on the reference product of customers and the reason why customers would want to use the Fun-ie-Fit centre. For each of the segments this research will need to find the alternatives that are the best in terms of fulfilling the same customers' needs. It's recommended to calculate the product or service against at least two or three best alternatives (Hinterhuber, 2004).

## Step 2: Segment the Market

The first and second step are closely related. Markets can be segmented because significant differences in economic value arise from the way in which customers use and value the product and how this value differs from their reference product. Customers can be segmented on distinctive characteristics like gender, age, usage of the product and preferences relating to the product or service (Hinterhuber, 2004).

## Step 3: Identify all Factors that differentiate the Product from the competitive Product and Process

The value products and services created for customers can differ greatly. Differences in the perceived value arise because a product or service will vary from the reference product. These variations are closely related to the concept of competitive advantage. Competitive advantage can be defined as: 'a value creating strategy not simultaneously implemented by any current or potential competitors' (Barney, 1991). To identify these sources of differentiation or competitive advantage it is important to note that the customer is the judge deciding what factors are actually important. Auty (1995) recommends the researcher talks informally to customers before designing the survey and then talk with the managers to refine the information.

## <u>Step 4: Determine the Value to the Customer of these Differentiating Factors</u>

In the research done by Anderson et al. (1992), about value assessment methods, they discovered nine methods, namely; internal engineering assessment, field value-in-use assessment, indirect survey questions, focus group value assessment, conjoint analysis, direct survey questions,

benchmarks, compositional approach and importance ratings. In their research they wanted to gain an understanding of the usage of these customer value assessment methods. In their research among industrial firms and market research firms they discovered that the conjoint analysis was considered the most successful method and came at a good third place when determining the price of a product or service, just after focus group value assessment and benchmarks. In a conjoint analysis respondents are asked to evaluate a set of potential product offerings in terms of purchase preference for each offering. These offerings, consisting of an array of attributes or features with matching levels, are systematically varied within the set of offerings. The respondents have to rate their purchase preference after which a statistical analysis is used to decompose the ratings into the value respondents place on each attributes and attribute level (Anderson et al., 1992) (For Conjoint Analysis see chapter 3.3.1).

# Step 5: Sum the Reference Value and the differentiation Value to determine the Total Economic Value

The value of the reference product will likely vary across customer segments, but the value to segments can simply be calculated as the sum of the price of the reference product plus its differentiation value.

## **Price** = price reference product + differentiation value

Since each segment will have a different reference product and differentiation value the prices are likely to vary across segments. That is why this process will not provide one monetary value for a given product or service, but rather a 'value pool' reflecting that different customers assign different values to the product or service examined (Hinterhuber, 2004).

## Step 6: Use the Value Pool to estimate future Sales at Specific Price Point

Once the value pool has been generated it's time to determine the economic value profile of a market. With the help of sales estimates for different price points it is possible to determine the revenue streams of an organization.

# 3.3.1 Conjoint Analysis

The conjoint analysis is a tool, based on a decomposition approach, in which respondents react to a set of "total" profile descriptions (Green & Srinivasan, 1978). With the analysis it's possible to derive estimates of purchasers' utility function, quantifying the relation between the overall reaction to a product and the individual attributes of that product. This way it is possible to determine what aspects of a product offering are most important for customers (Auty, 1995). Table 3.2 lists the steps and choices in methods that need to be undertaken for the analysis.

Table 3.2: Steps and Methods in the Conjoint Analysis (Green & Srinivasan, 1990)

|   | Step                   | Alternative Methods   |
|---|------------------------|---|
| 1 | Preference model       | Vector model, ideal point model, part-worth function model, mixed |
|   |                        | model   |
| 2 | Data collection method | Full profile, two-attribute-at-a-time (trade off)                 |
| 3 | Stimulus set           | Fractional factorial design, random sampling from multivariate    |
|   | construction           | distribution, Pareto-optimal designs                              |
| 4 | Stimulus presentation  | Verbal-, paragraph-, pictorial- or three-dimensional model        |
|   |                        | representation, physical products                                 |
| 5 | Measurement scale for  | Rating scale, rank order, paired comparisons, constant-sum paired |
|   | the dependent variable | comparisons, graded paired comparisons, category assignment       |
| 6 | Estimation method      | Metric methods, non-metric methods, choice-probability-based      |
|   |                        | methods   |

## Step 1: Selection of a Model of Preference

There are three different types of preference models; the part-worth function model, the ideal-point model and the vector model. The part-worth function models estimate only for a selected set of levels and the function is represented as a piecewise linear curve. This approach has received wide acceptance due to the interpretability of the graphically displayed attribute part-worth functions.

The ideal-point model posits that preferences are negatively related to the ideal-point and stimuli which are closer to the ideal point will be more preferred than those further away. The vector-model works with a continuous variable (e.g., travel time or price). The vector-model is however a special case of the ideal-point and is the least flexible model (Green & Srinivasan, 1978).

# Step 2: Data Collection Method

Data can either be collected with the two-factor-at-a-time procedure (trade-off procedure) or the full-profile approach. The trade-off procedure considers only two attributes/stimuli at a time, this makes the procedure simple to apply and reduces information overload on part of the respondent. The approach has the following limitations; it is less realistic than the full-profile method because it only considers two attributes at a time, it requires quite a large number of cards/options to be judged by respondents, it has the tendency for respondents to adopt patterned types of responses and it appears most suited to verbal descriptions of factor combinations

The most commonly used data collection method in conjoint analysis experiments is the full-profile method. This method consists of multiple stimuli and a combination of different attribute levels. Stimuli are factors that cause a response or reaction. For example, a mobile phone with one megapixel camera might be less desirable than a mobile phone with a ten megapixel camera. The stimulus is the camera and the level is the varying number of mega-pixels the camera can have. The respondent in this kind of research will have to evaluate the cards with varying attribute-level combinations. The main advantage of this approach is that it enables a more realistic vision of the problem since it deals with changing attributes and attributes levels of products or services simultaneously. The disadvantages of this approach are that it can lead to information overload, making the task of judging a card more difficult and the fact that respondents may simplify the task of judging the cards (Ramírez-Hurtado, 2010 and Green & Srinivasan, 1978).

One of the most important decisions in this step is the number of cards respondents will have to rate in the questionnaire. Too many cards can lead to 'information overload' on respondents and will make the questionnaire very boring and fatiguing (Ikemoto & Yamaoka, 2011). Sawthooth Software's CVA manual uses the following calculation for the number of cards: 3(K-k+1), with K being the total number of levels across all attributes and k being the number of attributes. The minimal number of cards possible is calculated with the following formula: (K-k+1).

## Step 3: Stimulus set Construct for the Full-Profile Method

The most critical decision that has to be made is about which attributes to include and what levels they'll be given. Green & Srinivasan (1990) identified that using 4 attributes is best with 5 being the maximum. In order to avoid difficulties of interpretation three or four levels per attributes works well. The important thing is to avoid having such a complicated task that respondents adopt simplification strategies to get through the survey. The unique selling points of a product must therefore be expressed in terms of no more than three or four attributes. This also means that managers should not expect the conjoint analysis to discover all important attributes and choice variations (Auty, 1995).

## Step 4: Stimulus Presentation

The stimuli can be presented in three basic approaches, each with their own advantages and disadvantages. Table 3.3 provides an overview of these approaches based on the research done by Auty (1995), Ramírez-Hurtado (2010) and Green & Srinivasan (1978).

Table 3.3: Advantages and Disadvantages of Stimuli Presentation Approaches

| Approach                 | Advantage   | Disadvantage   |
|--------------------------|---|--|
| Verbal description       | Most suited for two-factor-at-a-time approach     | Require personal interviews                                |
|                          |   | Requires a lot of time and can therefore be expensive      |
| Paragraph description    | More realistic & complete description of stimulus | Limits total number of descriptions                        |
| Pictorial representation | Information overload is reduced                   | Increases costs and time on part of researcher             |
|                          | Task is more interesting and less fatiguing       | Picture may display different information then is intended |
|                          | Stimuli are more realistic                        |  |

## Step 5: Measurement Scale for the Dependent Variable

Various alternatives are applicable for the measurement scale for the dependent variable. Depending on the purpose of the study, the measurement can be either in terms of overall preference or intention to buy. Roughly speaking this variable can be classified as nonmetric (paired comparisons or rank order) or metric (rating scales or ratio scales). The main advantage of the metric method is the increased information content by presenting information in these scales. The main advantages of the nonmetric methods are; ranked data is more reliable, more options in data analysis when using part-worth functions and nonmetric is the most appropriate method for two-at-a-time approach (Green & Srinivasan, 1978)

## Step 6: Estimation Methods

The estimation methods in conjoint analysis can be classified in three main categories; 1) methods which assume that the dependent variable is ordinally scaled; 2) methods which assume that the dependent variable is intervally scaled and 3) methods which relate paired-comparison data to a choice probability model. Each of these categories has their own estimation method, but explaining all the different programs and functions, with all their advantages and disadvantages for certain combinations of preference models, data collection methods and measurement scales, will be too detailed for the purpose of this study. That is why, when the estimation method has to be selected, this paper will go into more detail as to why that specific method is chosen (Green & Srinivasan, 1978).

# 3.4 Cost-Volume-Profit Analysis

The cost-volume-profit (CVP) analysis is a technique that allows managers to consider the consequences of a particular course of action. These answers can be related to the number of units a company has to sell in order to break-even, what the effect of a price change can be, how variable costs affect profitability and by how many the sales volume needs to increase to cover extra costs. The CVP analysis is mostly used for calculations in the short-run, a time in which the output of a firm is likely to be restricted at the current operating capacity (Drury, 2012). The most fundamental rules and calculations of the CVP are mentioned below. These rules form the backbone of the CVP analysis Heisinger, 2009).

**Profit** = Total Revenue – Total Costs

**Total Revenue** = Price x Number of Sold Units

**Total Costs** = (Variable Costs x Number of Sold Units) + Fixed Costs

**Contribution Margin** = Price – Variable Costs

**Break-Even Volume** = Fixed costs / (Contribution Margin per Unit)

Besides these rules there are underlying assumptions about the information that is used in the CVP analysis. If these assumptions are not recognized errors may occur and this will result in incorrect conclusions from the analysis. These assumptions are: 1) All other variables remain constant, 2) single product or constant sales mix, 3) Total costs and total revenue are linear functions of output, 4) profits are calculated on a variable costing basis, 5) costs can be accurately divided into their fixed and variable elements, 6) analysis applies only to the relevant range and 7) the analysis applies only to a short-term horizon (Drury, 2012).

It is always possible to alter the input variables of the CVP analysis, but it has to be mentioned that this can generate entirely different results, which cannot be compared with an analysis with other input variables.

# 3.5 Competitive Analysis

The third and final cornerstone of the Hinterhuber pricing framework (2004) is the competitive analysis. This analysis can provide insight in the competitive environment of the focal company and functions as a benchmark for the products and services of the organization that is being examined. First of all it is important to identify the competitive environment of the company. Peteraf and Bergen (2003) developed a broad competitive framework for single product markets. Their model uses a market-side and a resource side comparison for competitor identification. The market-side, or market needs correspondence as it's called, is a dichotomous indicator that signifies whether or not a given firm serves the same customer needs as the focal firm. The resource-side, or capability equivalence, is the extent to which a given firm has resource and capability bundles comparable to those of the focal firm, in terms of their ability to satisfy similar customer needs. These two dichotomous indicators create the framework mentioned in Figure 3.2.

A Framework for Competitor Identification Direct Rivals Vertical Differentiators Substitutors Yes Market Needs IV Ш Ш Potential Direct Rivals Weak Competitors No Non-Competitors Latent Substitutors Low Capability Equivalence

Figure 3.2: A Framework for Competitor Identification (Peteraf & Bergen, 2003)

Figure 1. A framework for competitor identification

Businesses in quadrant I serve the same basic market needs as the focal firm, with capabilities that are comparable in terms of ability to meet the needs. These are the most direct competitors, offering rival goods or product substitutes. Quadrant II contains businesses that do not meet the market needs but they have the ability to serve a particular set of market needs and thereby they become potential competitors. Quadrant III are not competitive in terms of market presence or capabilities and aren't a likely competitive threat, although these businesses should still be monitored. Quadrant IV businesses serve similar basic customer needs as the focal firm, but they lack the capabilities to directly compete with the focal firm.

Other elements that should be covered by the competitive analysis, according the theory of Hinterhuber, are:

- The threat of new entrants; the threat of entry in an industry depends on the height of entry barriers that are present and on the reaction entrants can expect from businesses in in the market. It is the threat of entry, not whether entry actually occurs, that holds down profitability. Barriers of entry are advantages that the participants in the industry have and newcomers do not have. Possible barriers are: supply-side economies of scale, demand-side benefits of scale, customer switching costs, capital requirements, incumbency advantages independent of size, unequal access to distribution channels, restrictive government policy. The objective is to see which main advantages the Fun-ie-Fit centre has over potential new entries (Porter, 2008).
- Price trends in existing markets; prices and price trends should be monitored carefully to know where the market is at a given moment and how prices could be affected in the future. The objective is to see how other sport centres in the region of Almelo and businesses related to esports have structured their prices in terms of monetary value and payment structures.
- <u>Competitive strategies</u>; what are the strategies of competitors and which customers do they target?
- Reference values for customer groups; what is the customer's best alternative from the product that is being examined? This is important because different clusters of customers will have different products set as reference value for the purchase in question.
- <u>Likely reactions to price changes</u>; how would competitors react to the prices that are set by the organization that is being examined?

# 3.6 Determine Price Ranges

The economic value analysis, the CVP calculations and the competitive intelligence are the foundations of effective pricing strategies. With these analyses it should be possible to determine a price floor and a price ceiling. The pricing strategy that will be most appropriate for the organization under review will also depend on the pricing objectives that are set and the competitive environment that the organization works in.

# 4. Research Design

The previous chapter described how the research can be performed, which steps have to be undertaken and which choices have to be made to do research in the pricing strategy of the Fun-ie-Fit centre. The previous chapter was the theoretical aspect of this research. Now it is time to look at the more practical aspect of this research . This chapter will describe the methods, rules and procedures that were used to perform this research, why certain choices were made, how information is gathered and how the research will be performed. In this research design we work in the same order as in the theoretical framework. We start with the research design of the pricing objectives, followed by the three analyses, with all their different steps.

# 4.1 How to Identify the Pricing Objectives

The first step in the framework of Hinterhuber (2004) is to determine the pricing objectives of the Fun-ie-Fit centre. This is done with the help of interviews with the director of Stichting De Klup Twente, Jan Anema, and business manager of the Meester Siebelinkhuis, Hans van Riet. Both persons have a good understanding of the overall strategy of the Fun-ie-Fit centre and both are well aware of the financial situation of the Fun-ie-Fit centre.

This research will use interview surveys because this allows the interviewer to clarify the concepts and questions mentioned in the survey. Another advantage is the opportunity for the interviewer to ask follow-up questions to get a better understanding of the pricing objectives and the underlying assumptions of the Fun-ie-Fit centre (Babbie, 2010, p275). In the survey the respondents will be asked which pricing objective(s), mentioned in the research by Avlonitis & Indounas (2005), are applicable in the situation of the Fun-ie-Fit centre.

# 4.2 How to Perform the Economic Value Analysis

The first analysis in this paper is related to the value the Fun-ie-Fit centre offers to its customers. With the help of this analysis it is possible to identify which aspects are important for different customer segments and what their specific preferences are. This analysis contains the next six steps:

- 1. Identify the cost of the competitive product and process that the consumer views as the best alternative
- 2. Segment the market
- 3. Identify all factors that differentiate the product from the competitive product and process
- 4. Determine the value to the customer of these differentiating factors
- 5. Sum the reference value and the differentiation value to determine the total economic value
- 6. Use the value pool to estimate future sales at specific price points

The value analysis itself will be done with the conjoint analysis tool, because this has proven to be one of the most successful methods in determining the value of a product and is well-suited for determining the price of a product or service (Anderson et al., 1992).

### 4.2.1 Data Collection

In order to measure and gather data about the customers' value perception of the Fun-ie-Fit centre this analysis will use surveys in the form of interviews and questionnaires. The advantages of questionnaires are the way that they can get information about public opinion and how suited they are for measuring attitudes in a large population (Babbie, 2010, p254). Another advantage of doing survey research is the form of standardization of the data collection, making it more reliable and easier to compare data (Babbie, 2010, p288). The data will be gathered via online surveys, because this is a quick and cheap survey method and encourages respondents to participate because questionnaires can be completed anonymously.

# 4.2.2 Population & Sampling

This research will use a purposive judgmental sampling method. This means the researcher will select the most useful respondents, because the goal of this research is to provide a balanced picture of the situation of the Fun-ie-Fit centre (Babbie, 2010).

The questionnaires will be distributed online amongst members of De Klup and the members of Tactix with the help of <a href="http://kwiksurveys.com/">http://kwiksurveys.com/</a>. The choice to interview this specific group of people has been made by the researcher because the it is very likely that this group of people knows the Fun-ie-Fit centre as it contains most of the current customers of the centre. In other research it became clear that it's important to make sure that respondents are familiar with the product or service under review when doing the conjoint analysis (Ramírez-Hurtado, 2010).

The objective was to do the conjoint analysis with 30 to 60 respondents. Research has shown that most analyses use between the 150 and 1200 respondents, but the Fun-ie-Fit centre does not have that many customers and that amount is not manageable in this research. For investigational work and developing hypotheses about the market a number of 30 to 60 will suffice (Orme, 2010).

# 4.2.3 The Six Steps in the Economic Value Analysis

## Step 1 & 2: Identify the Cost of the Best Alternative & Segmenting the Market

The cost of the best alternatives and the number of segments will depend on the reasons why people would use the Fun-ie-Fit centre (Hinterhuber, 2004). This means that the reference value will be different for every customer segment. In the questionnaire we will not directly ask respondents what they perceive to be the best alternative is for the Fun-ie-Fit centre, because interviews in an early stage made clear that people find it difficult to compare the centre with an alternative service. To identify the two best alternative products the questionnaire will ask why people would like to use the Fun-ie-Fit centre. This way it is possible to create customer segments and to compare the differences in perceived value of the Fun-ie-Fit centre. Besides creating segments based on the reason why people would use the Fun-ie-Fit centre, the questionnaire will also allow to create segments based on gender, age, residence, alternative sports, usage and whether someone has a disability or not.

## Step 3: Identify all Factors that Differentiate the Product from the Competitive Product and Process

The differentiating factors will be determined with the help of informal talks with customers and with semi-structured interviews with personnel and customers. Interviews will be a useful way to understand what makes the Fun-ie-Fit centre create differentiating value for the current customers. The interviews will be held with people that are closely involved with the Fun-ie-Fit centre, like the director, the gamecoach, the business leader and several customers, to identify the value the centre delivers to customers. This research uses interviews because this allows respondents to give their answers without restrictions and it enables the interviewer to ask more follow-up questions (Babbie, 2010).

## Step 4: Determine the Value to the Customer of these Differentiating Factors

In this research the value for the differentiating factors will be determined with the help of the conjoint analysis. The conjoint analysis is the most suited method for assessing the value of a product or service and is often used in determining prices (Anderson et al., 1992). How this analysis will be performed will be explained in chapter 4.2.4.

# Step 5: Sum the Reference Value and the differentiation Value to determine the Total Economic Value

The total economic value could be determined by summing the reference value and the differentiation value according to the paper by Hinterhuber (2004). The formula that will be used in this research will look slightly different because the conjoint analysis will decompose the reference value. That is why the total economic value formula in this research will look the following:

# **Total Economic Value** = <u>(price reference product)</u> x utility score Fun-ie-Fit centre (utility score reference product)

The utility score is the perceived value the conjoint analysis will give for a specific attribute level combination. For example, the reference product scores low and the Fun-ie-Fit scores high on an attribute level. This means that the centre has a higher value for a specific level of attribute and this will cause the price of the Fun-ie-Fit to be higher than that of the reference product. Varying scores for different reference products will create a 'value pool', a collection of prices for customer segments, instead of one monetary value.

# Step 6: Use the Value Pool to estimate future Sales at a Specific Price Point

With the help of the planning of the Fun-ie-Fit centre (Anema, 2012) it is possible to determine the size of the customer segments and to create an economic value profile of the market.

# 4.2.4 How to Perform the Conjoint Analysis

This paragraph will discuss the six steps that need to be undertaken in order to perform the conjoint analysis. Some of the steps can only be undertaken after previous steps are completed, like the stimulus set construct and the stimulus presentation. That is why some of the choices made in the research design will be explained in chapter 5: Results.

## Step 1: Selection of a Model of Preference

The conjoint analysis in this research will use the part-worth function model to assess the preference of each attribute level. This model has been chosen owing to its wide acceptance due to the interpretability of the graphically displayed attribute part-worth functions. The model also allows different combinations of levels to determine the overall preference for any combination of attribute levels (Green & Srinivasan, 1978 & SPSS Inc., 2010).

## Step 2: Data Collection Method

The data in this research will be collected with the help of full-profile cards; because this method is the most commonly used, is the most realistic and requires fewer cards to be judged by respondents. The respondents will have to rate a card with a combination of attribute levels on it. Depending on the number of attributes and levels this research will try to limit the number of cards per respondents while still getting valuable results (Ramírez-Hurtado, 2010 and Green & Srinivasan, 1978).

## Step 3: Stimulus set Construct for the Full-Profile Method

The stimuli, or attributes, that will be used in this research will be the differentiating factors that are identified in step 3 of the economic value analysis. This research will limit the number of attributes to four in order to avoid respondents adopting simplification strategies. To avoid difficulties in interpretation the maximum number of levels will be set at three per attribute.

# Step 4: Stimulus Presentation

The stimuli will be represented as paragraph descriptions. The paragraph description is more realistic, is easier to interpret than pictorial presentations and allows analysing multiple attributes at the same time. Paragraph descriptions are also well suited for distribution via mail.

## Step 5: Measurement Scale for the Dependent Variable

The measurement scale that will be used to determine the overall preference of a product offering in this analysis will be a metric scale. The specific metric method chosen is the rating scale, because this scale is used most often in commercial conjoint analyses (Wittink & Cattin, 1989), is very well suited for distribution via mail (Green & Srinivasan, 1978) and is less likely to result in simplification

strategies by respondents (Auty, 1995). In this analysis the respondents will be asked to rate their preference for a particular combination of levels on a scale from 0 to 10, with 0 being 'No preference' and 10 being 'High preference' (Ramírez-Hurtado, 2010).

#### Step 6: Estimation Methods

This research will use the estimation method proposed by IBM. This method, developed for the computer software of SPSS, uses the full-profile method where respondents can either rank or score their preference for a card. With this software program it is possible to determine both the relative importance for each attribute as well as which levels of each attribute are most preferred. It is also possible to create a fractional factorial design, useful for presenting a suitable fraction of all possible combinations of factor levels and reducing the number of cards that respondents have to rate. This results in an orthogonal array, designed to capture the main effects for each factor level. Interactions between these levels are assumed to be negligible (SPSS Inc., 2010).

Another advantage of this method is that it allows determining the preferences at an individual level. This would also make it possible to group individuals into market segments according to the strength of their preference for particular attributes (Ramírez-Hurtado, 2010).

# 4.3 How to Perform the Cost-Volume-Profit Analysis

In the theoretical framework several rules and assumptions about the CVP analysis were made to make it work properly and to come up with useful conclusions. There are however several assumptions related to the organisational aspects of the Fun-ie-Fit centre that will influence the outcome of the CVP analysis. These aspects are:

- Price
- Capacity and utilization of the Fun-ie-Fit centre
- Number of hours open during one week
- Number of week open during one year
- Ratio commercial activities versus non-commercial customers
- Variable costs
- Fixed costs
- Revenue from the bar
- Possible subsidy and/or sponsoring

This research will use as input the costs that are presently allocated to the Fun-ie-Fit centre using the current budget forecast for 2015. This budget and cost allocation can be found in the added Excel-file (Appendix B). By using and altering the variables that are mentioned above this paper will give insight in the required sales volume, the cost price and which factors have the most influence on the objective of the centre to break-even.

# 4.4 How to Perform the Competitive Analysis

The competitive analysis will cover the aspects of direct and indirect competitors, the threat of new entrants, price trends in existing markets, competitive strategies, the reference value for customer groups and likely reactions to price changes.

In order to identify competitors of the Fun-ie-Fit centre this research will use the framework provided by Peteraf and Bergen (2003). When, in the economic value analysis, the motivation of why people would like to use the Fun-ie-Fit centre become clear it will be possible to identify companies in the region of Almelo that serve the same purpose of have the same capabilities.

For identifying the possible threat of new entrants this paper uses the theory of Porter (2008) to determine what sort of advantages the centre has over potential new entrants. The other elements in the Hinterhuber framework, like price trends and competitive strategies, will be investigated by

doing secondary research. Data from the internet will be used to identify prices of competitors, pricing structures and segments targeted by competitors.

# 4.5 How to Identify different Users in the Fun-ie-Fit centre

To determine how the users of the Fun-ie-Fit differ, the questionnaire used for the conjoint analysis will also be used for this sub-question. With the help of the questionnaire it should be possible to identify different customers segments and different type of users. The respondents can be differing in the following aspects:

- Gender;
- Age;
- Residence;
- Why people would use the Fun-ie-Fit centre;
- How often they would like to use the Fun-ie-Fit centre;
- When they would like to use the Fun-ie-Fit centre;
- How respondents would prefer to pay for the Fun-ie-Fit centre, and;
- Whether the respondent has a disability

# 4.6 How to Identify Stimuli for Participation of the Fun-ie-Fit centre?

To determine how the participation of users of the Fun-ie-Fit centre can be stimulated this research will use the interviews with people closely associated with the Fun-ie-Fit centre. These are the people who have also been approached to identify the differentiating factors of the centre. Since most of these people have a great understanding of the value the Fun-ie-Fit centre offers to customers they may also have ideas how the centre can be improved and be made more attractive for the current and potential customers and users.

## 5. Results

This chapter will report the findings from the research. This chapter will present the outcomes of the interviews, questionnaires and analyses which serve as input for the pricing strategy of the Fun-ie-Fit centre. Here we will also answer the sub-questions mentioned in paragraph 1.5. Research Question. The outline of this chapter is structured in the same manner as the rest of the paper, starting with the pricing objectives, followed by the three analyses and finishing with the price range.

# 5.1 Pricing Objectives

Determining the pricing objective of the Fun-ie-Fit centre is done with by interviewing the director of Stichting De Klup Twente, Jan Anema, and business manager of the Meester Siebelinkhuis, Hans van Riet. With the help of the interviews the following five pricing objectives were identified:

#### **Cost Coverage**

One of the most important reasons why the Fun-ie-Fit centre is established is to help to cover the costs of the Meester Siebelinkhuis. This leads directly to the price objective of cost coverage. The pricing strategy of the Fun-ie-Fit centre should make sure that it covers the cost of the Fun-ie-Fit centre and thereby help in covering the costs of the Meester Siebelinkhuis. In the current situation that would mean that the Fun-ie-Fit centre has to generate a turnover of € X in 2015.

## **Satisfactory Profits**

The second objective is related to the objective of cost coverage. The primary (financial) goal is that the Fun-ie-Fit centre generates enough revenue to cover its own costs and indirectly a part of the costs of the Meester Siebelinkhuis. When this objective is achieved it is possible to focus more on making a profit. It will therefore be important that the prices of the Fun-ie-Fit centre should also make it possible that the centre can make a profit and thereby generate income for De Klup. However, this quantitative price objective has not been specified and will mostly depend on the ability of the centre to cover its own costs.

## **Social Goals**

Another important reason for the establishment of the centre is to give disabled people more opportunities to participate in sports. De Klup made this possible by designing the centre in such a way that almost everybody with a disability will be able to exercise in the Fun-ie-Fit centre. However, achieving the social goals cannot only be done with good facilities. The desire to achieve social goals should also be reflected in the price. Prices will have to be lower for organisations that exercise with disabled people to make it financially attractive for these organizations to use the Fun-ie-Fit centre.

# A Fair Price

The price objective of 'fair' prices is linked to the previous price objective. Namely, charging a lower price for organisations that do sports and exercises with disabled people. Price differentiation will also be important when looking at different types of customers. Commercial organisations, organisations that focus on making profit or organisations with large budgets/turnover will have to pay a relatively higher price for the Fun-ie-Fit centre than non-profit organisations. Non-profit organisations are, for example, sports clubs and civil society organisations.

## Long Term Survival

The final price objective that was mentioned in the interviews is obvious but not less important. Long term survival is essential for De Klup. Prices should reflect that intention and the focus should lie on long-term partnerships, both with customers and sponsors of the Fun-ie-Fit centre.

# **5.2 Results of the Economic Value Analysis**

In the economic value analysis is the first analysis in this paper and is used to determine the perceived value of the Fun-ie-Fit centre for customers. Since it was possible to determine all the input for the conjoint analysis before writing the research design this chapter will also describe some of the choices that have been made in the data collection and analysis of the data. First of all, we will describe the segments and best alternatives, followed by the differentiating factors of the centre, identified with the help of customers and personnel. Secondly, the choices in data collection are discussed, followed by the input of the conjoint analysis. The final part contains the results from the conjoint analysis for the several segments.

## Step 1 & 2: Identify the Cost of the Best Alternative & Segmenting the Market

The cost of the best alternative will depend on the reasons why people would use the Fun-ie-Fit centre (Hinterhuber, 2004). This means that the reference value will be different for every customer segment. With the help of the survey it became clear that there are several distinctive customer categories:

- o Respondents that view the Fun-ie-Fit centre as a 'spare-time-activity'
  - The best alternatives for spare time activities are numerous, because one can consider all different kind of activities. This research considers the gaming café WZZRD in Enschede and the cinema MovieUnlimited Almelo as the best reference products. WZZRD is chosen because it offers a similar kind of spare time activity as the Fun-ie-Fit centre does, namely gaming and exergaming. MovieUnlinited is chosen because going to the movies is a spare time activity and the price of going to a movie is set at € 9,00 and doesn't vary, where it does with most other organizations that facilitate spare time activities.
- Respondents that view the Fun-ie-Fit centre as a way to 'enjoy a work-out'

  The best alternative for respondents that want to enjoy a work-out or exercise is to participate in sports. For this research we the best alternative will be indoor sports in Almelo, since the Fun-ie-Fit is also an indoor activity. Another alternative is exercising at a fitness club. This is considered another alternative because prices and facilities of fitness clubs often differ from 'ordinary' indoor sport-clubs
- Respondents that are members of Stichting De Klup Twente For the respondents that are members of Stichting De Klup the best alternative would be the other activities of De Klup. This research will use two alternatives, namely the more general activities of De Klup that are held in the Meester Siebelinkhuis and activities that are held at other locations. These two categories are used because there is a great difference in price.

<u>Step 3: Identify all Factors that Differentiate the Product from the Competitive Product and Process</u>

The differentiating factors are determined with the help of interviews with knowledgeable personnel and by talking to customers. The differentiating factors in this research are:

- Amount of space in the Fun-ie-Fit centre
  - The amount of space offers a unique gaming experience and allows people to move freely when playing games. Normally when people play exergames they do not have the amount of space that is available in the Fun-ie-Fit centre. That is why the amount of space is a differentiating factor of the Fun-ie-Fit centre.
- O Gaming facilities of the Fun-ie-Fit centre
  With the aid of large screens and a good sound system the gaming experience reaches a new level. Just as with the amount of space, the centre has a differentiating factor with regard to its facilities. In most cases people will play exergames on a TV with a limited size screen and a limited quality sound system. The Fun-ie-Fit facilities could be considered to be better because it uses large projection screens and it has an individual sound system for every game area. With these facilities the gaming experience can be better.

## o Available equipment in the Fun-ie-Fit centre

The amount of games and different consoles can create extra value for the customers of the Fun-ie-Fit centre. The Fun-ie-Fit centre has more financial resources than individuals have and this can be used to buy the latest games and newest consoles. This is a differentiating factor, because it doesn't happen often that you will find a PlayStation, Xbox, Wii, Eye click, very fast personal computers and a very large collection of games in the same space.

## Social interaction in the Fun-ie-Fit centre

In this research, social interaction is the interaction between people while they enjoy gaming. Social interaction will also reflect the number of people that are present in the centre at a given moment. Interviews made it clear that the centre has a positive social effect on people. People that normally are very shy, open-up when they play games together. Gaming can also be used to create new friendships, learn to work in teams and to get in contact with people that normally wouldn't meet. It must however be said that this differentiating factor will probably be most important to the members of De Klup, because some members may lack social skills, due to their disability.

## Step 4: Determine the Value to the Customer of these Differentiating Factors

In this research the value for the differentiating factors will be determined with the help of the conjoint analysis. The conjoint analysis is the most suited method for assessing the value of a product or service and is often used in determining prices (Anderson et al., 1992). The steps involved in the conjoint analysis are discussed in the next paragraph (Green & Srinivasan, 1978).

# **5.2.1** Implementation of the Conjoint Analysis

## Step 1. Selection of a Model of Preference

The selected model of preference was the 'part-worth function model' because this model provides the greatest flexibility for the preference function along each of the attributes. The part-worth function is also the only model that can work when attributes are categorized, which is the case in this research (Green & Srinivasan, 1978).

## Step 2. Data Collection Method

The data was collected with full-profile cards. The minimal number of cards in this research is:

9 attribute levels -4 attributes +1 = 6 cards per respondent (Ikemoto & Yamaoka, 2011). The Sawtooth Software would recommend: 3(9-4+1) = 18 cards per respondent for the conjoint analysis (Orme, 2010). In most conjoint analysis the number of cards will be limited to keep the respondent interested and to make sure that they complete the entire survey, but since this research will have a sample size of only 30 to 60 respondents the information that will be gathered with only 6 cards may say little about the value of the Fun-ie-Fit centre. That is why this research will split the difference. The number of cards used in this conjoint analysis will be (18+6)/2 = 12 cards. This will not put an immense burden on the respondents when judging the cards and will still provide meaningful information about the value of the centre (Appendix C).

#### Step 3. Stimulus set Construction for the Full-profile Method

For the stimuli, or attributes, this paper uses the differentiating factors that in step 3 of the economic value analysis. The stimuli were divided into levels 2 or 3 levels in order to reduce the number of cards and to make it easier for respondents to identify with the levels (Auty, 1995).

## Amount of space in the Fun-ie-Fit centre

The factor 'Space' was divided into three categories in order to get a good assessment of the importance of the available space in the Fun-ie-Fit centre. This paper uses descriptions of the levels because this will make it more understandable for respondents, opposed to working with square meters. The levels of the amount of space are:

- Little space
- Enough space
- A lot of space

#### Gaming facilities in the Fun-ie-Fit centre

The factor 'Gaming Facilities' specifically focuses on the quality of the sound system and the large screens. The factor is divided into two levels to make it easier for respondents to interpret the meaning of the levels. The levels of gaming facilities are:

- Normal visual and sound quality
- High visual and sound quality

The choice for these two levels is based on the assumption that most of the respondents will be familiar with the centre and may not identify the centre with low visual- and sound-quality.

## Available equipment in the Fun-ie-Fit centre

This factor will be divided into two levels, limiting the number of cards that respondents need to judge. The levels of this factor are:

- Little choice in games & gaming consoles
- A lot of choice in games & gaming consoles

This paper also uses two levels because an 'average choice' in games & gaming consoles might cause problems for respondents to identify what an 'average choice' in games and consoles means.

## Social interaction in the Fun-ie-Fit centre

This differentiating factor is constructed in the same manner as the previous factor. In order to limit the number of cards per respondents it is divided into two levels:

- Few people present and little interaction
- A lot of people present and a lot of interaction

### Step 4. Stimulus Presentation

The stimuli were presented as paragraph descriptions. Paragraph descriptions were used to make sure that people understood what was asked of them, since it would be more difficult to explain what was meant with 'social interaction' when you only show a picture (Appendix C).

## Step 5. Measurement Scale for the Dependent Variable

A rating scale was used to measure the perceived value of the Fun-ie-Fit centre. Respondents would score a card on a scale from 0 to 10 with 0 = 'No preference' and 10 = 'High preference'.

## Step 6. Estimation Method

The outcome of the questionnaires will be analysed with the statistic tool SPSS, because this program allows the determination of both the relative importance and preference for each attribute.

# **5.2.2 Results of the Conjoint Analysis**

In total, 40 of the 74 respondents filled in the entire survey, limiting the usefulness of the response when doing the conjoint analysis. The preferences of all 40 respondents are shown in Table 5.1.

Table 5.1: Overall Utility Scores, Importance Values and Gender

| Panel A:   |                      | •                   |            |
|------------|----------------------|---------------------|------------|
| Utilities  |                      |                     |            |
|            |                      | Utilities Estimates | Std. Error |
| Space      | Small                | -,442               | ,085       |
|            | Enough               | ,240                | ,085       |
|            | Spacious             | ,202                | ,085       |
| Facilities | Normal Quality       | -,000               | ,060       |
|            | High Quality         | ,000                | ,060       |
| Equipment  | Little Choice        | -,696               | ,060       |
|            | A Lot of Choice      | ,696,               | ,060       |
| Social     | Little Interaction   | ,063                | ,060       |
|            | A Lot of Interaction | -,063               | ,060       |
| (Constant) |                      | 5,592               | ,060       |

| Panel B:   |          |     |        |  |
|------------|----------|-----|--------|--|
| Importan   | ce Val   | ues |        |  |
| Space      |          |     | 26,095 |  |
| Facilities |          |     | 18,264 |  |
| Equipmer   | nt       |     | 26,994 |  |
| Social     |          |     | 28,648 |  |
|            |          |     |        |  |
|            |          |     |        |  |
| Panel C:   | Panel C: |     |        |  |
| Gender     |          |     |        |  |
| Male       | 23       |     | 59,0%  |  |
| Female     | 16       |     | 41,0%  |  |
| Total      | 39       |     | 100%   |  |

The data in panel B shows that, overall, people find the social interaction the most important aspect of the Fun-ie-Fit centre since it has the highest rating. The amount of space and the equipment in the Fun-ie-Fit centre are almost equally important to all the 40 respondents. An interesting finding is that people would prefer less people and little interaction over a lot of interaction and a lot of people in the Fun-ie-Fit centre. This is reflected in the positive score for 'little interaction' and negative score for 'a lot of interaction'. In the questionnaire people mentioned that too many people in the centre will reduce the quality of the experience of the centre, because it gets too crowded and the volunteers have little time to help everybody. It is also interesting to see that people value the amount of 'enough' space higher than a 'spacious' environment, showing that more than enough space isn't a real added value. Of the 40 respondents one did not mention his/her gender. Finally, it seems that respondents are indifferent as to whether the centre has a normal or high quality visual and sound system, indicate by the two utility estimates of ,000.

# Correlations

The correlations mentioned in Table 5.2 provide information about the relationship between the observed and estimated preferences.

| Table 5.2: Correlations Conjoint Analysis |       |              |  |
|---|-------|--------------|--|
| Correlations                              | Value | Significance |  |
| Pearson's R                               | ,982  | ,000         |  |
| Kendall's tau                             | ,862  | ,000         |  |

Kendall's tau analyses the correlation between two

measured quantities and is often used in research with scale-variables, designed to assess how close the relationship between two variables is. The positive value of Kendall's tau indicates a positive relation between the scores of the cards and the higher values of the preferences (Stats, 2008). Pearson's R finds correlations for interval- and ratio variables and since the preferences are measured in a ratio-scale from 0 to 10 it is meaningful to see that there is a positive relationship between the independent and dependant variables (SPSS 18, 2010). The significance value is used in most social sciences to determine whether something is statistically significant and whether a hypothesis can be rejected or not. In this research the P-value is lower than  $\alpha$  = 0,05 and this means that the outcome of the analysis is statistically significant. This means that the outcome of the analysis is not due to chance alone (Stats, 2008).

The next couple of pages are dedicated to the value assessment of the three customer segments. For each segment the alternative product is put against the Fun-ie-Fit centre and prices are derived based on the utility scores of the Fun-ie-Fit centre. When the segments are described paragraph 5.2.3 will provide a monetary value pool.

## 5.2.3 Sum the reference- and differentiation value to determine the total economic value

In this paragraph the results of the conjoint analysis are presented, along with the reference prices and the perceived value of the Fun-ie-Fit centre for three different customer segments.

## 5.2.3.1 Respondents that view the Fun-ie-Fit centre as a 'Spare-Time-Activity'

Table 5.3: Spare-Time Activity Utility Scores and Importance Values

| Panel A: Utilities |                      |                            |            |  |
|--------------------|----------------------|----------------------------|------------|--|
|                    |                      | <b>Utilities Estimates</b> | Std. Error |  |
| Space              | Small                | -,479                      | ,159       |  |
|                    | Enough               | ,396                       | ,159       |  |
|                    | Spacious             | ,083                       | ,159       |  |
| Experience         | Normal Quality       | -,167                      | ,112       |  |
|                    | High Quality         | ,167                       | ,112       |  |
| Equipment          | Little Choice        | -,764                      | ,112       |  |
|                    | A Lot of Choice      | ,764                       | ,112       |  |
| Social             | Little Interaction   | ,486                       | ,112       |  |
|                    | A Lot of Interaction | -,486                      | ,112       |  |
| (Constant)         |                      | 5,500                      | ,112       |  |

| Panel B: Importance Values |        |  |
|----------------------------|--------|--|
| Space                      | 29,959 |  |
| Experience                 | 16,937 |  |
| Equipment                  | 27,452 |  |
| Social                     | 25,653 |  |

The respondents that view the Fun-ie-Fit centre as a spare-time activity find the amount of space and the equipment the most important attributes of the Fun-ie-Fit centre, while the amount of social interaction comes at a good third place, as can be seen in Table 5.3, panel A. It is interesting to see that the difference in preference related to the social aspect of the centre is much larger for respondents that see the centre as a spare time activity than for the entire group of respondents. Here the difference between little and a lot of interaction is 0,972 utility, where it is only 0,126 utility for all the 40 respondents. This means that for the spare-time activity respondents a lot of interaction and many people is much less preferred than for the other respondents.

The best alternatives that are used in this research are the gaming café WZZRD and MovieUnlimited. WZZRD can be regarded as a café where people come to play games. The space when playing console games is limited and smaller than in the Fun-ie-Fit centre, the quality of facilities can be considered 'normal' because there are 'just' TV screens with consoles attached, there is a lot of choice in games and

| Table 5.4: Reference Prices |  |  |  |  |
|-----------------------------|--|--|--|--|
| Prices WZZRD                |  |  |  |  |
| € 4,00 per hour             |  |  |  |  |
| € 6,00 per hour             |  |  |  |  |
| Prices MovieUnlimited       |  |  |  |  |
| € 9,00 per movie            |  |  |  |  |
|                             |  |  |  |  |

consoles and in most cases there will be many people present. MovieUnlimited is a service cinema which means customers can order drinks during the movies. MovieUnlimited has enough space, since the seats are quite large and there is enough space for your legs. The facilities are of a high quality as you might expect in a cinema. The cinema offers a lot of choice in movies varying throughout the year. The social interaction will be low since you're not supposed to talk during the movies. One average a movie takes about 2,5 hours (<a href="www.goeievraag.nl">www.goeievraag.nl</a>). Table 5.4 lists the reference prices of the alternatives and Table 5.5 lists the prices for the Fun-ie-Fit centre for this customer segment.

## Value 'Gaming in the WZZRD café':

- = Small + Normal quality + A Lot of Choice +A Lot of Interaction + Constant
- = -,479 + (-,167) + ,764 + (-,486) + 5,500 = **5,132 utility**

# Value 'Activities at MovieUnlimited':

- = Enough + High Quality + A Lot of Choice + Little Interaction
- = ,396 + ,167 + ,764 + ,486 +5,500 = 7,313 utility

# Value 'Gaming in the Fun-ie-Fit centre':

- = Spacious + High Quality + A Lot of Choice + A Lot of Interaction + Constant
- = ,083 + ,167 + ,764 + (-,486) +5,500 = 6,028 utility

**Table 5.5: Prices for the Spare Time Activity Segment** 

| Price Fun-ie-Fit centre |                 |                        |   |  |  |
|-------------------------|-----------------|------------------------|---|--|--|
| Alternative             | Reference Price | Calculation            | Price                                   |  |  |
| WZZRD - PC gaming       | € 4,00          | € 4,00 / 5,132 * 6,028 | € 4,70 per hour                         |  |  |
| WZZRD - Console gaming  | € 6,00          | € 6,00 / 5,132 * 6,028 | € 7,05 per hour                         |  |  |
| MovieUnlimited          | € 9,00          | € 9,00 / 7,313 * 6,028 | € 7,42 per movie, or<br>€ 2,97 per hour |  |  |

# **Conclusion**

The respondents in this segment find the gaming facilities relatively unimportant, which seems odd since they come especially to play games for fun. They do however find the space the most important aspect of the centre and they prefer 'enough' space above both 'small' and 'spacious'.

According to the conjoint analysis, people that come to the Fun-ie-Fit centre to enjoy gaming and to have a good time, would value PC gaming at € 4,70 per hour and would value console gaming at € 7,05 per hour. If going to see a movie at MovieUnlimited would be the best alternative for this segment, it would value the Fun-ie-Fit centre at € 2,97 per hour.

# 5.2.3.2 Respondents that view the Fun-ie-Fit centre as a way to 'Enjoy a Work-Out'

Table 5.6: Enjoy a Work-Out Segment Utility Scores and Importance Values

| Panel A: Utilities |                      |                     |            |  |  |
|--------------------|----------------------|---------------------|------------|--|--|
|                    |                      | Utilities Estimates | Std. Error |  |  |
| Space              | Small                | -,593               | ,117,      |  |  |
|                    | Enough               | ,213                | ,117,      |  |  |
|                    | Spacious             | ,380                | ,117,      |  |  |
| Experience         | Normal Quality       | -,019               | ,125       |  |  |
|                    | High Quality         | ,019                | ,125       |  |  |
| Equipment          | Little Choice        | -,648               | ,125       |  |  |
|                    | A Lot of Choice      | ,648                | ,125       |  |  |
| Social             | Little Interaction   | ,685                | ,125       |  |  |
|                    | A Lot of Interaction | -,685               | ,125       |  |  |
| (Constant)         |                      | 5,537               | ,125       |  |  |

| Panel B: Importance Values |        |  |  |  |
|----------------------------|--------|--|--|--|
| Space                      | 23,176 |  |  |  |
| Experience                 | 19,577 |  |  |  |
| Equipment                  | 26,128 |  |  |  |
| Social                     | 31,120 |  |  |  |

The respondents that see the Fun-ie-Fit centre as a way to enjoy a work-out find social interaction by far the most important aspect of the centre, followed by equipment, amount of space and the gaming experience of the centre, as can be seen in Table 5.6 panel B. The data in panel A shows that these respondents really don't prefer a small space and would rather have a spacious environment over 'enough' space. Again, as was the case in the two previous tables, 5.1 and 5.3, people prefer a lot of choice in games and consoles and prefer less interaction and few people present in the Fun-ie-Fit centre.

The best alternatives for this segment are other sports that people can do indoors. This is why this research uses prices of other indoor-sports facilities in Almelo. For this analysis we can refer to sports such as gymnastics, badminton, table tennis, basketball, judo, and yoga. On average, with the exception of the more expensive sports, the price for one hour of sports per week at sports clubs in Almelo ranges from € 8,00 to € 10,00 per month. These sports are often practised in a spacious gym

hall, with normal quality equipment, relatively little choice in games or exercises and a lot of interaction (Appendix E).

Another alternative is membership of a fitness centre. Prices vary a lot between fitness centres, with prices ranging from € 10,00 to € 60,00 a month. For one hour per week exercising this research uses a reference price of € 20,00 a month (Appendix E). In general, a fitness centre will have enough space, high quality equipment, a lot of choice in exercise machines and will have a lot of people present at certain times. Table 5.7 lists the prices for the centre for this specific segment.

#### Value of 'An Indoor-Sports Almelo':

- = Spacious + Normal Quality + Little Choice + A Lot of Interaction + Constant
- = ,380 + (-0,019) + (-,648) + (-,685) + 5,537 = 4,565 utility

#### Value of 'A Fitness Centre':

- = Enough + High Quality + A Lot of Choice + A Lot of Interaction +Constant
- = ,213 + ,019 + ,648 + (,685) + 5,537 = **5,732 utility**

#### Value of 'Sporting in the Fun-ie-Fit centre':

- = Spacious + High Quality + A Lot of Choice + A Lot of Interaction + Constant
- = ,380 + ,019 + ,648 + (-,685) + 5,537 = 5,889 utility

**Table 5.7: Prices for Work-Out Segment** 

| Price Fun-ie-Fit centre                                    |         |                   |           |          |
|--|---------|-------------------|-----------|----------|
| Alternative Reference Price Calculation Price Price (hour) |         |                   |           |          |
| Fun-ie-Fit 'Indoor   | € 9,00  | € 9,00 / 4,565 *  | € 11,61   | € 2,68   |
| Sports'  |         | 5,889             | per month | per hour |
| Fun-ie-'Fitness'   | € 20,00 | € 20,00 / 5,732 * | € 20,55   | € 4,74   |
|  |         | 5,889             | per month | per hour |

## Conclusion

The customer segment that regard the Fun-ie-Fit centre as a means to enjoy a work-out would prefer less interaction and people in the centre and would prefer the centre to offer a lot of choice in games and consoles. According to the conjoint analysis, the people whose best alternative would be another indoor sport would value the Fun-ie-Fit centre at € 2,68 per hour. For people whose best alternative would be to go to a fitness centre would value the centre at € 4,74 per hour.

#### 5.2.3.3 Respondents that are Members of Stichting De Klup Twente

Table 5.8: Members of Stichting De Klup Twente Utility Scores and Importance Values

| Panel A: Utilities   |                    |                     |            |  |
|----------------------|--------------------|---------------------|------------|--|
|                      |                    | Utilities Estimates | Std. Error |  |
| Space                | Small              | -,574               | ,058       |  |
| Enough               |                    | ,287                | ,058       |  |
| Spacious             |                    | ,287                | ,058       |  |
| Experience           | Normal Quality     | ,028                | ,041       |  |
| High Quality         |                    | -,028               | ,041       |  |
| Equipment            | Little Choice      | -,648               | ,041       |  |
| A Lot of Choice      | e                  | ,648                | ,041       |  |
| Social               | Little Interaction | ,120                | ,041       |  |
| A Lot of Interaction |                    | -,120               | ,041       |  |
| (Constant)           |                    | 5,296               | ,041       |  |

| Panel B: Importance Values |        |  |
|----------------------------|--------|--|
| Space                      | 26,170 |  |
| Experience                 | 16,159 |  |
| Equipment                  | 20,736 |  |
| Social                     | 36,936 |  |

The respondents who are members of De Klup from the largest segment in this research. This group highly values the social aspect of the Fun-ie-Fit centre, as is shown by the importance values in Table 5.8, panel B. The utilities estimates also show that the difference between little interaction and a lot of interaction is much smaller than in the two previous groups, meaning that the preference between either little or a lot of interaction is smaller than with the other two groups. The analysis also shows that enough space and a spacious environment are equally preferred by the respondents.

The best alternatives for this group are the activities of Stichting De Klup Twente. These alternatives are divided into activities in the Meester Siebelinkhuis and activities at other locations , such as swimming pools, sport halls and fitness centres. On average the activities of De Klup last about an hour and a half, with prices for activities in the Meester Siebelinkhuis at about € 11,50 per quarter (€ 0,59 per hour) and prices for activities elsewhere at about € 40,00 per quarter (€ 2,05 per hour). For both alternatives, the amount of space is considered spacious since the Meester Siebelinkhuis is quite spacious and so are the sport halls and swimming pools. The quality is considered normal because it is not different from what people would expect when using these facilities. The choice of games and equipment is considered to be high because there are a lot of alternatives for people when taking part in, activities either in the Meester Siebelinkhuis or at other locations. Since most activities organised for members of De Klup are also to socialize, there is considered to be a lot of interaction amongst customers. Table 5.9 lists the prices of the Fun-ie-Fit centre for the members of Stichting De Klup Twente.

#### Value of 'Activities in the Meester Siebelinkhuis':

- = Spacious + Normal Quality + A Lot of Choice + A Lot of Interaction + Constant
- = ,287 + ,028 + ,648 + (-,120) + 5,296 = 6,139 utility

#### Value of 'Activities outside the Meester Siebelinkhuis':

- = Spacious + Normal Quality + A Lot of Choice + A Lot of interaction + Constant
- = ,287 + ,028 + ,648 + (-,120) + 5,296 = 6,139 utility

#### <u>Value of 'the Fun-ie-Fit centre for members of Stichting De Klup Twente':</u>

- = Spacious + High Quality + A Lot of Choice + Constant
- = ,287 + (-,028) + ,648 + (-,120) + 5,296 = **6,083 utility**

**Table 5.9: Prices for Members of Stichting De Klup Twente** 

| Price Fun-ie-Fit centre |                 |                   |             |                 |
|-------------------------|-----------------|-------------------|-------------|-----------------|
| Alternative             | Reference Price | Calculation       | Price       | Price (hour)    |
| Meester                 | € 11,50         | € 11,50 / 6,139 * | € 11,40 per | € 0,58 per hour |
| Siebelinkhuis           |                 | 6,083             | quarter     |                 |
| Activities Outside      | € 40,00         | € 40,00 / 6,139 * | € 39,64 per | € 2,03 per hour |
|                         |                 | 6,083             | quarter     |                 |

#### Conclusion

The respondents that are members of Stichting De Klup Twente find the social aspect by far the most important and the amount of space also plays a large role in their preferences. According to the analysis the respondents would value the Fun-ie-Fit centre at  $\leqslant$  0,58 per hour if it is considered as an activity in the Meester Siebelinkhuis. The value of the Fun-ie-Fit centre would be higher when it is considered as an activity outside the Meester Siebelinkhuis, making use of other facilities. Than the value would be  $\leqslant$  2,03 per hour, three-and-a-half times as much.

## 5.2.4 Use the Value Pool to estimate Future Sales at Specific Price Points

The previous analyses showed that the perceived value of the Fun-ie-Fit centre varies for different customers and this is why it is not wise or relevant to create one monetary value for the Fun-ie-Fit centre. Instead of creating one price, it's more sensible to create a 'value pool' that will reflect that different customer segments will assign different values to the service examined (Hinterhuber, 2004). The value pool of the Fun-ie-Fit centre is mentioned in table 5.10.

Table 5.10: Monetary Value Pool Fun-ie-Fit centre

|                     | Prices per Segment and per Best Alternative |                             |                                      |  |
|---------------------|---|-----------------------------|--------------------------------------|--|
| Customer<br>Segment | Reference Price                             | Reference price<br>(hourly) | Perceived value<br>Fun-ie-Fit centre | Perceived value<br>Fun-ie-Fit centre<br>(hourly) |
| Spare time          | € 4,00                                      | € 4,00                      | € 4,70                               | € 4,70   |
|                     | € 6,00                                      | € 6,00                      | € 7,05                               | € 7,05   |
|                     | € 9,00                                      | € 3,60                      | € 7,42                               | € 2,97   |
| Exercising          | € 9,00                                      | € 2,08                      | € 11,61                              | € 2,68   |
|                     | € 20,00                                     | € 4,62                      | € 20,55                              | € 4,74   |
| Members De Klup     | € 11,50                                     | € 0,59                      | € 11,40                              | € 0,58   |
|                     | € 40,00                                     | € 2,05                      | € 39,64                              | € 2,03   |

According to the planning of the Fun-ie-Fit centre, there will be 30 customers per part of day. If we consider a realistic planning the centre would be open for 16 of such parts per week. This would mean the centre would have a total number of 480 customers per week (Appendix A).

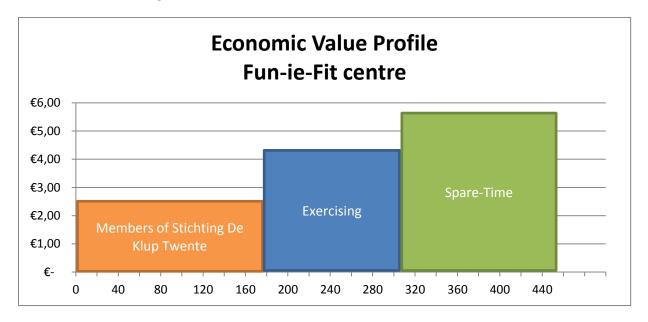
The survey made clear that 31,1% of the respondents would use the Fun-ie-Fit centre as a spare-time activity and 27,9% of the respondents would use the Fun-ie-Fit centre as a way to enjoy a work-out. The rest of the respondents would use the Fun-ie-Fit centre for more varying reasons. That is also why this market profile doesn't contain all the 480 customers, since it is not possible to place every customer in a particular customer segment. Of the respondents that are member of Stichting De Klup Twente 20,9% would like to use the Fun-ie-Fit centre (Appendix D). With this information it is possible to estimate the economic value of the different market segments. In table 5.11 the sizes of the market segments are noted and the value per segment is calculated. Figure 5.1 is an illustration of the economic value profile of the centre and provides a visual representation of the value of each customer segment.

Table 5.11: Economic Value Profile of the Fun-ie-Fit centre

|               | Share of          | Number of | Average (hourly)    | Segment Value |
|---------------|-------------------|-----------|---------------------|---------------|
|               | Customers/Members | Customers | Perceived Value     |               |
| Members of De | 20,9% of 800      | 167       | € 2,03              | € 339,01      |
| Klup          | members           |           |                     |               |
| Exercising    | 27,9% of 480      | 134       | (2,68+4,74)/2 =     | € 497,14      |
|               | customers         |           | € 3,71              |               |
| Spare time    | 31,1% of 480      | 150       | (4,70+7,05+2,97)/3= | € 736,00      |
|               | customers         |           | € 4,91              |               |
| Total         |                   | 451       |                     | € 1572,15     |
|               |                   |           |                     |               |

(Note: The price for member of Stichting De Klup Twente is € 2,03 since the centre should not be considered as part of the Meester Siebelinkhuis, even though it is located there)





## 5.3 Results of the Cost-Volume-Profit Analysis

The second analysis in this report is related to price changes, customer volume and how the Fun-ie-Fit centre can break-even. The disadvantage of this specific analysis is that several assumptions have to be made related to the organisational aspects of the Fun-ie-Fit centre. These aspects are:

- o Price;
- Capacity and utilization of the Fun-ie-Fit centre;
- Number of hours open during one week;
- Number of weeks open during one year;
- o Ratio commercial activities versus non-commercial activities;
- Variable costs;
- Fixed costs:
- The number of special events;
- o Revenue from the bar;
- o Possible subsidy and/or sponsoring.

## **Total Costs**

The costs the Fun-ie-Fit centre faces are mostly fixed costs and have less to do with variable costs. This has to do with the fact that the staff has a standard number of hours they work for the centre, unrelated to the number of customers. Besides the labour costs there are assumptions made about the electricity and cleaning costs. A large part of the fixed costs are the result of depreciation of the re-building and the equipment that is installed in the centre. Most of the variable costs are therefore calculated as fixed costs and the assumption is made that, organisations and people that will rent the centre will make use of their own supervisors or will make use of the volunteers from De Klup Twente. This allows De Klup to refrain from hiring more personnel when there are more customers. In the future it would be possible to take a closer look at the variable electricity costs that are made during an entire year. This will allow De Klup to be more precise in their cost allocation and cost-assumptions for the years to come.

This research makes use of the budgetary forecast for 2014 and 2015 which has been made by the management of Stichting De Klup. This budget can be found in the added Excel-files (Appendix B).

The assumption is made that the total costs are € X per year. Costs are allocated in the four groups in the budget forecast of the Fun-ie-Fit centre:

| Sum  | €X  |
|--|-----|
| Running costs (depreciation equipment, purchasing new equipment)       | €X  |
| Organisational costs (assumptions)                                     | € X |
| Housing (electricity, rent, depreciation building, internet, cleaning) | € X |
| Salary of personnel, working for the Fun-ie-Fit centre                 | € X |

This chapter starts with calculating the cost price per month, week and hour after which it is possible to determine the cost price per customer per hour. In paragraph 5.3.1 this paper will demonstrate how the assumptions and variables mentioned previously influence the break-even point of the Funie-Fit centre. These calculations, graphs and figures will provide an insight about how the revenue and the costs of the Funie-Fit centre can be affected by changing certain organisational aspects of the centre.

## Cost Analysis of the Fun-ie-Fit centre

After interviewing the management of Stichting De Klup it became clear that, by using volunteers, the assumption has to be made that the centre will operational between 40 to 45 weeks a year and that the centre will be open for 9 hours per day during the working week. The opening hours and costs per unit of time related to these opening hours are mentioned in Table 5.12 and 5.13.

Table 5.12: Realistic Opening Hours Fun-ie-Fit centre

|           | Morning<br>(9:00-12:00) | Afternoon<br>(13:00-17:00) | Evening<br>(19:00-21:00) | Total |
|-----------|-------------------------|----------------------------|--------------------------|-------|
| Monday    | 3                       | 4                          | 4                        | 11    |
| Tuesday   | 3                       | 4                          | 2                        | 9     |
| Wednesday | 3                       | 4                          | 2                        | 9     |
| Thursday  | 3                       | 4                          | 2                        | 9     |
| Friday    | 3                       | 4                          | 2                        | 9     |
| Saturday  | -                       | 4                          | -                        | 4     |
| Sunday    | -                       | -                          | -                        | -     |
| Total     | 15                      | 20                         | 10                       | 51    |

Table 5.13: Costs per Month, per Week and per Hour

| Unit of Time | Costs per Unit of Time | Cost per Hour |
|--------------|------------------------|---------------|
| 12 Months    | = € X per month        | -             |
| 40 Weeks     | = € X per week         | € X           |
| 41 Weeks     | = € X per week         | €X            |
| 42 Weeks     | = € X per week         | €X            |
| 43 Weeks     | = € X per week         | €X            |
| 44 Weeks     | = € X per week         | €X            |
| 45 Weeks     | = € X per week         | €X            |

## From Cost Prices to Customer Prices

Considering a standard situation of 51 hours per week, the cost price of the Fun-ie-Fit centre would vary between € X and € X per hour. This is the <u>average</u> cost per hour that the centre needs to cover during the entire year. The estimate at the start of the project was that there would be 30 people in the centre every part of the day. According to the agenda there are 15 parts of day during the week and one during the weekend (Appendix A). This leads to an estimate of 480 customers per week. In Table 5.14 the cost price per customer per hour are listed. These are the minimum prices that customers would have to pay in order for the Fun-ie-Fit centre to hit break-even.

**Customs per hour =** 480 customers / 51 hours = 9,41 customers per hour **Price Fun-ie-Fit centre** = costs per week / 51 hours / 9,41 customers per hour

Table 5.14: Price per Customer per Hour

| Number of weeks per year | Costs per week | Price per Customer per hour |
|--------------------------|----------------|-----------------------------|
| 40 weeks                 | €X             | €X                          |
| 41 weeks                 | €X             | €X                          |
| 42 weeks                 | €X             | €X                          |
| 43 weeks                 | €X             | €X                          |
| 44 weeks                 | €X             | €X                          |
| 45 weeks                 | €X             | €X                          |

## **Results of the CVP Analysis**

Based on the CVP analysis it is possible to come up with a minimum price per hour, as well as a minimum price per customer per hour. This is relevant to determine the price floor of the Fun-ie-Fit centre and to see how costs, prices and customer volume interact. The cost prices will always be affected when variables are changed, that is why this research comes up with a range of cost prices, working with an estimate of 480 customers and 51 opening hours per week. These price ranges, presented in Table 5.15, contain the average prices that the centre needs to charge in order to hit break-even over an entire year.

Table 5.15: Price Floors Fun-ie-Fit centre

| Number of weeks open | Costs per week | Minimum price per<br>hour | Minimum price per<br>customer per hour |
|----------------------|----------------|---------------------------|--|
| 40                   | €X             | €X                        | €X                                     |
| 41                   | €X             | €X                        | €X                                     |
| 42                   | €X             | €X                        | €X                                     |
| 43                   | €X             | €X                        | €X                                     |
| 44                   | €X             | €X                        | €X                                     |
| 45                   | €X             | €X                        | €X                                     |

Based on Table 5.15 it's possible to determine that the minimum price floor for the Fun-ie-Fit centre should be € X per hour, or € X per customer per hour. This ensures that at least the costs are covered when the centre is open for 40 weeks per year, the least favourable situation. The highest price floor is € X per hour, or € X per customer per hour, because in the favourable situation of 45 weeks open per year, this is the minimal price for the Fun-ie-Fit centre can be, based on the total costs.

#### 5.3.1 Impact of Input Variables on Pricing Strategy

In this chapter we are mostly focused on the cost structure of the Fun-ie-Fit centre and how the customer volume and the capacity, in the form of opening hours, affect the pricing strategy of the Fun-ie-Fit centre. However, it's also very important to assess how the variables mentioned previously will influence the Fun-ie-Fit centre in achieving its pricing objective of covering its own costs. This paragraph will show how variables like the number of opening hours and the number of customers can affect the break-even point and therefore the price floors of the Fun-ie-Fit centre. This paragraph will discuss the impact of the number of weeks open per year, the number of hours open per week, different amount of customers and the impact of working on a capacity lower than 100%.

## 5.3.1.1 The Effect of the Number of Weeks open per Year

There are many organizations and businesses that increase the number of opening hours to increase the number of customers they can have and to make as much use of the capacity they have to generate revenue. More customers allows organizations to charge lower prices, because the extra number of customers should compensate for the price reduction and lower prices can in its turn attract even more customers. Another advantage of increasing the opening hours and the number of weeks open per year is that it allows more people to experience the Fun-ie-Fit centre and allows more people to interact with each other, one of the social goals of the Fun-ie-Fit centre. Besides the social aspect it would also allow the centre to vary the number of hours it sells to customers. Having more capacity, or being open for more hours in a year, reduces the need to always work at full capacity, allowing the centre to build up revenue in peak hours and to consolidate in off-peak hours. Graph 5.1 demonstrates that the number of weeks open per year has a considerable impact on the revenue that needs to be generated per week. The total revenue necessary to hit break even remains € X per year, but by increasing the number of opening weeks per year the prices can be lowered, possibly attracting more customers and reducing the necessity of working on full capacity every week. In graph 5.1a, you can see what happens to the costs per week when the number of weeks open per year is increased or reduced. Realistically the Fun-ie-Fit centre could not be open for more than 50 weeks per year, due to national holidays. Graph 5.1b demonstrates what happens to the cost price per hour when the numbers of weeks open per year changes, considering 51 operational hours per week. The green lines demonstrate the relevant range of 40 to 45 weeks per year.

Graph 5.1a: Costs per Week (€) and Graph 5.1b Costs per Hour (€)

## 5.3.1.2 The Effect of the Number of Opening Hours per Week

In the graphs above we demonstrated what happens when the number of weeks open per year is changed. Now this paper will look what happens when the number of opening hours is changed. The effect of the number of weeks is slightly larger, because every extra weeks leads to 51 extra opening hours, where one extra hour per week leads to, at least 40 hours extra per year. However, a change in opening hours might be easier to accomplish than an extra week open per year. When we take a look at other organisations that offer sport facilities, like sport halls and swimming pools, it becomes clear that these organisations try to keep the number of opening hours as high as possible in order to

reduce prices and still increase revenue. Table 5.16 shows how opening hours are structured for sport accommodations in Enschede.

Table 5.16: Opening Hours Gym Halls Enschede

| Monday till Friday  | 09:00 – 22:00 hour | 13 x 5 = 65 hour |
|---------------------|--------------------|------------------|
| Saturday and Sunday | 09:00 – 22:00 hour | 13 x 2 = 26 hour |
| Sum                 |                    | 91 hour a week   |

(Source: http://www.enschede.nl/repository/09169/#.Ut0wUBDb IU)

Opening hours for fitness centres are often slightly different during the weekends. Instead of 13 hours a day, most centres are only open for 6 hours a day, from 9:00 till 15:00. This has to do with the fact that they do have to use personnel whereas most sport halls make use of volunteers. Most fitness centres are open for 77 hours a week (<a href="http://www.healthcity.nl/">http://www.healthcity.nl/</a>).

When presented with these facts it becomes clear that the 51 hours of the Fun-ie-Fit centre is a relatively low amount of opening hours. Graph 5.2 demonstrates how the number of opening hours affects the cost price of the Fun-ie-Fit centre, considering both 40 and 45 weeks per year. The green line in the graph represents the assumption of 51 hours per week, used in previous calculations.

Graph 5.2: Cost Price Fun-ie-Fit centre versus Opening hours per week

The graph shows what happens when the centre is open for more or less hours per week. A raise in the number of hours from 50 to 55 would lower the cost price from  $\in$  X to  $\in$  X per hour in a year with 40 weeks and would lead to a reduction in cost price from  $\in$  X to  $\in$  X per hour in a year with 45 weeks. These price changes per hour are significant, even more when you consider the Fun-ie-Fit centre is open for at least 2.040 hours per year (40 weeks\*51 hours).

The questionnaire also showed that a lot of respondents prefer to make use of the Fun-ie-Fit centre during the evenings, from 18:00 to 22:00, and on the Sunday from 12:00 to 18:00 (Appendix D). This is an opportunity for the Fun-ie-Fit centre to increase the number of opening hours per week. This would lead to 12 more opening hours per week, making it 63 hours per week and creating a new cost price of € X per hour, when considering 40 weeks per year.

#### 5.3.1.3 The Effect of the Number of Individual Customers

When charging a price to the individual customers, this paper assumed that there will be 480 customers per week during the entire year. This paper shall now demonstrate how the minimum price will be affected if the number of customers is higher or lower than expected. In this example we will use the realistic number of opening hours of 51 per week and consider the centre will be operational for 40 weeks per year. If the number of opening hours or operational weeks is more, the price-line in graph 5.3 would shift downwards, leading to lower prices for the same amount of customers per hour. The line in Graph 5.3 shows that as the number of customers per week increases the minimum price that can be charged to the customer will be lower. The line is not linear, meaning that prices will vary most in the left side of the graph, where the number of customers is lower, and prices vary less when we move further to the right, showing that the price will level out and require much more customers for a similar amount of price decrease. The green line in the graph represents the estimate of 480 customers per week.

For example, an increase of 100 customers per week, from 200 to 300 per week, would lead to a decrease in price of X%, from  $\in$  X to  $\in$  X per customer per hour. An increase of 100 customers, from 500 to 600 would lead to a decrease in price of X%, from  $\in$  X to  $\in$  X per customer per hour. This demonstrates the impact of a relatively low amount of customers on the price of the Fun-ie-Fit centre.

#### Graph 5.3: Price per Customer per Hour versus Number of Customers per week

## 5.3.1.4 The Effect of Capacity

In all previous graphs the assumption is made that the centre will be able to rent out all the hours per week during the entire year. Now it's time to demonstrate what happens if the Fun-ie-Fit centre isn't able to rent out all the hours. Graph 5.4 shows what happens to the cost price per hour if the centre doesn't work at full capacity. The graph shows that if the centre was to work at 80% it would have to average a cost price of € X per hour, € X per hour more when working at 100%. This demonstrates how important it is for the Fun-ie-Fit centre to work as close to full capacity as possible in order to cover the costs.

**Graph 5.4: Cost Price per Hour versus Capacity** 

## 5.3.2 Impact of Input Variables on Generating Revenue

The previous paragraph described how organisational aspects can influence the pricing strategy and minimum price of the Fun-ie-Fit centre. In this paragraph this paper will show how other variables influence the costs and revenue, and therefore the break-even point of the Fun-ie-Fit centre. We will discuss the impact of price differentiation, cost reduction, revenue from the bar and additional revenue from events/parties and subsidies or sponsoring.

#### 5.3.2.1 The Impact of Price Differentiation

There are various types of customers that can game and exercise in the Fun-ie-Fit centre. Where there are differences in customers there are differences in pricing. With the help of interviews it became clear that there should be a difference between internal and external customers and between profit and non-profit organisations. By setting a specific price it should be more attractive for sport clubs and foundations to make use of the Fun-ie-Fit centre. At the moment the internal customers are De Klup itself, E-sport club Tactix, KinderKlup and the GameKlup. The internal customers closely related to Stichting De Klup Twente and will therefor pay different prices than organisations that are not closely related to Stichting De Klup Twente.

Price differentiation is essential to stimulate organisations, whose members have a low income, to still make use of the Fun-ie-Fit centre. For Tactix and other sport clubs there should be a special price, since these clubs are not focused on making profit and they cannot afford to spend all their contribution on renting the Fun-ie-Fit centre.

Prices should be different for profit-organisations that do focus on making a profit and that can spend more money on renting the Fun-ie-Fit centre. This has to do this the fact that they simply have

more spending power and this should be used to compensate for the lower prices that are charged to non-profit organisations. Besides the difference that can be created between types of organisations, there can also be a difference in the use-frequency. Customers that rent the centre more frequently should be charged less than customers who only rent the centre for one or two hours in a year.

## 5.3.2.2 The Impact of Cost Reduction

Another way to reduce the price for non-profit organisations and to work at a lower capacity, is by reducing the costs that occur. From the several options this might be one of the hardest to enforce, because a large proportion of the costs that occur are necessary to keep the Fun-ie-Fit centre operational. Besides costs to keep the centre running, Fun-ie-Fit also has to cover some of the costs of the Meester Siebelinkhuis.

However, a lot can be gained when the assumptions that are made in the budget for the years 2014 and 2015 are not that expensive or do not cost as much money as expected. When the overheads such as water, electricity and cleaning are lower than expected, the fixed costs of the centre can be reduced. This would create a direct substantial financial benefit since these assumptions are more than X% of the total costs.

**Total Assumptions** = Extra energy + cleaning by Wajong-youth + organisational costs  $= \emptyset X, -+ \emptyset X, -+ \emptyset X, -+ \emptyset X, -+ \emptyset X$ 

Other significant costs are related to the personnel costs as can be seen in Table 5.17. Research done by Slot (2009) shows that, in general, X% of the costs that are made by sport clubs are related to personnel. The Fun-ie-Fit centre isn't an 'ordinary' sport club, but it still facilitates sports and therefor it is interesting to see that X% of the costs of the centre are related to personnel costs.

Another large cost-post is related to the depreciation of the equipment (X%) but since the Fun-ie-Fit centre works with new and expensive

| Table 5.17: Balance S | port A | Accommodations |
|-----------------------|--------|----------------|
| vs. Fun-ie-Fit centre |        |                |
| Costs                 | (%)    | Fun-ie-Fit (%) |
| Personnel (contract)  |        |                |
| Housing               |        |                |
| Cleaning              |        |                |
| Resources bar         |        |                |
| Capital               |        |                |
| Contributions         |        |                |
| Tournaments           |        |                |
| Rest                  |        |                |

equipment it will be difficult to cut back on these expenses and depreciations (CBS, 2009).

## 5.3.2.3 The Impact of Revenue from the Bar

Research done by NOC NSF shows that sport clubs with their own accommodation generate a lot of revenue from the sales in the bar. In general, 25% of the revenue made by sport clubs comes from the revenue made in the bar of the sport facility (Slot, 2009). This could also be a very important source of revenue for the Fun-ie-Fit centre. However, this will depend on the number and the type of customers that are going to use the centre in the future.

It can be recommended to look carefully at the revenue generated from the bar in the future, because there is the possibility that this can provide substantial revenue. If the research done by the NOC NSF (2009) could be applied on the Fun-ie-Fit centre it could generate  $\in$  X (25% x  $\in$ X). Current prices for consumptions in the Fun-ie-Fit centre are mentioned in Table 5.18.

According to the planning of the Fun-ie-Fit centre there would be 30 people present in the centre per part of day, making up for 480 customers per week according to the agenda. The questionnaire showed that X% of the customers would make use of the bar in the Fun-ie-Fit centre, this is represented by the green line in Graph 5.5 (Appendix D). Graph 5.5 also demonstrates how the profit from the bar increases when more customers make use of it.

**Table 5.18: Contribution of Consumptions** 

| Table 3.18. Contributio | ir or consumptions    |                      |                               |
|-------------------------|-----------------------|----------------------|-------------------------------|
| Consumption             | Price per consumption | Cost per consumption | Profit margin per consumption |
| Alcohol Beer            | € 1,50                | €X                   | €X                            |
| Whine                   | € 2,00                | €X                   | €X                            |
| Alcohol-free Beer       | € 1,00                | €X                   | €X                            |
| Soda                    | € 1,00                | €X                   | €X                            |
| Coffee/Thee             | € 1,00                | €X                   | €X                            |
| Candy                   | € 0,80                | €X                   | €X                            |
| Bifi-sausages           | € 1,00                | €X                   | €X                            |
| Averages                | € 1,19                | €X                   | €X                            |

(Note: the prices are incl. VAT of either 6% or 21%. Source: Prijzen Sligro Knol Dec 2013)

Graph 5.5: Profit from the Fun-ie-Fit Bar

If X% of the 480 customers would use the bar in the Fun-ie-Fit centre, it would generate a profit of € X if the centre is operational for 40 weeks. This revenue stream would cover X% of the costs of the Fun-ie-Fit centre. The profit can even be higher if the centre sells more consumptions than one consumption per customer, or when it sells more consumptions with a profit margin higher than € X, or when more than X% of the customers make use of the bar in the Fun-ie-Fit centre.

## 5.3.2.4 The Impact of Private Parties and Events

Another possible source of revenue can be exploited by renting out the Fun-ie-Fit centre to businesses, organisations or individuals that want to use the Fun-ie-Fit centre for their own events. These events can form a major source of revenue for the Fun-ie-Fit centre because these events will take up multiple hours of the day. Therefore they will cover a large part of the costs.

Let's take for example the party from partner and sponsor NDIX coming up in March 2014. This event will last from 16:00 to 20:00, will host 60 people who will all enjoy drinks, snacks and a buffet. Without the costs for renting the Fun-ie-Fit centre, the event would generate revenue of  $\in$  X and it would cost the centre about  $\in$  X (including rent), making a profit of  $\in$  X for one event (prices excl. VAT). Other organisations, that would pay the rent, would generate  $\in$  X and generate a profit of  $\in$  X because they would pay  $\in$  X per hour for renting the Fun-ie-Fit centre. This  $\in$  X accounts for the costs of more than 15 hours and could be used to fill up gaps in the Fun-ie-Fit exploitation (Appendix F).

#### 5.3.2.5 The Impact of Sponsoring/Subsidy

The Fun-ie-Fit centre is realized with the help of gifts from third parties and help from socially responsible organisations in the region of Almelo. With the help of these partners the Fun-ie-Fit dream became a reality for Stichting De Klup. At the moment, the Fun-ie-Fit centre is still being sponsored by organisations that were involved in the initial phase of the Fun-ie-Fit centre. The sponsoring is organised in different contracts with suppliers who give a discount via a contract. The figures can be found in Table 5.19. Extending these contracts is a direct way to increase the revenue stream for the centre and decreases the necessity to work at full capacity every week.

| Table 5.19: Confirmed Sponsoring for 2015 |    |  |  |  |
|---|----|--|--|--|
| Cogas                                     | €X |  |  |  |
| Soweco                                    | €X |  |  |  |
| Urenco                                    | €X |  |  |  |
| Tubbergen ('Haringparty')                 | €X |  |  |  |
| Obligatory-effort commitment              | €X |  |  |  |
| Foundation 'Friends of De Klup'           | €X |  |  |  |
| Sum                                       | €X |  |  |  |

These sponsor-deals with other organisations will cover over X% of the costs of the Fun-ie-Fit centre. This shows how crucial these revenues are for the centre and how important it will be to continue the partnerships with these organisations.

The sponsoring has not been taken into account in the previous calculations in this paper, since there is no guarantee whether these donations will continue after 2015. Therefor this paper worked with the total cost of  $\in X$  per year from 2015 and beyond.

## 5.4 Results of the Competitive Analysis

The final analysis in this research is related to the competitive environment of the Fun-ie-Fit centre. Here we will describe the competitors of the centre, the threat of new entrants to the market, price trends in existing markets, competitive strategies, the reference value for customers groups and likely reactions to price changes.

#### 5.4.1 Competitors

Peteraf & Bergen (2003) identified four types of competitors in their framework. Competitors can either be; direct rivals, vertical differentiators, potential direct rivals or weak competitors. In this paragraph we will see how other companies can be classified in relation to the Fun-ie-Fit centre.

The Fun-ie-Fit centre offers both organisations and individuals the opportunity to rent the location and make use of the different facilities. When we consider that most of the customers of the Fun-ie-Fit centre will be located in Almelo and the Twente region, we can state that the Fun-ie-Fit centre doesn't have any direct rivals. There isn't an organization in the region of Almelo that has the same standard of facilities and serves the same customer needs. This has to do with the concept behind the Fun-ie-Fit centre, which is that the centre should be accessible and suitable for almost everybody, including people in a wheelchair or people that suffer from other disabilities, such as poor eyesight or hearing problems. With the large amount of space in the centre, the large screens and the quality of the sound system the centre can offer a gaming experience that cannot be experienced elsewhere in the region of Almelo. This means that there are no direct rivals or substitutes as is described by the theory from Peteraf & Bergen (2003).

However, there are companies, with somewhat similar facilities, who are targeting the same kind of customers as the Fun-ie-Fit centre is targeting. These are companies that have gaming facilities and even try to motivate people to exercise more by using games. Indirect rivals in the same region as the Fun-ie-Fit centre are E-sportclub Twente and WZZRD.

#### E-sportclub Twente and WZZRD

Both organizations offer individuals the opportunities to make use of multiple gaming consoles and games. They differ from the Fun-ie-Fit centre in the facilities that they offer and the concept behind gaming. WZZRD is a game café that allows people to enjoy games and organises gaming tournaments. It does offer exergaming on the Wii for example but since it is a café the purpose of these games will mostly be to encourage customers have a good time instead of a work-out. The E-sportclub Twente has a bigger focus on encouraging young children to stay or become active with the help of exergames, but it does this with different kind of facilities as the Fun-ie-Fit centre does. The sportclub rents a room in the Stroinkshuis in Enschede and the consoles are only made available during certain hours, whereas the Fun-ie-Fit centre has a permanent location where people can come to play games. Based on this reasoning the WZZRD café can be considered as a potential direct rival, with the same capabilities as the centre but serving different market needs. The E-sportclub Twente can be considered as a vertical differentiator because it tries to serve the same market needs but doesn't have the capability to do this at a similar level as the Fun-ie-Fit centre does (Peteraf & Bergen, 2003 and <a href="http://drupal.ectwente.nl/">http://drupal.ectwente.nl/</a> and <a href="http://wzzrd.nl/">http://drupal.ectwente.nl/</a> and <a href="http://wzzrd.nl/">http://wzzrd.nl/</a>).

#### **Embedded Fitness**

One company that does have its focus on motivating people to exercise more by using games is Embedded Fitness in Helmond. Next to the Xbox Kinect and the Wii they offer an even wider range of exergame-devices that are specially designed to make exercising more attractive for people. A distinctive difference between Fun-ie-Fit and Embedded Fitness can be found in the diversity of possible devices and the maximum capacity of users available. The Fun-ie-Fit centre has a relatively limited capacity relative to Embedded Fitness. Embedded Fitness is also more designed to take its

equipment to the customers, instead of letting the customers come the them ( <a href="http://www.embeddedfitness.nl/">http://www.embeddedfitness.nl/</a>).

When we look at the potential customer segments of the Fun-ie-Fit centre other indirect competitors can be found by looking where the particular customer segments currently do their activities. These segments involve: sport clubs, primary schools, physiotherapists, business parties, business presentations, team building experiences, parties for children, groups that enjoy gaming, groups of friends looking for a good time and people that want to exercise more. Based on these segments, other indirect competitors are for example other sport clubs and sport halls, companies that rent out spaces for business related events, companies that facilitate business parties and teambuilding experiences. In addition to these competitors, the sport activities of De Klup itself are also a form of indirect competition.

## 5.4.2 Threat of New Entrants

The threat of new entrants on the market is relatively low. This has to do with the costs that are related to the interior design, the purchase of equipment and the installation of the facilities in the Fun-ie-Fit centre. This large investment will discourage possible new entrants from entering this market. Another advantage that the Fun-ie-Fit centre has, is that it has got the 'first-mover advantage'. By being the first to work out this concept of exergaming with the current facilities they are a step ahead of possible new entrants. The third advantage that the centre has over new entrants is the costs they save by working with volunteers. Since most of the activities organized by De Klup, are carried out with the help of volunteers they are able to keep the cost of personnel down. This is an advantage that would be very difficult to copy by possible new entrants and can be the major competitive advantage (Porter, 2008).

However, although it has to be said that the set-up that is used in the Fun-ie-Fit centre is relatively unique and of a high quality it might not be that important for all types of customers. When people come to exergame and exercise, the spacious environment, the quality of both sound and visual equipment can be of great importance. For the people that just want to play games when it suits them, both the E-sport club Twente and WZZRD are possible alternatives. This was also demonstrated in the economic value analysis, where the game facilities (sound and visual) were the least important differentiating factor.

To conclude, the threat of new entrants that will directly compete with the Fun-ie-Fit centre is relatively small, but the chance that there will be more companies that will offer gaming-facilities is larger because these days gaming is a very popular spare-time activity.

## 5.4.3 Price Trends in Existing Markets

#### Prices for renting a location

The first thing this paragraph will do is to look for other sports clubs that rent out spaces for sporting activities in the Almelo area. Sportbedrijf Almelo has differing rental prices for the sport halls in Almelo based on a price per hour. These prices vary for each location, event and frequency of use. The price of renting a sport hall for one hour varies between € 39,90 and € 57,30 per hour. It is also possible to rent these locations for an event, this can be a competition, a business event such as a presentation or a laund, or a party. When renting the sport halls for an event the prices are close to €90,00 per hour (<a href="http://www.sportbedrijfalmelo.nl/">http://www.sportbedrijfalmelo.nl/</a> ). These prices are compared with renting a sport hall in the city of Enschede in order to get a clear picture of pricing structures. The prices for renting a sport hall in Enschede range from € 27,30 to € 53,65 per hour (<a href="http://www.enschede.nl/repository/09169/#.Us6Vf QvQIR">http://www.enschede.nl/repository/09169/#.Us6Vf QvQIR</a> ). For renting a room that has exergaming facilities the prices are higher. Embedded Fitness has set a rent price of € 100,00 per hour.

#### Prices for business events

The price of sports-related business events, despite the large variety, were assessed and ranged from € 20,00 to € 50,00 per person (excl. VAT). Most business events last about 3 hours, leading to a price ranging from € 6,67 to € 16,67 per person per hour. (<a href="http://www.tbevents.nl/bedrijfsuitje/almelo">http://www.prestonpalace.nl/</a>).

#### Prices for children's party

After doing internet research it became clear that children's parties have a price of their own. Prices for this kind of event range from € 8,00 to € 13,00 per person and last about two hours. This leads to a price range of € 4,00 to € 6,50 per hour. Embedded Fitness uses a price of € 10,00 for two hours of exergaming with some candy and a drink. Additionally, children can go to a snack bar when the two hours are over, for an extra € 5,00 per child ( <a href="http://www.kinderfeestjes.nl/forum/topics/id/14">http://www.kinderfeestjes.nl/forum/topics/id/14</a> & <a href="http://www.embeddedfitness.nl/">http://www.embeddedfitness.nl/</a>).

#### Prices for larger groups

When renting out the centre to large groups prices will vary from  $\[ \]$  9,00 to  $\[ \]$  22,50 per person. These events last about 3 hours, creating a price range from  $\[ \]$  3,00 per person per hour to  $\[ \]$  7,50 per person per hour. This price-range does not cover the costs of drinks and dinner and is often set for the evening hours (http://www.prestonpalace.nl/ & http://www.tbevents.nl/uitjes).

With the help of this research it became clear that there are different customers segments for the Fun-ie-Fit centre with varying prices and their own pricing structures. Renters who use the location more frequently should pay a lower price opposed to those who only rent the centre incidentally. It is also customary that there are different arrangements for different groups and different sizes in groups.

#### 5.4.4 Strategy of the Competition

The customer segments of the indirect competitors are very diverse and it is hard to speak of one single competitive strategy. Sport halls are primarily focussed on long term relations with their customers whereas companies that facilitate group arrangements are mostly concerned with the profit margin per person. It also became clear that there are price differences between the hours during the week and the hours during the weekend. There can also be a differentiation in prices between day-hours and evening/night-hours.

## 5.4.5 Reference Value for Customer Groups

The reference value is very important in the economic value analysis because this will help to determine the value of the Fun-ie-Fit centre. The reference value is different for different customer segments because each segment will have a different reference product. The reference values for the three customer segments used in the economic value analysis of the centre are shown in Table 5.20.

Table 5.20: Reference Value of the Fun-ie-Fit centre

| Segment         | Reference Value |         | Price structure        |
|-----------------|-----------------|---------|------------------------|
|                 | Minimum         | Maximum |                        |
| Spare time      | € 4,00          | € 9,00  | Per hour, per customer |
| Exercising      | € 2,08          | € 4,62  | Per hour, per customer |
| Members De Klup | € 0,59          | € 2,05  | Per hour, per customer |

### 5.4.6 Likely reactions to Price Changes

At the moment Fun-ie-Fit centre uses a price of € 50,00 per hour. Since the centre is relatively new and has few customers it's very unlikely that indirect competitors even consider themselves as a competitor of the Fun-ie-Fit centre. Therefor it will be very unlikely that there will be any reactions to the prices set by the Fun-ie-Fit centre. This may change when the Fun-ie-Fit centre becomes very popular and would 'steal' customers from these indirect competitors.

## 5.4.7 Conclusion

With this competitive analysis it became clear that the Fun-ie-Fit centre doesn't have direct competitors and therefore it can determine its price more freely. The expectation is that there will be no new entrants to the market in the short term. This has to do with the large initial investment and the competitive advantage the Fun-ie-Fit centre has by using volunteers instead of personnel.

There is however plenty of indirect competition. When you think of Fun-ie-Fit centre as a location to exercise you come to the conclusion that there are many alternatives. This research looked at alternative locations that can be rented by sport clubs and locations that facilitate in entertaining large groups. Renting a sport hall will cost a frequent user between the € 30,00 and € 50,00 per hour. Renting it incidentally will cost between the € 50,00 and € 115,00 per hour

When looking at the Fun-ie-Fit centre as an entertainment facilitator, there are a lot of different indirect competitors and different pricing structures. The prices of these companies are often based on a price per person instead of a price per hour. The prices vary greatly because some arrangements are 'all-in' whereas other prices excluded food and drinks from the initial price. In general the prices of a business event range from € 20,00 to € 50,00 per person and the events will last for about three hours.

When renting out the centre to larger groups or children's parties prices are much lower. This has to do with the fact that these customers have to pay for themselves instead of a company footing the bill. Prices for larger groups can vary from  $\le 9,00$  per person, often excluding food and drinks in the price, to  $\le 22,50$  per person for an 'all-in' deal for food and drinks. These types of events are likely to last about three hours.

Renting out the location for a children's party falls in an even lower price range. Prices for a children's party vary from  $\le 8,00$  to  $\le 13,00$  per person. These activities last about two hours and are often limited to playing games and having some candy and a drink.

Table 5.21 lists the prices per person per hour, based on the competitive analysis.

Table 5.21: Price range based on the Competitive Analysis

| Customer segment    | Minimum price | Maximum price | Based on             |
|---------------------|---------------|---------------|----------------------|
| Rent out for sports |               |               |                      |
| Frequent            | € 30,00       | € 50,00       | Per hour             |
| Incidental/Event    | € 50,00       | € 115,00      | Per hour             |
|                     |               |               |                      |
| Rent out for        |               |               |                      |
| business/private    |               |               |                      |
| Business (event)    | € 6,67        | € 16,67       | Per person, per hour |
| Larger groups       | € 3,00        | € 7,50        | Per person, per hour |
| Children's party    | € 4,00        | € 6,50        | Per person, per hour |

## **5.5 Determining Price Ranges**

The last step in the Hinterhuber (2004) framework is use the economic value analysis, the cost-volume-profit analysis and the competitive analysis to come up with an effective pricing strategy. The outcomes of the analyses are summarized in Table 5.22.

In this research, the economic value analysis is only used to assess the value of the Fun-ie-Fit centre to individual customers and can therefore not give a price per hour. However, by using the estimate from the management of 30 people per part of day, and 480 per week, it's possible to determine the price per hour when the average amount of customers would be 9,41 per hour (480 customer/51 hours). The perceived value of the centre for members of Stichting De Klup is not used as the minimum price, because this customer segment is used to very different prices and should not be used as the main source of income for the Fun-ie-Fit centre. It should also be noted that the prices of the competitive analysis are related to different customer segments and should therefore not be used in all circumstances.

Table 5.22: Summary of the Three Analyses (in Euro's)

| Price                        | Economic Value<br>Analysis |       |       |        |      | Cost-Volume-<br>Profit Analysis |      |      | Competitive<br>Analysis |        |
|------------------------------|----------------------------|-------|-------|--------|------|---------------------------------|------|------|-------------------------|--------|
| Segment                      | Spare                      | time  | Exerc | cising | De   | Klup                            |      |      |                         |        |
|                              | Min.                       | Мах.  | Min.  | Мах.   | Min. | Мах.                            | Min. | Мах. | Min                     | Мах.   |
| Per hour                     | 27,95                      | 66,35 | 25,22 | 44,61  | 5,46 | 19,11                           | x    | X    | 30,00                   | 115,00 |
| Per<br>customer,<br>per hour | 2,97                       | 7,05  | 2,68  | 4,74   | 0,58 | 2,03                            | X    | Х    | 3,00                    | 16,67  |

## 5.6 What types of different users make use of the Fun-ie-Fit centre?

This sub-question was answered with the help of the questionnaire about the Fun-ie-Fit centre. The questionnaire made it possible to identify different customer segments and different types of users of the Fun-ie-Fit centre (Appendix C).

#### Why make use of the Fun-ie-Fit centre

The first differences are created by the motivation of users of the Fun-ie-Fit centre. More than 30% of the respondents said they would use the Fun-ie-Fit centre as a spare-time activity and another 25% would use the Fun-ie-Fit centre as a way to enjoy a work-out. 12% of the respondents would like to get more in contact with other people through the use of Fun-ie-Fit (Appendix D).

### **Time Preferences**

It is also possible to identify different users by looking at the preferred time that they would make use of the Fun-ie-Fit centre. Evenings are by far the most preferred time, except on Sundays when people would rather game in the afternoon. The duration of a session in the Fun-ie-Fit centre is related to the time preference. Most respondents would like to use the centre for one hour per session (61,4%), 17,54% would like to game for an hour and a half, 15,19% would like to game for two hours and only 5,26% would like to game for more than two hours (Appendix D).

#### **Current Users**

The current users are using the Fun-ie-Fit centre for various purposes. E-sport club Tactix uses the Fun-ie-Fit centre with young customers (<16) to exercise and enjoy a work-out, while the older customers, mostly 16+, are more involved in competitive gaming and play more strategic related games. The SportKlup uses the Fun-ie-Fit centre every Tuesday evening and their goal is to exercise with the help of the gaming facilities in the Fun-ie-Fit centre. The KinderKlub, for children with a disability, uses the Fun-ie-Fit centre both for stimulating exercising and to teach children to work and play together. The GameKlup uses the Fun-ie-Fit centre with the same intentions as the KinderKlup, but with a mix of able and disabled children.

#### Conclusion

All in all, it is possible to identify many different user groups by their preferences, but the most useful classification for pricing decisions is related to the reason why people would like to use the Fun-ie-Fit centre, because this is will make it possible to create larger segments (Appendix D).

# 5.7 How can the participation of users of the Fun-ie-Fit centre be stimulated?

The goal is to provide advice on how the Fun-ie-Fit centre can make itself more attractive for different customers. With the help of the surveys and the interviews with several customers and staff members several solutions are mentioned below.

#### **Price Differentiation**

One of the first methods to stimulate more people to make use of the Fun-ie-Fit centre is price differentiation. For people with a disability, who haven't got much to spend, it will be important to charge a relatively low price in order to make it financially attractive for these people to come. Price differentiation can also be useful when targeting non-profit organisations, since the financial resources of these organisations are often limited. Price differentiation can also be useful to attract more customers to use the off-peak hours (9:00-12:00). This way the flow of customers during the entire day can be distributed more evenly.

#### **Special Opening Hours**

Another way of attracting people to the Fun-ie-Fit centre is by reserving a number of hours for selected customer segments. By reserving special hours it is possible to make the Fun-ie-Fit attractive for customer segments that would benefit from a more 'closed' environment and it would allow them to use the centre with similar people. The 'closed environment' can be especially useful for people with a disability who do not react well to too many people or a lot of distraction. With special openings hours De Klup can also meet some of the social goals, mentioned in the pricing objectives and in the planning of the Fun-ie-Fit centre (Anema, 2012).

#### **Investing in Equipment**

Equipment can make the Fun-ie-Fit more attractive for a number of reasons. First of all, by buying the latest gaming consoles and games the centre can become very attractive for people that really enjoy gaming. Secondly, special gaming equipment for the customer segment that cope with a physical disability can make the Fun-ie-Fit centre more attractive. This would enable even the people that get very little exercise to work up a sweat in the Fun-ie-Fit centre, or at least enjoy themselves. The third reason why investing in equipment may attract people to the Fun-ie-Fit centre has to do with the capacity of the centre. With more equipment, more people will be able to enjoy the game. This also implies that the Fun-ie-Fit centre will be able to house more people at the same time.

#### Guidance for People with a Disability

Several comments in the survey made it clear that the help of the volunteers of De Klup is very important for this customer segment. This segment requires the help of volunteers to start-up the consoles and games to get them playing. Guidance or a person that can help is very important for the gaming experience of people with a disability. Without good help these people might stop coming to the Fun-ie-Fit centre.

#### Theme-Days

Another way in which the Fun-ie-Fit centre can stimulate participation of customers is by special theme-days. This is something that will be done in April and has been done in the past with a boxing clinic. In 'the Week of Autism' the centre will host an event that will facilitate presentations and workshops about gaming and autism. With these kinds of events the centre can make itself known to more than just the people in Almelo.

#### Conclusion

Users and customers of the Fun-ie-Fit centre can be stimulated in different way to participate in the Fun-ie-Fit centre. Price differentiation will allow people with less money to use the centre. Special opening hours will make the centre more attractive for people that would like to play with their own specific group. Investing in equipment will make the centre more attractive for people that enjoy gaming and it can increase the capacity of the centre. Help for people with a physical disability is very important and will be essential for them to enjoy themselves in the centre. Finally, theme-days have the potential to increase the awareness for people outside Almelo and can attract new and different types of customers.

## 6. Conclusion and Discussion

In this chapter this paper will answer the research questions used in this investigation by using the insights gained from the results mentioned in the previous chapter. With the help of the three analyses, the interviews with personnel and customers it is possible to make recommendations related to the pricing strategy of the Fun-ie-Fit centre and how it can break-even. The main research question that needs to be answered is:

How can the price-strategy of the Fun-ie-Fit centre be organized in order to hit break-even?; and How can the participation of different customers in the Fun-ie-Fit centre be stimulated?

In addition to the conclusions and the recommendations based on the results, this chapter will also discuss the limitations to this research and mention some possibilities for future research.

#### 6.1 Conclusion

Based on the literature review in chapter 2 it was possible to identify the most common pricing methods used in the service sector. The review also demonstrated that each of the three main pricing method categories, based on costs, competitors or customer value, all have their own advantages and disadvantages. To exclude the disadvantages and include the advantages of these methods this research used the integrated framework proposed by Hinterhuber to determine the pricing strategy for the Fun-ie-Fit centre. The first step in this framework was to determine the pricing objectives in order to give a direction to the pricing strategy.

Based on the interviews with the management of Stichting De Klup Twente, the people and organization that established the Fun-ie-Fit centre, the following pricing objectives were derived: cost coverage, achieving satisfactory profits, achieving social goals, charging a fair price and long term survival. The objectives are not equally important but should be balanced when setting the pricing strategy of the Fun-ie-Fit centre.

The main body of this research is based on the three key elements of the pricing strategy; namely the customer-, company- and competition-perspective. With the help of the economic value analysis to understand the value to customers, the cost-volume-profit analysis to understand the implication of price- and volume changes and the competitive analysis to understand price trends and competitive strategies, this research uses different insights to make recommendations about the pricing strategy for the Fun-ie-Fit centre.

In the economic value analysis three main customer segments were identified, namely, customers that view the Fun-ie-Fit centre as a spare time activity, customers that view the centre as a good way to enjoy a work-out and customers that are members of Stichting De Klup Twente. By performing the conjoint analysis, a decomposable value assessment method, it was possible to determine important differentiating factors and the value of the Fun-ie-Fit centre for each of these customer segments. An interesting conclusion is that most respondents prefer few people and little interaction in the Fun-ie-Fit centre, this may be due to the fact that the gaming experience becomes less when there are more, or too many, people present in the centre. Another interesting finding was that the quality of the facilities is not that important for the customers, the amount of space in the Fun-ie-Fit centre and the number of gaming consoles and games is a more important factor in determining the value of the Fun-ie-Fit centre.

Based on the economic value analysis it was possible to create a monetary value pool to determine the prices for different customer segments and customers with varying reference products. The monetary value for the 'spare time' segment lies between the € 2,97 and € 7,05 per customer per hour, the value for customers that come to exercise ranges from € 2,68 to € 4,74 per customer per

hour and the value for members of Stichting De Klup is € 2,03 when considering the Fun-ie-Fit centre is not part of the Meester Siebelinkhuis.

The cost-volume-profit analysis is used to determine the price floor for the Fun-ie-Fit centre based on the costs the Fun-ie-Fit centre incurs according to the budget forecast of 2015. The total costs in that year, consisting out of salary-, housing-, organisational- and running-costs, are € X. Realistic opening hours were set at 51 hours per week by the business leader, since the Fun-ie-Fit centre requires volunteers to keep it running. The number of weeks the centre will be open lies between 40 and 45 weeks per year, because this is in line with the activities of Stichting De Klup Twente. The number of customers is expected to be 30 per part of day and 480 per week according to the planning of the Fun-ie-Fit centre. Since this analysis could only be used when certain assumptions are made the minimum price per hour will vary between the € X and € X and the minimal price per customer per hour will vary between the € X and € X. These prices form the price floor, or price bottom, for the pricing strategy for the Fun-ie-Fit centre.

The competitive analysis was used to determine price trends in related existing markets and to identify competitors of the Fun-ie-Fit centre. No direct competitors were identified in the region of Almelo, but there are however enough alternatives for customers that view the centre as spare-time activity or a place to enjoy a work-out. The threat of new entrants is relatively low at the moment due to the large investment needed to build this kind of facility and the advantage the centre has by using volunteers instead of personnel. The threat of new entrants can become larger when the Funie-Fit centre becomes a financial success.

Since the centre can be used for a lot of different purposes there are a lot of alternatives and reference products with different prices and pricing structures. In general the competitive analysis showed that the price of the Fun-ie-Fit centre should lie between the  $\leqslant$  30,00 and  $\leqslant$  115,00 per hour and between the  $\leqslant$  3,00 and  $\leqslant$  16,67 per customer per hour. This will depend on what the centre can offer, besides just a location where people can enjoy gaming and have a good time. The findings of the three analyses are reported in Table 6.2.

Table 6.2: Summary of the Three Analyses (in Euro's)

| Price                        | rice  |        | Economic Value<br>Analysis |        | Cost-Volume-<br>Profit Analysis |       | Competitive<br>Analysis |      |       |        |
|------------------------------|-------|--------|----------------------------|--------|---------------------------------|-------|-------------------------|------|-------|--------|
| Segment                      | Spare | e time | Exerc                      | cising | De                              | Klup  |                         |      |       |        |
|                              | Min.  | Мах.   | Min.                       | Мах.   | Min.                            | Мах.  | Min.                    | Мах. | Min   | Мах.   |
| Per hour                     | 27,95 | 66,35  | 25,22                      | 44,61  | 5,46                            | 19,11 | x                       | x    | 30,00 | 115,00 |
| Per<br>customer,<br>per hour | 2,97  | 7,05   | 2,68                       | 4,74   | 0,58                            | 2,03  | Х                       | Х    | 3,00  | 16,67  |

With the information of Table 6.2 it is possible to determine the pricing strategy of the Fun-ie-Fit centre under certain conditions. Considering the centre is operational for at least 40 weeks per year and open for 51 hours per week, the average minimum price should be  $\in$  X per hour or  $\in$  Xper customer per hour considering 480 customers per week. According to the analyses the maximum price for the Fun-ie-Fit centre should be  $\in$  X per hour or  $\in$  X per customer per hour. However, these are prices related to special and incidental events according to the competitive analysis. That it's why it's more sensible to use the economic value analysis for the price ceiling of the pricing strategy. The maximum price of the Fun-ie-Fit centre should on average be  $\in$  X per hour or  $\in$  X per customer per hour. With these prices set for the Fun-ie-Fit centre the centre should be able to break-even, because the minimum price ensures that the average costs are covered by charging the price derived from

the CVP analysis. The maximum price creates room for the Fun-ie-Fit centre to achieve some of their pricing objectives. By charging higher prices for certain customer segments or special events the price for members of Stichting De Klup could be lower, making it possible for them to use the centre and therefore achieving some part of their social goals. By using the total costs per year of the centre and determining the price floor by calculating the average costs instead of variable costs, the prices derived from the CVP analysis are useful to stimulate long-term survival since all fixed costs are considered in the calculations. Achieving satisfactory profits and charging a fair price is possible by segmenting the customers. Charging a higher price to profit organizations than non-profit organizations creates price differentiation and can create profits while still charging a 'perceived' fair price for the Fun-ie-Fit centre.

#### 6.2 Recommendations

Based on the results from the analyses, the questionnaires and interviews it is possible to make several recommendations about the pricing strategy of the Fun-ie-Fit centre and how this can help to ensure break-even. These recommendations are listed here below:

- Based on the three analyses the prices of the Fun-ie-Fit centre should fall in the following ranges: the price for the Fun-ie-Fit centre should be at least € X per hour with € X per hour being the maximum price. The price for the Fun-ie-Fit centre should be at least € X per customer per hour with a maximum of € X per customer per hour.
- The prices for special event or special occasions should be higher than prices for more frequent and regular customers. The prices for special events should be at least € X per hour with a maximum of € X per hour. Prices for individual customers will depend on the number of customers present during an event. The price per customer per hour should at least cover the minimal costs of € X per hour, this being € X per customer per hour with 10 customers. Prices can be lower per person per hour if the number of customers is increased, but it should still cover the minimum price of € X per hour.
- The number of weeks open per year should be as close to the maximum as possible, because more weeks open per year would spread the costs over more weeks and thereby reducing the stress on the capacity, the price and the required number of customers per week to break-even.
- The Fun-ie-Fit centre should also extend its opening hours, especially during the evenings.
   The questionnaire showed that most people prefer to make use of the Fun-ie-Fit centre in the afternoon and the evenings. It is also recommended to be open on Sundays instead of Saturdays due to customer preferences.
- Another recommendation is to look at the costs of the Fun-ie-Fit centre and how these could be reduced. Especially the costs of staff, cleaning and depreciations are high cost posts for the centre. It can also be recommended to keep a close eye on the assumptions made in the budget forecast because this can either reduce or increase the total costs in the future.
- Generating revenue by selling consumptions has the potential to have a real impact on the revenue stream of the Fun-ie-Fit centre. Every consumption that is sold generates a profit and contributes to covering the costs of the Fun-ie-Fit centre.
- The special events can be an important source of revenue for the Fun-ie-Fit centre because
  prices for these events will be higher than normal and additional revenue can be gained from
  selling drinks, snacks and dinner. This only works when the centre is able to keep the costs
  down by working with volunteers.
- The final recommendation is to try to renew or continue the contracts with the current sponsors. The sponsoring is a direct way to generate revenue and can cover a substantial part of the costs of the Fun-ie-Fit centre.

#### 6.3 Limitations

As with many researches, this paper also has its limitations. These limitations say something about the way the research is conducted and how the choices made in this research will have impact on the results, conclusions and recommendations.

One of the limitations of this research is that the Hinterhuber (2004) framework is not a framework that has been used often by researchers in determining the pricing strategy of an organization. Since there are not many examples of this framework some questions can be asked about the usefulness of the added value of this framework.

Another limitation to this research is the number of respondents used in both the conjoint analysis and the economic value analysis. The limited sample size of 40 (74 in total) respondents is makes it more difficult to make statements about the preferences and value assessment of other (potential) customers. Especially when considering most conjoint analyses use a sample size of over 200 respondents per customer segment, creating conjoint analyses with up to 1.200 respondents (Orme, 2010).

Another limitation in the conjoint analysis is the way the differentiating factors were described and presented. The analysis might have come up with different results if all attributes had three levels, but in order to reduce the number of cards per respondent the number of levels has been limited.

The final limitation that we mention has to do with the assumptions made in the cost-volume-profit analysis. In order to make recommendations, some assumptions and estimates had to be made about the Fun-ie-Fit centre in order to come up with a cost price. The downside of these assumptions is that if one variable would change, the outcome of the analysis can be quite different, which may lead to different cost prices.

#### 6.4 Future Research

Based on this research it would be interesting to take a closer look pricing strategies used in non-profit industries. Little research was found about the pricing strategies of these kinds of organisations, that is why this paper used literature from the service industry instead. Besides the pricing strategy it might also be valuable to get more insight into the pricing objectives of non-profit organisations because it is fair to say that these organisations might have completely different objectives then service firms in general, as is stated by Avlonitis & Indounas (2005).

It might also be interesting to see how respondents would react to a similar conjoint analysis questionnaire with different attribute levels to see how the utility scores and importance ratings would change by choosing different levels.

## References

- Anema, J. (2012). 2012-2015 FUN-IE-FIT online, de realisatie van een droom. Stichting de Klup Twente
- Anderson, J. C., Jain, D. C., & Chintagunta, P.K. (1992). *Customer Value Assessment in Business Markets: A State-of-Practice Study*. Journal of Business-to-Business Marketing, Vol. 1, The Haworth Press, Inc.
- Auty, S. (1995). *Using Conjoint Analysis in Industrial Marketing: The Role of Judgment*. Industrial Marketing Management, Vol. 24, pp. 191-206, Elsevier Science Inc., New York
- Avlonitis, G. J., & Indounas, K. A. (2005). *Pricing objectives and pricing methods in the services sector*. Journal of Services Marketing, Vol. 19, pp. 47-57, Emerald Group Publishing Limited
- Avlonitis, G. J., & Indounas, K. A. (2007). *Service pricing: An empirical investigation*. Journal of Retailing and Consumer Services, Vol. 14, pp. 83-94, Elsevier Ltd.
- Babbie, E. R. (2010). *The Practice of Social Research.* Cengage Learning.
- Backman, J. (1953). Price Practices and Price Policies. Ronald Press, New York
- Barney, J. (1991). *Firm Resources and Sustained Competitive Advantage*. Journal of Management, Vol. 17, No. 1, pp. 99-120
- Berry, A. & Jarvis, R. (2006). *Accounting in a Business Context, 4<sup>th</sup> ed.,* Cengage Learning EMEA, London
- Diamantopoulos, A. (2003). *Pricing*: In The Marketing Book by Baker, M. J., Vol. 5, pp. 342-359, Butterworth Heinemann
- Dolan, R. J. & Simon, H. (1996). *Power Pricing: How managing Price Transforms the Bottom Line*. Free Press, New York
- Drury, C. (2012). Management and Cost Accounting, 8<sup>th</sup> ed., Cengage Learning EMEA, London
- De Veaux, R. D., Velleman, P. F., & Bock, D. E. (2008). *Stats: Data and Models, 2<sup>nd</sup> ed.*, Person Education, Inc
- Gemeente Almelo. (2012). Kortweg Almelo. Gemeente Almelo, Almelo
- Green, P. E., & Srinivasan, V. (1978). *Conjoint analysis in consumer research: issues and outlook*. Journal of consumer research, 103-123.).
- Hansmann, H. (1987). *Economic theories of nonprofit organization*. The nonprofit sector: A research handbook, Vol. 1, pp. 27-42.
- Heisinger, K. (2009). Essentials of Managerial Accounting. Cengage Learning.
- Hinterhuber, A. (2004). *Towards value-based pricing An integrative framework for decision making*. Industrial Marketing Management, Vol. 33, pp. 765-778
- Hinterhuber, A. (2008). *Customer value-based pricing strategies: why companies resist.*Journal of Business Strategy, Vol. 29, No. 4, pp. 41-50. Emerald Group Publishing Limited
- Hinterhuber, A. & Liozu, S. (2012). *Is it time to rethink your pricing strategy?* MIT Sloan Management Review, Vol. 53, No. 4, pp. 69-77
- Huizingh, E. (2010). Inleiding SPSS 18 voor IBM SPSS Statistics en Data Collection Author, 10<sup>e</sup> ed., Sdu Uitgevers,
- Ikemoto, H., & Yamaoka, T. (2011). Conjoint Analysis Method That Minimizes the Number of Profile Cards: In HCI International 2011–Posters' Extended Abstracts (pp. 23-28). Springer Berlin Heidelberg.
- Ingenbleek, P., Debruyne, M., Frambach, R. T., & Verhallen, T. M. (2003). *Successful new product pricing practices: a contingency approach.* Marketing letters, Vol. 14, pp. 289-305

- Malhorta, N. (1996). The impact of the academy of marketing science on marketing scholarship an analysis of the research published in JAMS. Journal of the Academy of Marketing Science, Vol. 24, No. 4, pp. 291-298
- McCarthy, K., Hodgkinson, V. & Sumariwalla, R. (eds) (1992). *The Nonprofit Sector in the Global Community*. Jossey Bass, San Francisco, California
- Myers, M., Cavusgil, S., & Diamantopoulos, A. (2002). *Antecedents and actions of export pricing strategy*. European Journal of Marketing, Vol. 36 No. 12, pp. 159-188
- Nagle, T. T. & Holden, R. K. (1995). *The Strategy and Tactics of Pricing.* Prentice-Hall, Englewood, Cliffs, NJ.
- Nagle, T. T., Hogan, J. E., & Zale, J. (2011). *The Strategy and Tactics of Pricing, 5<sup>th</sup> ed.*, Prentice Hall
- Ohmae, K. (1982). The mind of the strategist The art of Japanese business. New York: McGraw-Hill
- Orme, B. (2010). *Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research*, 2<sup>nd</sup> ed., Madison, Wis.: Research Publishers LLC.
- O'Neill, M. (1989). *The Third America: The Emergence of the Nonprofit Sector in the United States*. Jossey Bass, San Francisco, California
- Overdorp, J. (2012). Activiteiten Kalender 2012. Stichting De Klup Twente
- Oxenfeldt, A. R. (1961). Pricing for marketing executives. Wadsworth Pub. Co..
- Peteraf, M. A., & Bergen M. E. (2003). Scanning Dynamic Competitive Landscapes: A Market-based and Resource-based Framework. Strategic Management Journal, Vol. 24, pp. 1027-1041, John Wiley & Sons, Ltd.
- Porter, M. E. (2008). *The five competitive forces that shape strategy*. Harvard business review, 86(1), 25-40.
- Raju, J., & Zhang, Z. J. (2010). *Smart Pricing: How Google, Priceline, and Leading Businesses Use Pricing Innovation for Profitability*. Pearson Prentice Hall

  Via; (http://www.ftpress.com/articles/article.aspx?p=1569334&seqNum=2)
- Ramírez-Hurtado, J. (2010). Measuring Preferences: from Conjoint Analysis to Integrated Conjoint Experiments. Revista de Mètodos Cuantitativor Para La Economía Y La Empresa, Vol. 9, pp. 28-43
- Shipley, D., & Jobber, D. (2001). *Integrative Pricing via the Pricing Wheel*. Industrial Marketing Management, Vol. 30, pp. 301-314, Elsevier Science Inc., New York
- Simon, H. (1992). *Pricing opportunities and how to exploit them.* Sloan Management Review, Winter, pp. 55-65
- Simon, H., Butscher, S. A., & Sebastian, K. (2003). *Better pricing processes for higher profits*. Business Strategy Review, Vol. 14, No. 2, pp. 63-67
- Slot, G. (2009). De economie van de sportvereniging: Wat merkt de sportvereniging van de economische crisis. NOC\*NSF
- SPSS Inc., (2010). *Conjoint Analysis*. IBM Company
- Te Pas, J. (2013). Accountantverslag 2012 Stichting De Klup Twente. Eshuis Registeraccountants
- Wittink, D. R. & Cattin, P. (1989). *Commercial use of conjoint analysis: an update*. Journal of Marketing, Vol. 53, No. 3, pp. 91-96

#### **Internet Sources**

Bedrijfsuitjes Almelo, accessed at November 24, 2013 <a href="http://www.tbevents.nl/bedrijfsuitje/almelo">http://www.tbevents.nl/bedrijfsuitje/almelo</a>

Case study Value-based pricing, accessed at December 1, 2013 http://sloanreview.mit.edu/article/setting-prices-based-on-customer-value/

CBS, accessed at February 3, 2013

 $\frac{\text{http://statline.cbs.nl/StatWeb/publication/?VW=T\&DM=SLNL\&PA=70256ned\&D1=1-2,7-23,42\&D2=0-4,6,9-13\&D3=a\&HD=090710-1514\&HDR=G1\&STB=T,G2\ ).}$ 

Competitors (direct), accessed at December 10, 2013 <a href="http://www.businessdictionary.com/definition/direct-competition.html">http://www.businessdictionary.com/definition/direct-competition.html</a>

Competitors (indirect), accessed at December 10, 2013 <a href="http://www.businessdictionary.com/definition/indirect-competition.html">http://www.businessdictionary.com/definition/indirect-competition.html</a>

E-sport vereniging Twente, accessed at December 19, 2013 <a href="http://drupal.ectwente.nl/">http://drupal.ectwente.nl/</a>
<a href="http://www.sportboulevardenschede.nl/activiteiten/e-gaming/">http://www.sportboulevardenschede.nl/activiteiten/e-gaming/</a>

Goedevraag.nl, Length of movies

 $\frac{\text{http://www.goeievraag.nl/vraag/entertainment-muziek/films/gemiddelde-speeltijd-films-dvd.207461}$ 

Healthcity, Fitness centre http://www.healthcity.nl/roosters-tijden/healthcity-almelo-groenplein

Kinderfeestjes, Overijssel, accessed at December 10, 2013 http://www.kinderfeestjes.nl/forum/topics/id/14

Kwiksurvey, accessed at December 16, 2013 <a href="https://www.kwiksurvey.com">www.kwiksurvey.com</a>

Preston Palace, Almelo, accessed at December 10, 2013 http://www.prestonpalace.nl/zakelijk

Sportbedrijf Almelo, accessed at January 13, 2013 <a href="http://www.sportbedrijfalmelo.nl/tarieven-2">http://www.sportbedrijfalmelo.nl/tarieven-2</a>

Sport Halls Enschede, accessed at January 13, 2013 http://www.enschede.nl/repository/09169/#.Us6Vf\_QvQIR http://www.enschede.nl/repository/09169/#.Ut0wUBDb\_IU

Stichting De Klup Twente, accessed at November 18, 2013 http://www.deklup.nl/stichting/

WZZRD Cafe Enschede, accessed at December 9, 2013 <a href="http://wzzrd.nl/">http://wzzrd.nl/</a>

## Appendix A: Agenda Fun-ie-Fit centrum

|           | Morning<br>(9:00-12:00) | Afternoon<br>(13:00-17:00) |                 | Evening (19:00-21:00) | Sum      |
|-----------|-------------------------|----------------------------|-----------------|-----------------------|----------|
| Monday    | 3h free                 | 4h free                    |                 | 4 h Tactix            | 11h      |
| Tuesday   | 3h free                 | 4h free                    |                 | 2h De Klup            | 9h       |
| Wednesday | 3h free                 | 2,5h free                  | 1,5h KinderKlup | 2h De Klup            | 9h       |
| Thursday  | 3h free                 | 2,5h free                  | 1,5h GameKlup   | 2h De Klup            | 9h       |
| Friday    | 3h free                 | 4h free                    |                 | 2h free               | 9h       |
| Saturday  | -                       | 4h free                    |                 | -                     | 4h       |
| Sunday    | -                       | -                          |                 | -                     | -        |
| Sum       | 15 hours                | 21 hours                   | 3 hours         | 12 hours              | 51 hours |

## **Appendix B: Exploitation Fun-ie-Fit centre 2012-2015**

## **Appendix C: Survey Fun-ie-Fit centre**

## **Questionnaire Fun-ie-Fit Centrum**

Over more than half a year De Klup Twente has its own Funie-Fit centrum. The Fun-ie-Fit centrum is an old gym hall which has been converted in a digital health-centre. The Fun-ie-Fit centre was established to make exercising more



fun and that is why you can play all kinds of exergames in the centre. The centre uses the most brand new gaming consoles like the Wii U, the PlayStation Move and the Xbox Kinect. You play the exergames without using a controller, you are the controller! By moving your body in certain ways you play the game and exercise at the same time.

The Fun-ie-Fit centre, located in the Meester Siebelinkhuis, allows people to play exergames in the best facilities. The centre is equipped with large screens, a good sound system, many different gaming consoles, a large number of games and a 'social media' room. All these factors create a unique gaming-experience!

#### Why this questionnaire?

The goal of this questionnaire is to assess how the current users and potential users value the Fun-ie-Fit and what they find important aspect about Fun-ie-Fit.

Several examples of Exergaming in the Fun-ie-Fit centre!

Bankhangers in beweging

## Part 1: You and Fun-ie-Fit

| 1) |   | Do you participate in sports? Which sport do you do the most? |
|----|---|---|
|    | 0 | Fitness   |
|    | 0 | Soccer  |
|    | 0 | Tennis  |
|    | 0 | Speed cycling   |
|    | 0 | Running   |
|    | 0 | Swimming  |
|    | 0 | Hiking  |
|    | 0 | Dancing   |
|    | 0 | Ski/snowboard   |
|    | 0 | Group lessons on music  |
|    | 0 | Exergaming  |
|    | 0 | Other,  |
|    | 0 | I don't do sports   |
|    |   |   |
| ٠, |   |   |
| 2) |   | Are you familiar with the Fun-ie-Fit centre?                  |
|    | 0 | No<br>V   |
|    | 0 | Yes   |
|    |   |   |
| 3) |   | Have you ever used the FUN-IE-FIT centre?                     |
| ٦) | 0 | No  |
|    | 0 | Yes   |
|    | O | 103   |
|    |   |   |
| 4) |   | How often have you played in the Fun-ie-Fit centre?           |
|    | 0 |   |
|    | 0 | Inapplicable  |
|    |   |   |
|    |   |   |
| 5) |   | (If) you play in Fun-ie-Fit, what would be your main goal?    |
|    | 0 | Spare time activity   |
|    | 0 | Fanatic gaming  |
|    | 0 | Enjoying a work-out   |
|    | 0 | Recovering from injury  |
|    | 0 | Getting in contact with other gamers                          |
|    | 0 | Getting in contact with other people                          |
|    | 0 | Other,  |
|    |   |   |

6) When would you like to sport in FUN-IE-FIT? (Multiple options)

|           | Morning (8:00-12:00) | Afternoon (12:00-18:00) | Evening (18:00-22:00) |
|-----------|----------------------|-------------------------|-----------------------|
| Monday    | 0                    | 0                       | 0                     |
| Tuesday   | 0                    | 0                       | 0                     |
| Wednesday | 0                    | 0                       | 0                     |
| Thursday  | 0                    | 0                       | 0                     |
| Friday    | 0                    | 0                       | 0                     |
| Saturday  | 0                    | 0                       | 0                     |
| Sunday    | 0                    | 0                       | 0                     |

- 7) How long would you like to exercise in FUN-IE-FIT in one session?
  - o A hour
  - One and a half hour
  - o Two hours
  - o More than two hours
- 8) How often would you like to sport in FUN-IE-FIT?
  - o Once a week
  - o Twice a week
  - More than twice a week
  - o Once a month
  - Less than once a month
- 9) Would you make use of the bar when gaming in the FUN-IE-FIT centre?
  - o No
  - o Maybe
  - o Yes
- 10) How would you like to pay for the use of Fun-ie-Fit?
  - o Per hour
  - o Per week
  - o Per month
  - Per quarter
  - o Per year
  - o Paying for 10-times in advance
- 11) How would you like the payment to occur?
  - o Cash
  - o Giro
  - o Automatic withdraw
- 12) Are you interested in a membership at the Fun-ie-Fit centre?
  - o No
  - o Maybe
  - o Yes
  - Already have one

## Part 2: Your preferences and the Fun-ie-Fit centre

In this part of the questionnaire we ask you to rate several combinations of important factors of the Fun-ie-Fit centre. The important factors are:

#### Amount of Space

One of the most differentiating factors of the Fun-ie-Fit centre is the amount of space available when playing the exergames. This factor is divided in:

- Little space
- Enough space
- A lot of space

#### Gaming facilities

Fun-ie-Fit is able to provide a unique gaming experience. With the aid of a large screen and a good sound system the gaming experience reaches a new level. We can differentiate this factor in:

- Normal visual and sound quality
- High visual and sound quality



Fun-ie-Fit is equipped with very modern equipment. You can think of the PlayStation 4, the Xbox Ki-nect and the Wii U. The centre also has a large collection of games available.

- Little choice in games & gaming consoles
- A lot of choice in games & gaming consoles

#### Social interaction

One of the objectives of the Fun-ie-Fit centre is to bring people together and encourage people to interact together. Gaming is very suitable to play both with and against other people. Social interaction is divided in:

- Few people present and little interaction
- Many people present and a lot of interaction







## Rating

In the next couple of pages you will find 12 cards. Every card has a different combination of the 4 factors mentioned on the previous page. We would ask you to give your **preference** for a certain combination. You can give your preference with a grade on **a scale from 0 to 10**. In this scale '0= No preference' and '10= High preference'. Of course you can choose for a grade between 0 and 10, if this better reflects your preference for a certain combination.

Hint: To make it easier for yourself, it can be valuable to first think what your find the most important aspect of the Fun-ie-Fit centre (Amount of Space, Gaming facilities, Available Equipment, Social interaction).

#### Card 1

Space: Small

Visual- and sound quality: Normal

Available equipment: A lot of choice in games & consoles Social interaction: A lot of people present, a lot of interaction

What grade do you give this combination:....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 2

Space: Spacious

Visual- and sound quality: High

Available equipment: A lot of choice in games & consoles Social interaction: Few people present, little interaction

What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

### Card 3

Space: Spacious

Visual- and sound quality: High

Available equipment: Little choice in games & consoles Social interaction: A lot of people present, a lot of interaction

What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 4

Space: Enough

Visual- and sound quality: High

Available equipment: A lot of choice in games & consoles Social interaction: Few people present, little interaction

What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 5

Space: Spacious

Visual- and sound quality: Normal

Available equipment: A lot of choice in games & consoles Social interaction: A lot of people present, a lot of interaction

What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 6

Space: Small

Visual- and sound quality: High

Available equipment: Little choice in games & consoles
Social interaction: A lot of people present, a lot of interaction

What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 7

Space: Enough

Visual- and sound quality: Normal

Available equipment: A lot of choice in games & consoles Social interaction: A lot of people present, a lot of interaction

What grade do you give this combination:.....

( 0 = 'No preference'; ....; 10 = 'High preference)

#### Card 8

Space: Enough

Visual- and sound quality: High

Available equipment: Little choice in games & consoles Social interaction: A lot of people present, a lot of interaction

What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 9

Space: Small

Visual- and sound quality: Normal

Available equipment: Little choice in games & consoles Social interaction: Few people present, little interaction

What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 10

Space: Spacious

Visual- and sound quality: Normal

Available equipment: Little choice in games & consoles Social interaction: Few people present, little interaction

What grade do you give this combination:....

(0 = 'No preference'; ....; 10 = 'High preference)

#### Card 11

Space: Small

Visual- and sound quality: High

Available equipment: A lot of choice in games & consoles Social interaction: Few people present, little interaction

What grade do you give this combination:.....

( 0 = 'No preference'; ....; 10 = 'High preference)

#### Card 12

Space: **Enough** 

Visual- and sound quality: Normal

Available equipment: Little choice in games & consoles Social interaction: Few people present, little interaction

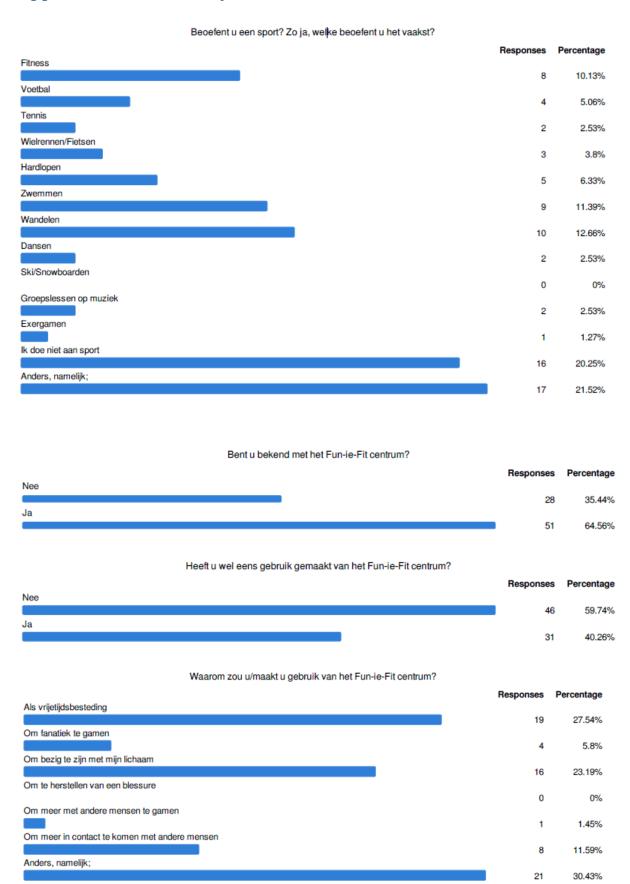
What grade do you give this combination:.....

(0 = 'No preference'; ....; 10 = 'High preference)

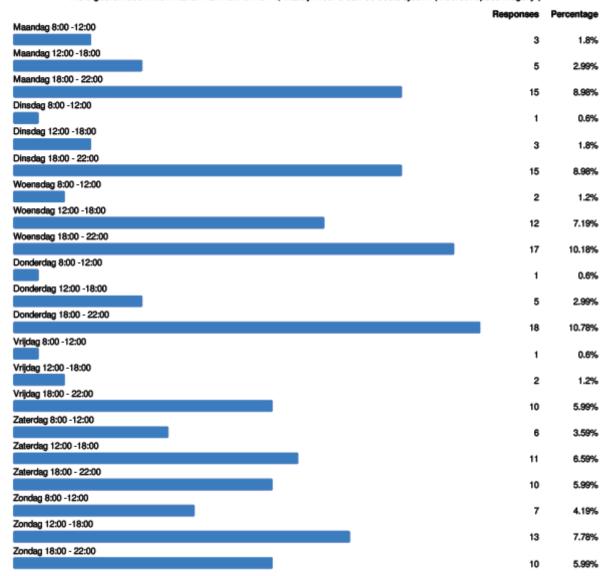
## Part 3: You as a person

| 13) |   | What is your gender?  |
|-----|---|---|
|     | 0 | Man   |
|     | 0 | Female  |
| 14) |   | What is your age?   |
|     |   | year  |
| 15) |   | Where do you live?  |
|     | 0 | Almelo  |
|     | 0 | Wierden   |
|     | 0 | Vriezenveen   |
|     | 0 | Borne   |
|     | 0 | Hengelo<br>Enschede   |
|     | 0 | Anders  |
|     | O | Anders  |
| 16) |   | Are you a member of one of these organizations?   |
|     | 0 | Stichting De Klup Twente  |
|     | 0 | E-sport club Tactix   |
|     | 0 | Physiotherapist Smienk  |
|     | 0 | No member   |
| 17) |   | Do you have a disability?   |
| ,   | 0 | No  |
|     | 0 | Yes   |
|     |   | have and remarks regarding the Fun-ie-Fit centre or this questionnaire, if you do, please write own here: |
|     |   |   |

## Appendix D: Kwiksurvey Fun-ie-Fit centre

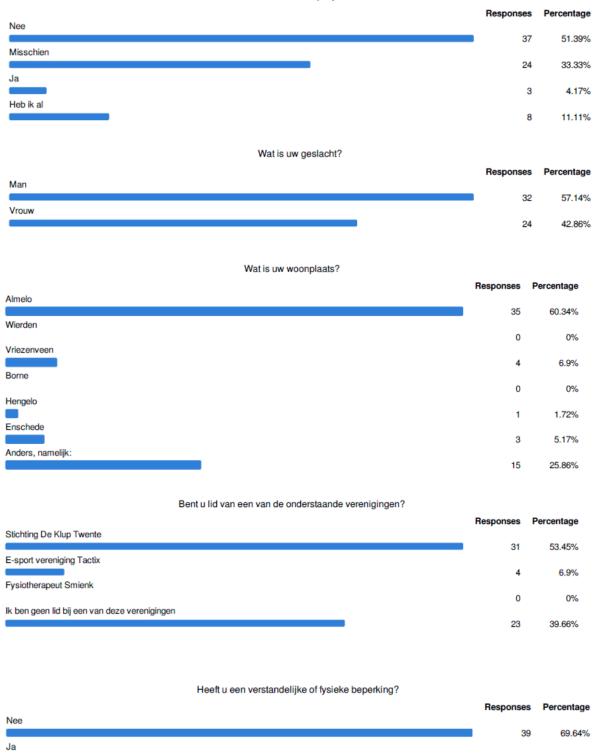


#### Als u gebruik zou willen maken van het Fun-ie-Fit, wat zijn voor u dan de beste tijden? (Meerder opties mogelijk)



| Hoe lang zou u willen sporten/gamen tijdens één sessi           | ie?                 |            |
|---|---------------------|------------|
| Een uur   | Responses           | Percentage |
| Anderhalf uur   | 36                  | 56.25%     |
| Twee uur  | 11                  | 17.19%     |
|   | 11                  | 17.19%     |
| Langer dan twee uur   | 6                   | 9.38%      |
|   |                     |            |
| Hoe vaak zou u willen sporten/gamen in het Fun-ie-Fit cer       | ntrum?<br>Responses | Percentage |
| Een keer per week   | 30                  | 46.15%     |
| Twee keer per week  | 13                  | 20%        |
| Vaker dan twee keer per week                                    | 2                   |            |
| Een keer per maand  | 15                  |            |
| Minder dan een keer per maand                                   | 5                   |            |
|   | 5                   | 7.09%      |
| Zou u gebruik maken van de bar?                                 |                     |            |
| Nee   | Responses           | Percentage |
| Misschien   | 16                  | 23.19%     |
| Ja  | 38                  | 55.07%     |
|   | 15                  | 21.74%     |
| Hoe zou u willen betalen voor het sporten/gamen in het Fun-ie-F | it centrum?         |            |
|   | Responses           | Percentage |
| Per uur   | 12                  | 18.46%     |
| Per week  | 5                   | 7.69%      |
| Per maand   | 15                  | 23.08%     |
| Per kwartaal  | 10                  | 15.38%     |
| Per jaar  | 2                   | 3.08%      |
| Betalen voor een 10-ritten kaart                                | 21                  | 32.31%     |
|   |                     |            |
| Op welke manier wilt u het liefst betalen?                      |                     |            |
| Contant   | Responses           | Percentage |
| Per acceptgiro  | 30                  | 47.62%     |
| Automatisch incasso   | 7                   | 11.11%     |
|   | 26                  | 41.27%     |

#### Heeft u interesse in een lidmaatschap bij het Fun-ie-Fit centrum?



17

30.36%

## **Appendix E: Prices of the Competitors**

Sportbedrijf Almelo, accessed at January 13, 2014 <a href="http://www.sportbedrijfalmelo.nl/tarieven-2">http://www.sportbedrijfalmelo.nl/tarieven-2</a>

## Prices of Indoor sports in Almelo

| Badminton:     | €33,- per quarter/Older than 18 €45,- per quarter |        | = €11/15        | per   | month |
|----------------|---|--------|-----------------|-------|-------|
| RSV            | €21,50 per quarter                                |        | = <b>€7,2</b> 0 | per   | month |
|                | €32,50 / 42,50 per quarter                        |        | = €10,8/14.6    | per m | onth  |
|                | €20,- / 32,50 per quarter                         |        | = €7/11         | per   | month |
| Basketball     | €33,50 per quarter                                |        | = €11           | per m | onth  |
|                | €31 - 60 per quarter                              |        | = €10 to 20     | per m | onth  |
| Dancing        | €28 – 30 per quarter                              |        | = €10           | per m | onth  |
| Gymnastic      |   |        | = €8-11         | per m | onth  |
|                |   |        | = €8-10         | per m | onth  |
|                | € 28,- to 36,-                                    |        | = €10 – 12      | per m | onth  |
|                |   | 2 hour | = €17 -27       | per m | onth  |
|                |   |        | = €9            | per m | onth  |
| Judo           |   |        | = €10,-         | per m | onth  |
| Karate         |   |        | = €25,-         | per m | onth  |
| Taekwondo      |   |        | = € 18,-        | per m | onth  |
| Thai Chi Chuan | ı €37,- per quarter                               |        | = €12,-         | per m | onth  |
| Turning        |   | 2hour  | = €17 -27       | per m | onth  |
|                | € 28,- tot 36,- per quarter                       |        | = €10 – 12      | per m | onth  |
|                |   |        | = €8-11         | per m | onth  |
| Yoga           | €42,45 per quarter                                |        | = €14,15        | per m | onth  |

| Prices Activities De Klup | (Overdorp, 2012) | (about 1,5 hour per activity)       |
|---------------------------|------------------|-------------------------------------|
| Badminton                 |                  | = 11,50 per quarter                 |
| Bowling                   |                  | = 28/30 per quarter                 |
| Darting/Pool              |                  | = 11,50 per quarter                 |
| Fitness                   |                  | = 21 per month or 73,85 per quarter |
| Swimming                  |                  | = 27,20 per quarter                 |
| Ice skating               |                  | = 110,80 winter season              |
| Sportmix                  |                  | = 14,50 per 7 weeks                 |
| Hiking                    |                  | = 13,- per quarter                  |
| Competition Swimming      |                  | = 32,20 per quarter                 |
| Indoor-soccer             |                  | = 20,50 per quarter                 |
| Zumba                     |                  | = 60 per quarter                    |

## On Average

Activities in the Meester Siebelinkhuis = € 11,50 per quarter

Activities outside Meester Siebelinkhuis = € 37,80 per quarter (€ 242,85 / 6 activities = €40,475 per quarter)

Health City = € 50,-/ € 55,- or € 60,- per month

Safe Fitness = € 38,75 / €32,75 € 28,75 /€ 27,75 per month

Fit for free =  $\in 9,95$  or  $\in 15,95$  per month Fitinnsport =  $\in 20,-/ \in 25,-/ \in 30,-$  per month Forza Gym = starting at  $\in 15,-$  per month

## **Appendix F: Calculations of Parties and Events**

These calculations are based on the NDIX-event in March 2014. The table demonstrates the profit that can be made with a single event. The graph shows how much profit can be generated by varying the number of events per year. These calculations use an estimate of 60 people per event.

| Variable Costs | Cost | Sales | Total Costs | Revenue | Total   |
|----------------|------|-------|-------------|---------|---------|
|                |      |       |             |         | Revenue |
| Drinks         |      |       |             |         |         |
| Snacks         |      |       |             |         |         |
| Buffet         |      |       |             |         |         |
| Equipment      |      |       |             |         |         |
| Rent           |      |       |             |         |         |
| Cleaning       |      |       |             |         |         |
| Sum            |      |       |             |         |         |
|                |      |       |             |         |         |
| Profit         |      |       |             |         |         |

**Graph I: Profit from Events** 

## **Appendix G: Pricing Objectives in Service Sector**

## Table I: Pricing objectives of Service Firms (Avlonitis & Indounas, 2005, p 48)

Achievement of social goals

## Table I Pricing objectives of service firms

Long-term survival

| Profit maximization   | Achievement of satisfactory profits        |
|---|--|
| Sales maximization  | Achievement of satisfactory sales          |
| Market share maximization                                   | Achievement of a satisfactory market share |
| Market share increase                                       | Cost coverage                              |
| Return on investment (ROI)                                  | Return on assets (ROA)                     |
| Coverage of the existing capacity                           | Liquidity maintenance and achievement      |
| Price differentiation                                       | Service quality leadership                 |
| Distributors' needs satisfaction                            | Creation of prestige image for the company |
| Price stability in the market                               | Price wars avoidance                       |
| Sales stability in the market                               | Market development                         |
| Discouragement of new competitors' entering into the market | Price similarity with competitors          |
| Maintenance of the existing                                 | Customers' needs satisfaction              |
| customers   |  |
| Determination of "fair" prices for customers                | Attraction of new customers                |