







## **Designing a profitability analysis tool for SATO Oyj**

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<p>This Bachelor's thesis presents a project, commissioned by SATO Oyj, a leading company in the real estate investment business in Finland. The main outcome of this thesis report is to introduce the reader to the unique calculator and familiarize them with the research executed in order to complete the project.</p> <p>The primary objective of this thesis is to design a customized to the commissioning company's instructions tool which analyses profitability from different pricing decisions. The potential users of the tool are the management level employees of the internationally present real estate investment company. SATO is a market leader in the housing business in Finland, with investments currently valued at more than two and a half billion euros.</p> <p>The need for the tool came from the Senior management's desire to unify the profit projections and estimations throughout the Rental Investment and Management Division. For years the responsibility of computing future profits has fallen on each of the Regional managers, who have used different methods and tools to report profitability. With implementation of this thesis project, the management seeks not only to improve the process of reporting but also achieve efficiency in comparing different Regional Managers' portfolios. The need for the project and the thesis objective have been set by the commissioning company. The project serves the purpose of being bachelor thesis material, of having practical usefulness in the business life, and helps the author gain international experience by carrying out research of this scope and kind.</p> <p>The sole purpose of the tool is to study how the profitability from individual customers changes in the future. It will be solely used on new and future clients of the company, and not to assess the overall profitability of the company. Another limitation to the project includes the treatment of VAT, which is not executed per apartment, but rather corporate-wide, and therefore disregarded in the tool.</p> <p>The tool has been fully customized to the operational activities of SATO. It follows company laws and implements specific business practices. This level of adaptation has been achieved throughout informative, extensive interviews with the management, conducted in February and March, 2015. Desktop as a research method was implemented in order to collect information about the housing industry, and build the framework of theoretical reference. The concepts and methodology studied include reliable theories on revenue management, promotional pricing, components of CVP analysis, and customer profitability.</p> <p>The conclusions and suggestions to the commissioning party were reached by critically analyzing the thesis process, and include recommendations for further researching customer behavior and development ideas on improving cost structures and analysis of profitability.</p>	
<b>Keywords</b> Profit, customer profitability, revenue management, SATO Oyj	

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# **1 Introduction**

The primary objectives of this thesis is to analyze how sensitive the commissioning company's profitability is to changes in the revenue streams and ease the process of taking future pricing decisions by the management. The outcome of the thesis is to design a functioning, easy to use calculator which projects potential profitability from future tenancies.

The introduction of the thesis defines the project tasks, which outline the actions needed to finalize the project. It sets the scope and presents the international aspects in conducting such a project, and discusses the anticipated benefits to all stakeholders involved.

The theses also defines the theoretical framework, studies relevant key theories, concepts, and methods. It describes the methods for data collection, its analysis and the results, and discusses the risks occurring within the thesis writing process. Lastly, the report provides feedback and gives recommendations to the commissioning party based on the author's observations and critical opinions.

## **1.1 Thesis topic**

The primary objective of this thesis is to design a tool to analyze different scenarios of profitability, customized to the commissioning company. The project consists of seven accompanying tasks, which help achieve a clear and sensible layout of the report which will be presented together with the calculator to the commissioning company.

The tool makes projections over short and long-term periods of time. For that particular purpose external factors such as the inflation (annual increase on rent) have been considered. With minimum manual input from the management, the calculator analyses and evaluates each potential tenancy agreement, and show the revenue streams from different pricing decisions during the given projected timeline. However, primarily the tool will be used to make decisions for or against giving rent discounts to the customers based on the calculations from the tool.

The table below lists the project objective and tasks, were concluded in order to successfully finalize the thesis writing process.

Table 1. Defining the project objective and tasks

<b>PROJECT OBJECTIVE</b>	<b>DESIGNING A PROFITABILITY ANALYSIS TOOL FOR SATO OYJ</b>
<b>PROJECT TASK 1</b>	Establish the company's need and focus of profitability analysis.
<b>PROJECT TASK 2</b>	Research the real estate industry in Finland.
<b>PROJECT TASK 3</b>	Study related theory on profitability and pricing decisions.
<b>PROJECT TASK 4</b>	Create the tool and prepare the user's manual.
<b>PROJECT TASK 5</b>	Present the tool to the commissioning party, collect feedback.
<b>PROJECT TASK 6</b>	Adjust the tool according to the feedback and finalize it.
<b>PROJECT TASK 7</b>	Learn from the process, evaluate and make recommendations.

Keeping the thesis objectives and tasks in mind, the initial overlay matrix has been created. It indicates the project tasks, theoretical framework, which have been used within completing the specified task, the timeframe of the phase, methods, and the outcome from the task which has been discussed in the respective chapter of the thesis. The overlay matrix can be found in Attachments (Attachment 1).

## **1.2 The case company SATO Oyj**

SATO Oyj (Y-Tunnus 0201470-5) is a public stock company and a market leader in the housing investment in Finland with assets of approximate value of €2.6 billion (Figure 1), and managing roughly 24 200 rental homes throughout Finland and St. Petersburg. The company offers housing development expertise and responds to the housing needs of its clients by providing them with homes, matched to their individual needs.

The value proposition of SATO, "A home the way you want it", guides the company's day to day business practices and decisions. Annual profitability is ensured through efficient, customer driven operations, centralized sourcing, skilled service network, and use of modern technology.

<b>INCOME STATEMENT, M€</b>	<b>1 Jan - 31 Mar 2015</b>	<b>1 Jan - 31 Mar 2014</b>	<b>1 Jan - 31 Dec 2014</b>
<b>Net sales</b>	<b>96.3</b>	<b>73.6</b>	<b>312.3</b>
<b>Operating profit</b>	<b>67.5</b>	<b>60.1</b>	<b>191.3</b>
Financial income and expenses	-9.2	-9.5	-39.1
<b>Profit before taxes</b>	<b>58.3</b>	<b>50.7</b>	<b>152.2</b>
<b>STATEMENTS OF FINANCIAL POSITION, M€</b>			
	<b>31 Mar 2015</b>	<b>31 Mar 2014</b>	<b>31 Dec 2014</b>
Investment property and other non-current assets	2,617.9	2,422.0	2,561.5
Inventories and other current assets	224.8	236.2	240.1
<b>Total assets</b>	<b>2,842.7</b>	<b>2,658.2</b>	<b>2,801.6</b>
Shareholder's equity	908.1	827.8	892.2
Non-controlling interests	0.1	1.1	0.1
Total liabilities	1,934.6	1,829.3	1,909.3
<b>Total shareholder's equity and liabilities</b>	<b>2,842.7</b>	<b>2,658.2</b>	<b>2,801.6</b>

Figure 1. Income statement and Statement of Financial position of SATO Oyj

The company reported net sales of 96.3 million euros for the first quarter of 2015. The operating profit for the same period was 67.5 million euros, while the profit before taxes reached 58.3 million euros, which is almost 15% more than the profit before taxes for the same quarter last year. (Figure 1.)

SATO has set an objective to become the biggest housing company in Finland by investing in those rental homes with the highest prospects of appreciation and revenue turnover. The company ensures growth by preserving sustained treasury operations and developing innovative financing solutions. In its quarterly report, the company showed shareholder equity of 908 million euros. (Figure 1).

The table below shows the latest ownership of the company's shares (Table 2). The total shareholders subscribed in the book-entry system on 13 April 2015 was 75. The majority of shares are owned by the Varma Mutual Pension Insurance Company and APG Asset Management NV, each of which holds 22.8% ownership. The third most influential owner is Balder Finska Otas AB with 16.1% of the total shares, closely followed by the Elo Mutual Pension Insurance Company with 12.9% ownership.

Table 2. Shareholders of SATO Oyj as of 13 April 2015.

<b>Varma Mutual Pension Insurance Company</b>	<b>22.8%</b>
<b>APG Asset Management NV</b>	<b>22.8%</b>
<b>Balder Finska Otas AB</b>	<b>16.1%</b>
<b>Elo Mutual Pension Insurance Company</b>	<b>12.9%</b>
<b>Danske Bank Plc (nominee-registered):</b>	<b>6.7%</b>
<b>The State Pension Fund</b>	<b>5.0%</b>
<b>LocalTapiola Group</b>	<b>4.8%</b>
<b>Pohjola Insurance Ltd</b>	<b>2.5%</b>
<b>The Finnish Construction Trade Union</b>	<b>0.9%</b>
<b>Other</b>	<b>5.5%</b>

### **1.3 Background**

It comes as no surprise that such a huge corporation like SATO Oyj, has developed numerous ways to project profitability. However, until this day the company has not implemented a unified method to make projections at apartment levels, since the regional managers have been fully responsible for reporting on profits. By using different tools of their own, results vary a lot, because each projection is calculated in a different way by taking various factors into consideration. Therefore, the management wishes to unify the process of computing and reporting on future profitability.

Naturally, the most cost efficient way to achieve the management's goal is by having young future professionals put their knowledge into creating a tool, customized to the requirements of the management. The managers themselves value the students' perspectives and innovative ideas when it comes to the methods of measuring profitability.

### **1.4 Demarcation**

In the thesis itself the demarcation indicates the processes of planning and conducting the research or project in order to attain the objective and produce the final result (San Miguel 2013).

As initially anticipated, the thesis process begun by identifying the revenue and cost structures and pricing formation in the real estate industry by analyzing a leading company in the housing business in Finland. The author has gained crucial understanding on the initial decision making process and revenue drivers of the commissioning company in order



to categorize them by priority and determine their usefulness and functionality in the tool. The methods and factors affecting any other business decisions have been eliminated from the scope.

The profitability is analyzed via a long or short-term projection with the help of the tool, considering each potential tenancy separately. The profitability of the company on a corporate level is outside of the scope of this thesis. The calculator is designed to assist the management in pricing decisions for new and future customers. However, with few adaptations, it gives the possibility to assess profitability of current and historical tenancies.

The tool disregards VAT calculations, as they are not executed per tenancy nor apartment portfolio, but rather company-wide at a higher level.

Based on the above mentioned delimitation, the thesis has met each of the management's expectations, and has proven its usefulness in the day to day operations, and assistance in important pricing decisions.

### **1.5 International aspect**

Sato has established business operations in Russia via foreign direct investments, which makes it a truly international company. The corporate language in Finland is naturally Finnish. However, the employees use English in their everyday communication with their non-Finnish speaking colleagues, vendors, and the author of this thesis during the research process. For those reasons, the tool has been presented to the commissioning company in both English and Finnish.

Another international aspect of this thesis comes from the fact that the tool disregards VAT treatment, which makes it possible to be implemented by any other housing company or a private investor, managing real estate in Finland or abroad, naturally with executing a few technical adaptations.

### **1.6 Benefits to stakeholders**

The commissioning company benefits from a flawless practical calculator to estimate and predict profits based on tenancies' lengths. Due to the anticipated number of calculations and variables, the management would find it challenging to understand and interpret the results. In order to assist them in the translation of outcomes, the thesis package comes with an easy to follow user's manual with illustrative commands and interpretations of the results. Even though the initial plan concentrated on helping the management understand

whether it is practically beneficial to give discounts on the rent to their clients, the calculator will provide them with much more extensive information, such as predicting profitability at apartment levels and cash flow streams from tenancies in the short and long run.

Naturally, the whole process of completing this thesis project has had positive outcomes to the author. By conducting a desktop research, her familiarity with the real estate business in Finland has significantly improved, as well as the housing industry's specific practices when it comes to financial reporting. Creating the tool has examined and significantly advanced the author's ability to work with Excel, and has contributed extensively to her theoretical knowledge gained during the course of accounting studies.

Other possible but indirect stakeholders include the thesis advisors, the Haaga-Helia establishment as a whole and its potential partners, SATO's customers, SATO's shareholders and partners.

## **1.7 Key concepts**

The following are summaries of the key concepts, theories and models used to build the theoretical framework which support the thesis objective.

### **1.7.1 Profit**

Profits are the absolute monetary amount made when computing the difference between sales and costs. It may be negative (loss), and is usually historically reported on (Ryals, 2008, 20).

### **1.7.2 Customer profitability**

Profitability is the proportion of money generated, usually but not necessarily always expressed as percentage. Customer profitability respectively refers to the absolute profits made from a client, most commonly recorded over a historical period of time. (Ryals 2008, 20)

### **1.7.3 Revenue management**

Revenue management is the most efficient pricing innovation in companies, offering services. The term refers to the observation of price levels and optimizing the company's capabilities to achieve profitability. (Hinterhuber & Liozu 2013, 8.)

#### **1.7.4 Promotional pricing (Discounts)**

Discounts are a proven technique of revenue management resulting in reductions in price agreed upon with the client before completing a purchase (Ryals 2008, 322).

#### **1.8 Risks and risk management**

The initial motivation and enthusiasm to bring the project to a successful end have played an important role in the whole process of writing this particular thesis. Having the opportunity to produce a thesis with such significant influence on an internationally present company, as well as the impact this project will have on the managers' decision making processes, inevitably serves as a great motivator.

One potentially occurring risk arises from the project's timeline. It has been in the commissioning company's interest to benefit from the functioning calculator as soon as possible. Nevertheless, appropriate time management, the ability to cope with deadlines and work under stress come in handy in instances like this. Therefore, by overcoming stress and dealing with the time pressure, the project has been brought to a successful end within the initially agreed deadlines.

## **2 Managing revenue and customer profitability**

The theoretical framework moves from general to specific concepts. It is built from relevant concepts, models and tools, which support carrying out the thesis objective. Analyzing and measuring revenues and profitability have a significant importance in the day to day decision making processes of any business. This is why the theory framework integrates both marketing and accounting concepts which construct a sensible interaction in-between them.

### **2.1 Revenue management**

Utilizing and implementing certain techniques for revenue management must be well-designed and well-researched in order to go in line with the clients' expectations, the demand for the product or service and to ensure significant improvement in the company's profits (Huefner 2011, 90).

Successful revenue management has the ultimate goal of an increase in revenues and profits both in the short and long runs. However, this doesn't always mean satisfying all clients, no matter the cost. Collecting, and especially analyzing customer information about the past profitability of each client separately, as well as their historic behavior are vital to future revenue management practices. Having profitable customers is ideal, converting unprofitable ones to profitable can be challenging but discontinuing loss-making clients may not always be financially beneficial in the long run. (Huefner 2011, 112-116.)

### **2.2 Decision making**

The most common form of revenue management decision is offering promotional pricing (discounts) to new customers. Such clients may not always be willing or able to buy at existing prices, however, reduction in unit prices, while increasing volumes results in a growth in the total revenues from sales. (Huefner 2011, 38.)

### **2.3 Sales revenue and analysis of sources**

Analysing the sources of revenue and gaining deep understanding of each of them is essential beginning point of revenue management. Huefner (2011, 121) identifies five different components of the sources of revenue:

- Sales to existing clients.
- Sales to new clients.

- New sales through expansion to new geographical locations, or internet-based sales.
- Sales to adjacent markets through products or services close to the current business line.
- Sales through establishing new lines of business.

When analyzing revenue it is crucial that revenues are profitable, meaning sales amounts, gross profit and net income are taken into account (Huefner 2011, 120).

### **2.3.1 Sales to new customers**

Acquiring new clients is the most desired objective of revenue management. One strategic decision to achieve that is by obtaining a competitor by an acquisition. However, there are other strategies towards expansion of the customer base without a significant change in the company's resources. Such strategies include additional promotional efforts and sales-enhancing techniques. (Huefner 2011, 122.)

However, Best (2005, 21) argues that the unregulated process of acquiring new clients may result in unprofitable and disloyal customers. Therefore, sales to new clients must be targeted, intentional, and based on extensive customer profiling processes in order to avoid potential costs occurring from improper client acquisitions while improving customer retention rates.

### **2.3.2 Sale or price reduction (Discounting)**

Commonly, discounts, sale prices and price promotions are well-known and proven techniques for short-term revenue management. These are usually temporary, and after the promotion's end, the prices return to their normal levels. These techniques result in shifting the demand to different times (e.g. happy hours at bars, seasonal sales), to encourage demand during slow-periods (e.g. after common holidays), or to attract price-sensitive customers, who otherwise lack interest in the regular prices. In order for the company to avoid potential losses, the discounted price must cover the marginal costs per unit. However, the company's overall ability to handle price reductions is highly individual and depends ultimately on its unique cost structure. (Huefner 2011, 79-90.)

## **2.4 Cost-Volume-Profit-Analysis**

Cost-Volume-Profit analysis (CVP) shows how changes in the amount of sales affect profits and costs. It is an accounting tool used by managers and business owners to help in

the day-to-day decision making, which illustrates the relationship between the company's costs, sales volume and profitability. Another use of CVP is to determine the amount of sales needed to breakeven, to cover certain costs or to make a specific profit. (Braun & Tietz 2015, 400-412.)

The components of CVP relevant to the creation of the tool are discussed below.

#### 2.4.1 Unit contribution margin

The unit contribution margin calculates how much profit is earned from selling a single product or service after covering the variable costs and before consideration of the fixed expenses. The margin shows earnings per units and their contribution towards coverage of the fixed costs and calculating the profit. It is estimated by subtracting the variable costs per unit from the sales unit price (Figure 2). (Braun & Tietz 2015, 413.)

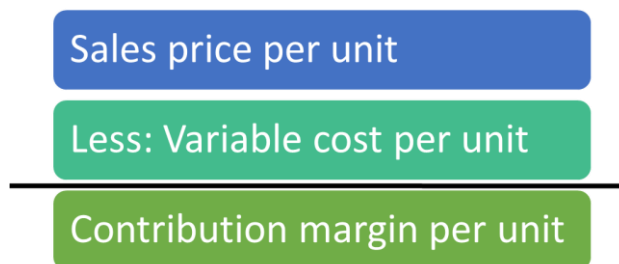


Figure 2. Unit contribution margin calculation

#### 2.4.2 Cost accounting

Braun and Tietz (2015, 351) identify two primary categories to differentiate costs. Variable costs are ones which increase or decrease in proportion to sales (or manufacturing). Fixed costs, on the other hand do not change according to production (or sales) volume, but rather remain unchanged.

Identifying a cost allocation system and gaining understanding on its structure helps managers follow the expenses occurring from each unit sold more closely and even determine the cost of unnecessary activities in order to maximize profits without the urging need to increase sales revenues (Braun & Tietz 2015, 194-196).

Accounting for costs normally includes pooling of different fixed costs (such as administration, electricity, rent costs and other expenses independent from sales volumes) together and computing a predetermined manufacturing overhead allocation rate per unit by dividing

the total overheads by total allocation base. The allocation base may be labor hours or machine hours, or adapted to the retail housing industry: square meters. Cost accounting requires each unit sold to be allocated a part of the total overheads based on the single calculated rate. The rate may be computed as euro or percentage amount. (Braun & Tietz 2015, 196-203.)

### **2.4.3 Profit**

In companies' financial statements and reports the term profit sometimes means the margin between the revenues from sales and the costs, and at other times it is meant as the absolute amount of money made during a fiscal period. Respectively, negative profits are losses for the company. Profits, revenues and costs are recorded on an accrual basis and historically reported on. (Ryals 2008, 20.)

## **2.5 Profitability**

The profitability from a customer is defined as the absolute profit or cash flow delivered by a relationship with the customer over a specified period of time, usually a year. Practically, the profitability is compiled by subtracting the costs (operational costs, and any fixed costs, arising from the relationship with the customer) from the sales revenue. It may also be referred to as customer contribution. (Ryals 2008, 19-21.)

Undoubtedly, customer satisfaction ensures higher financial gains. Which is why it is crucial to examine and determine the profitability from a customer's point of view or in other words by segmenting the clients. Satisfied customers are one thing but profitable customers are worth keeping. Measuring customer profitability turns a customer – focused company into customer – obsessed ones. (Kaplan & Atkinson 2014, 553.)

However, in the long run the business trait of a heavy client focus plays an important role in the economic health and financial performance of the company. Long-lasting and strong relationships with the clients translate into higher financial gains (Figure 3). Obsession towards customer satisfaction and value creation not only helps companies outperform their competitors, but also generates higher profitability in the short-run, and ensures high shareholder value in the long term. (Best 2005, 5-6.)



Figure 3. Customer Relationship Marketing (Best 2005, 7).

In their book Kaplan and Atkinson argue that newly acquired customers are hardly ever profitable in comparison to other customers with proven financial returns. Moreover, attracting and acquiring customers can be a costly activity, which hopefully pays back in the future. (Kaplan & Atkinson 2014, 553.)

While new customers appear valuable due to their growth potential, the unprofitable ones need to be taken actions against, in order to make up for their incurred losses (Kaplan & Atkinson 2014, 553).



### 3 Data collection methods

Two main approaches have been integrated to collect the data needed to finalize the thesis. The primary approach towards data collection has been through conducting qualitative interviews. Towards the end of the thesis writing process the author has done vast desktop research in order to gather information about the real estate industry and the theory supporting the thesis objective.

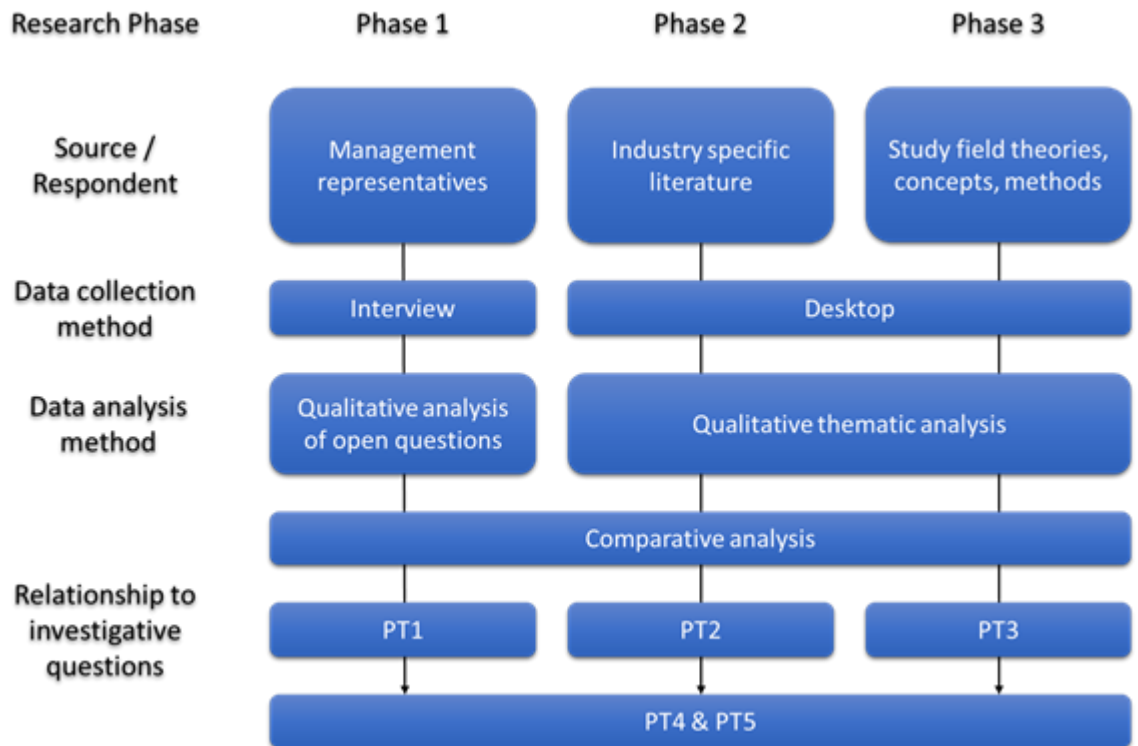


Figure 4. Research design

The figure above (Figure 4) illustrates the initial plan for a research design. The thesis writing process has begun by obtaining the data needed to conduct the study from the management representative and employees via qualitative data collection method. The second stage involved conducting desktop research on the industry specific literature and relevant theories within the author's field of study. The outcome from those actions have been the first three project tasks, which have served as a base for creating the tool, preparing the user's manual, and finalizing the tool.

#### 3.1 Interviews

One reason for conducting interviews with representatives from the company comes from the type of information needed to design the profitability analysis tool. Even though the data obtained has mostly been numerical, it was provided during informative interviews.

However, some of the disclosed information, such as operational issues, certain strategies and numerical values, is absolutely confidential and has served solely for testing the tool. The data collected includes rent prices, sales margins, profits made, costs incurring from day to day operations, and other relevant expenses.

Naturally, the more accurate the data provided, the more accurately the tool predicts future profitability of the tenancies. It has been in the management's interest to ensure that the author works with the exact real numerical values throughout designing and testing the tool.

The data collection has been performed via face to face interviews with the management, and their subordinates, and observations made at the place of work. The primary person in contact is a subordinate of the CEO of SATO Oyj, and currently holds the position of Regional Manager. Close cooperation and clear communication have prevented potential mistakes. The total number of informants has been 4. While collecting feedback on the tool, the regional managers' notes, as well as feedback from the accounting team have been taken into consideration. Due to confidentiality issues the employees' names, their job responsibilities, as well as the transcripts from the interviews, and the commissioning agreement between the author and the company's representative have not been publicly presented in this thesis.

The primary objective of the interviews with people from the management, subordinates as well as the accounting team was to establish the company's need for this specific study, while identifying and better understanding the drivers for profitability. At a later stage, the management participated in a meeting, where the tool was tested, feedback was collected, and recommendations from the author's side were provided to the company.

The company visits and the interview meetings have been short and productive, so that the employees do not experience inconvenience, nor were kept from their ordinary course of business. Furthermore, urgent matters have been quickly and efficiently resolved via emails.

### **3.2 Desktop research**

The primary desktop research has included industry-specific information about the real estate transactions in Finland, with a concentration on the biggest property market: the Helsinki metropolitan area.

During a later stage of the thesis-writing process the author has reviewed and reported on relevant theories, concepts and models on customer profitability, which aim to sensibly complement the content of the thesis and provide a hierarchical theoretical framework to substantiate the thesis objective.

## **4 Reporting on the data collected**

This chapter contains the results, after an extensive and critical analysis of the data collected. During the desktop study the author has been researching and reporting solely on reliable sources providing up-to-date information. The analysis of the qualitative data has been executed by summarizing the author's notes from each of the interviews, organizing that data by source and determining its use in the thesis report and functional purpose in creating the tool.

### **4.1 The real estate industry in Finland**

The Finnish state takes a dominant position in the real estate market. Of around 800 000 rental spaces throughout Finland, the construction of more than half has been subsidized by the Housing Finance and Development Centre for Finland (ARA), and managed by local municipalities and authorities and companies whose profits are limited (Expat Finland 2015).

The state of health of Finland's economy is highly dependable on its foreign transactions and trade. During the financial crisis and the years closely following it 2008-2013 Finland's exports decreased by roughly 14.5%, and remained unchanged during 2014 (Newsec 2015, 5). During the years of crisis Finland's real estate properties' prices have experienced a moderate decrease, and have currently not only reached but also exceeded pre-crisis levels (Kivistö 2012, 49). With negative Gross domestic product in 2014 and variation between the other economic indicators, Finland is considered to have quite a steep economy compared to the rest of Europe (Newsec 2015, 4).

#### **4.1.1 The year 2014**

The economic prognoses in late 2014 gave little hopes for financial growth. The economic indicators almost always grow in proportion to the volume of real estate transactions. (Newsec 2015, 4.)

The year 2014 has been an interesting case from the investors' point of view due to an unexpected lack of correlation between property transaction volumes and the economic development. The low interest rates, the shortage of suitable properties in Central Europe and the positive outlook on the return on investments, as well as the stability and mass lending from the Central Bank, have attracted many investors from abroad to Finland to look for inexpensive but profitable yields. In 2014 the total property transaction volume

accounted for 4.26 billion euros, which is 70% more than the previous one. (Newsec 2015, 3. & Kivistö 2012, 49).

Households and businesses normally make housing decisions such as whether to rent or own premises based on financial grounds. Therefore an increase in rents compared to financing an ownership will increase the demand for owner-occupations, which will then cause the housing prices to increase as well. Similarly, if the cost of owning a real estate increases, this will drive the demand for rental premises upwards, and therefore pressure them to increase. (Kivistö 2012, 51.)

For a location to be considered as attractive, a few economic and technical factors need to be met, such as its location, lease maturity and others. And even though the yields in 2014 remained low, the number of potential investors was small, and the prices appeared to be highly uncertain, a clear trend in the investors' preferences has been noticed: the majority of office spaces demanded were located in the Helsinki metropolitan area (Uusimaa), while a part of the property transactions from abroad happened in the rest of Finland. There were also clear preferences for certain regions and property types within the Uusimaa area. (Newsec 2015, 4.)

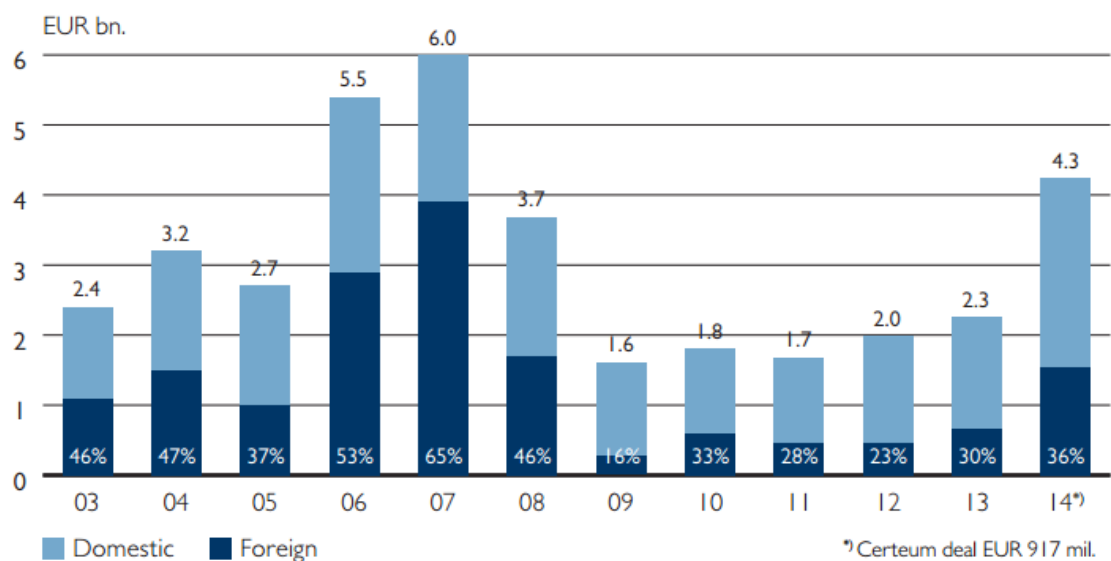


Figure 5. Transaction volume in Finland 2003-2014 (Catella 2015, 4).

The transaction volume during 2014 reached 4.3 billion euros, which is the highest since 2007 (Figure 5). More than a third from the total were comprised by international investments.

Figure 6 illustrates the distribution of the total transaction volume. About 33% of that were industrial or warehouse property purchases. A quarter of the total, or 25% accounted for

investments in retail housing. Very close to each other were purchases of office spaces (18%), and residential transactions (15%). (Catella 2015, 5)

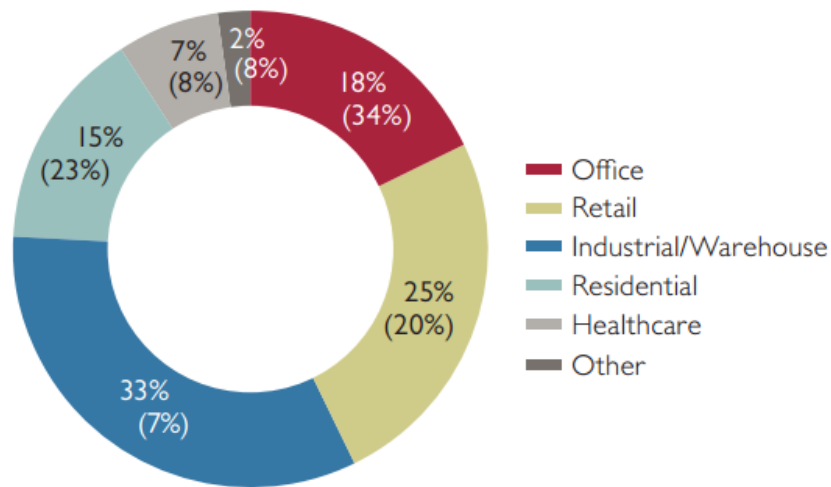


Figure 6. Distribution of the total transaction volume in 2014.

Unfavorable changes in the purchasing power of the consumers, decreases in automobile transactions and other numerous economic challenges have heavily affected the interest in rental premises. However, investors continue to consider them desirable. (Newsec 2015, 4.)

#### 4.1.2 Helsinki Metropolitan area

In the Helsinki metropolitan area naturally lies the most attractive real estate market in Finland: only last year the population raise by roughly 19 000 residents, which is the most it grew in the last 50 years (Catella 2015, 9). It has become a common practice by the lessors to offer rent-free periods and reductions in rents (discounts) to certain locations to decrease vacant spaces and secure long-term profitability. (Newsec 2015, 8).

According to Newsec (2015, 4) there is more than a million square meters of free office spaces available in the Uusimaa area but it can be challenging to attract tenants for older premises in unpopular for the businesses locations. There are also about 163 000 square meters of uninhabited retail space (Catella 2015, 10).

The thread of vacancies puts the potential tenants in dominant positions when it comes to price. An attractive option for investment with high returns, however, would be demolishing the property and obtaining permits for residential buildings due to the current high demand for these in the Helsinki metropolitan area. (Newsec 2015, 4.)

### 4.1.3 Reported changes during the first quarter of 2015 and future prognoses

It has been reported by Statistics Finland that the overall rent amounts during the first quarter of 2015 have risen by 3.3% compared to the same time last year. On average for the whole country the change to the previous year was 2.8% for non-subsidized properties. The percentage reached 3.8% in the whole country for government-subsidized properties. In Greater Helsinki the changes were respectively 2.7% for non-subsidized dwellings. (Official Statistics of Finland 2015).

The two figures below (Figures 7 & 8) show the average rent amount during the first quarter of 2015. For Great Helsinki, where the highest rents in Finland are found, the rental price for non-subsidized apartments was 17.61 euros per square metre, and 12.93 euros per square meters for subsidized apartments by the government (Official Statistics of Finland 2015).

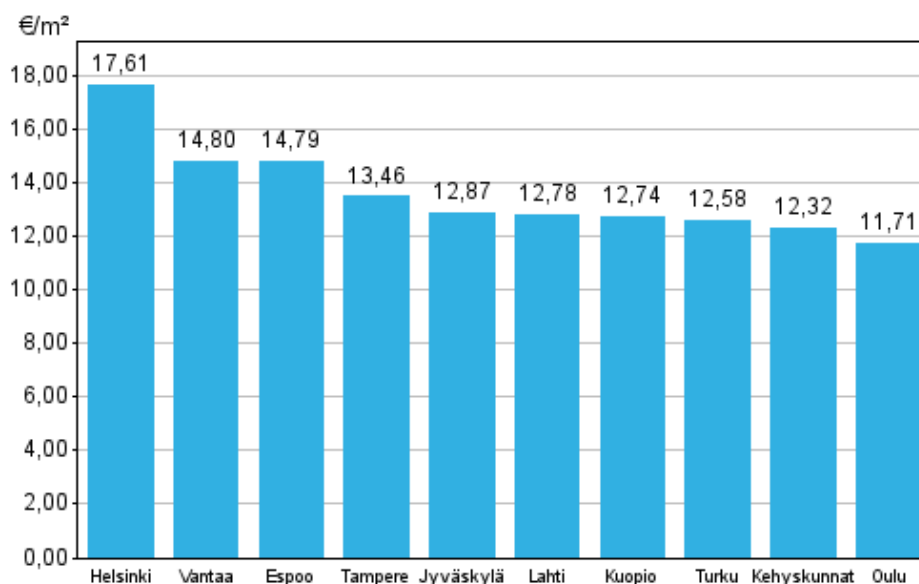


Figure 7. Average rents of non-subsidized apartments during the first quarter of 2015.

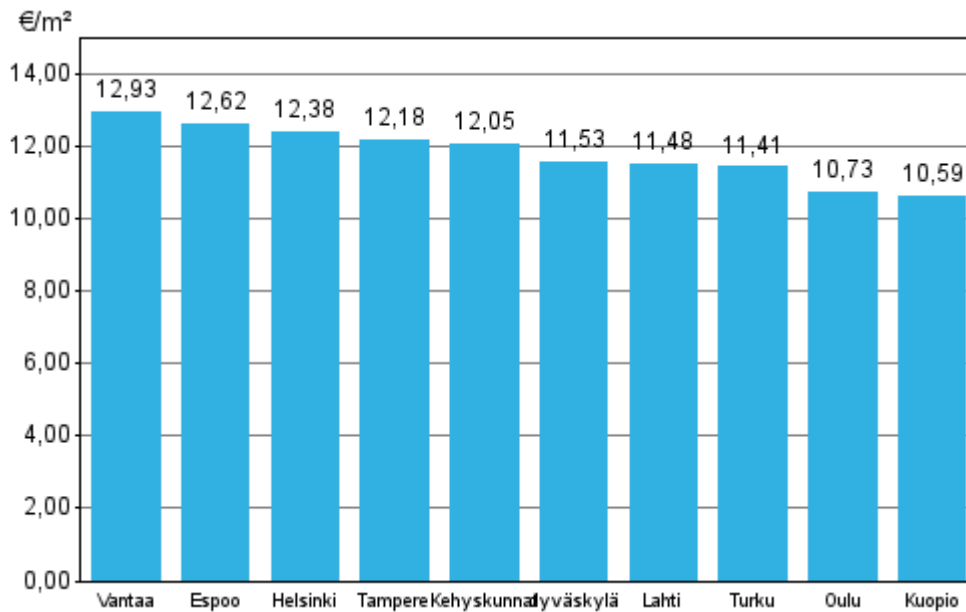


Figure 8. Average rents of government subsidized apartments during the first quarter of 2015.

The rent prices of residential premises have been increasing for the past few years due to a growing demand. Currently, the highest demanded properties are small flats in the Helsinki city center (source). Newsec (2015, 9) has determined the reason for this to lie within the tenants' financial abilities.

The property transaction amounts during 2015-2016 are anticipated to hold its high levels from last year and possibly exceed them due to major new real estate investments, a raise in the interest from investors abroad, the increasing buying behavior of consumers and their constantly growing purchasing power (Newsec 2015).

The vacancies of warehouses, industrial spaces and residential homes are expected to continue to raise due to an uninhabited capacity currently. In the same time, the total transaction volume during 2015 is expected to exceed 3 billion euros, which means there are plenty of property investments that lie ahead with stable but growing returns. (Catella 2015, 3-11)



## **4.2 SATO's perspectives**

The following information presents interpretations of the results, applicable to the case company's business operations.

### **4.2.1 Rent ranges**

Rental prices are determined per size (in square metres) per month. Those amounts vary primarily due to location. Another variable in the price determination process is the class of the apartment. Naturally new and luxurious buildings hold the higher rents.

### **4.2.2 Sales revenues sources**

SATO identifies two main types of revenue streams. Most of the sales are made from rental apartments. Since recently, SATO has been operating in a new business field: investing, constructing and selling of apartments and offices to private individuals and companies.

### **4.2.3 Costs related to operational activities**

The biggest portion of company costs incur from day-to-day operations related to administration and the staff. Those are clearly categorised as fixed expenses. However, they are currently ignored in calculating profitability at apartment levels. Other costs include marketing of the rental apartments, possible renovations, change of appliances, cleaning up fees. However, the latter occur primarily at a turnover point: after the current tenant moves out, but not necessarily at termination of each and every tenancy contract. This is why those are currently considered operational expenses.

### **4.2.4 Profits/Margins**

In the company's home and office construction business, the cost of goods sold are clearly the costs incurring from building and furnishing the premises. When it comes to the rental business, however, the company does not recognise directly cost of goods sold (variable expenses). Due to its unusual categorisation, the operational expenses mentioned above (such as marketing, renovations, new appliances and clean-up) have some of the traits of variable costs, and may be considered as such.

Currently, profits per apartment are calculated from the sales, by directly subtracting operational expenses (as if variable costs). In managerial accounting theory this is known as

calculation of contribution margin per unit, rather than profits. Due to insistence from the potential users of the tool, these are called “profits”.

#### **4.2.5 Access to information and its validity**

All of the above mentioned have been provided to the author by the person in contact from the commissioning company. Some of the ratios and financial data are available in the financial statements of the company. However, the company doesn't disclose the nature of all revenue streams, the categorization of expenses, the formulation of pricing, the reasoning for pricing decisions, and other company specific information. Therefore, the non-publically reported data has been provided by the management, since they are naturally the only people with access to it.

The financial data has been obtained from the accountants of the firm. All the statements are reported under the International Financial Reporting Standards (IFRS). An external audit is performed on the financial statements on an annual basis, which makes the data accurate, objective and thorough.

## 5 Profitability analysis tool

The tool has been developed with the guidance of the management of the company. Its functionality and design have also been influenced by the managers' preferences. Therefore, its sole purpose has been customized to the operations of SATO Oyj and their business practices. However, during testing with a private real estate investor, the tool was found useful and accurate for managing individual investments, and keeping track of the revenue streams or cash in- and outflows related to those investments.

### 5.1 The layout and logic behind the tool

The tool is primarily visually divided into three main parts: one which applies to the Normal rent prices, another – about the Discount rent prices, and a common area, which applies to both cases.

The tool consists of three parts for manual input, and a section for results, all located on a single excel sheet. The cells, where the user is required to fill in the numerical data, have been marked in light green. Naturally, the user would only input whatever information is found reasonable and related to a particular tenancy.

There is no strict order in which the cells are to be filled. However, it is advised to start from the very top, which applies to both cases of renting a single apartment, disregarding the rent amount as a start. In this area, the user fills in the projection period, the costs, occurring at a turnover point (marketing costs, cleaning costs, and the vacancy in-between tenants, possible renovations, or change of appliances if needed). Figure 9 below illustrates the part of the tool for manual input which applies to both pricing options.

<b>Projection</b>	<input type="text"/>	Years
<b>Turnover associated costs</b>		
Marketing	<input type="text"/>	€
Clean up	<input type="text"/>	€
Vacancy	<input type="text"/>	Months inbetween tenants
<b>Other possible costs at turnover</b>		
Renovation(s)	<input type="text"/>	0 €
Appliances	<input type="text"/>	0 €

Figure 9. Projection period and turnover costs manual input.

The user then proceeds to determine the pricing-specific information for an apartment in question with regular (“normal”) rent. The length of a single tenancy is actually an average period, which is about 36 months. However, the user may find it necessary to change that average, depending on a specific situation. Another time-related issue is the initial vacancy, before renting out the apartment, which is filled in manually. The tool is then able to determine with accuracy the number of full tenancies, and the number of months of the next tenancy, naturally a partly one. The figure below (Figure 10) shows the section to be filled in by the user applicable to regular pricing decisions.

### Normal rent

Length of single tenancy  Months

Tenants during projection: 0 whole tenancies, 0 months

Initial vacancy  Months

### Tenant-specific information

	Rent	Annual raise
First tenant	<input type="text" value=""/>	<input type="text" value=""/>
Second tenant	<input type="text" value=""/>	<input type="text" value=""/>
Third tenant	<input type="text" value=""/>	<input type="text" value=""/>
Fourth tenant	<input type="text" value=""/>	<input type="text" value=""/>
Fifth tenant	<input type="text" value=""/>	<input type="text" value=""/>
Sixth tenant	<input type="text" value=""/>	<input type="text" value=""/>
Seventh tenant	<input type="text" value=""/>	<input type="text" value=""/>
Eighth tenant	<input type="text" value=""/>	<input type="text" value=""/>
Ninth tenant	<input type="text" value=""/>	<input type="text" value=""/>
Tenth tenant	<input type="text" value=""/>	<input type="text" value=""/>

Figure 10. Normal rent manual input.

The rent prices are input manually, and exclude VAT. A single rent price is applicable to only one tenant, and is usually raised after termination of the contract, and before entering into an agreement with another tenant. The only legal raise the company can apply during the contractual agreement is the annual raise of maximum 5% per annum. (Figure 10.)

In the area related to Discount rent (Figure 11), the user performs similar actions as in the Normal rent section. The only difference comes from the fact that the discount applied to the initial tenants has to be filled in manually as a percentage amount. The tool then proceeds to calculate the rent in euros and make projections based on the input info in all three sections of the tool.

## Discount rent

Length of single tenancy  Months

**Tenants during projection:      0      whole tenar      0      months**

Initial vacancy  Months  
Discount  %

### Tenant - specific information

	Rent	Annual raise
First tenant		%
Second tenant		%
Third tenant		%
Fourth tenant		%
Fifth tenant		%
Sixth tenant		%
Seventh tenant		%
Eighth tenant		%
Ninth tenant		%
Tenth tenant		%

Figure 11. Discount rent manual input.

The results appear on top of the Excel sheet, on the right, in the form of a table. The table identifies the two different scenarios of pricing, and compares and contrasts the changes in-between them. In the “Normal rent” and “Discount rent” columns, the profits show either on the left, or the right hand side. Profits from a full tenancy would appear on the left, while those from partly tenancies – on the right. Each of the amounts shows on the row during which tenancy it was generated. The total revenues from both scenarios are then summed up, and show as “Total profit before turnover costs”. Respectively, the turnover costs are pooled together, and subtracted from the sales. The total profits for the specific tenancy shows in larger, bolded text at the very bottom of the table. (Figure 12.)

## TOTAL PROFITS PER PROJECTION

Tenancy	Normal rent	Discount rent	Change
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
<b>Total profit before turnover costs</b>	- €	- €	- €
<b>Total turnover costs</b>	- €	- €	- €
<b>Total profit during projection</b>	- €	- €	- €

Figure 12. Total profits per projection results table.

Changes between the two scenarios, and the change in total profitability are recorded in the “Change” column. A positive change turns the cells green, while a negative one colors the cells in red. (Figure 12.)

At the bottom of the tool the user is to find two additional tables (Figures 13 &14) which show the maximum potential profitability with the input given by the user, and have only an informative purpose. The tables sum the potential maximum profits by tenants, and years of incurring, then subtract the losses from vacancies at the times of occurrence, and calculate a total maximum profitability. However, the real results differ due to the partly incomplete tenancies.

### Potential Profitability - Normal Rent

Tenant/Year	1	2	3	4	5	Total per tenant	Vacancy loss	Total profit
First tenant	12 000,00 €	12 480,00 €	12 979,20 €			37 459,20 €	2 000,00 €	35 459,20 €
Second tenant	12 600,00 €	13 141,80 €	13 706,90 €			39 448,70 €	3 150,00 €	36 298,70 €
Third tenant	13 440,00 €	14 112,00 €	14 817,60 €			42 369,60 €	3 360,00 €	39 009,60 €
Fourth tenant	- €	- €	- €			- €	- €	- €
Fifth tenant	- €	- €	- €			- €	- €	- €
Sixth tenant	- €	- €	- €			- €	- €	- €
Seventh tenant	- €	- €	- €			- €	- €	- €
Eighth tenant	- €	- €	- €			- €	- €	- €
Ninth tenant	- €	- €	- €			- €	- €	- €
Tenth tenant	- €	- €	- €			- €	- €	- €

Figure 13. Maximum potential profitability for normal rent results table.

### Potential Profitability - Discount Rent

Tenant/Year	1	2	3	4	5	Total per tenant	Vacancy loss	Total profit
First tenant	- €					- €	- €	- €
Second tenant	- €					- €	- €	- €
Third tenant	- €					- €	- €	- €
Fourth tenant	- €	- €	- €			- €	- €	- €
Fifth tenant	- €	- €	- €			- €	- €	- €
Sixth tenant	- €	- €	- €			- €	- €	- €
Seventh tenant	- €	- €	- €			- €	- €	- €
Eighth tenant	- €	- €	- €			- €	- €	- €
Ninth tenant	- €	- €	- €			- €	- €	- €
Tenth tenant	- €	- €	- €			- €	- €	- €

Figure 14. Maximum potential profitability for discounted rent results table.

For better visualization an illustrative user manual with instructions is available to the readers as Attachment 2. An example of a profitability projection can be found as Attachment 3. The tool's version in Finnish can be viewed from Attachment 4.

## 5.2 Implementation of the theoretical framework

The initial purpose of the tool is to assist the management in the decision making process of whether or not to provide discounts to new customers. In that same sense, it measures the potential profits resulting from two different pricing scenarios and compares and contrasts the profitability and costs, resulting from each one of them separately. For this purpose the tool implements components of CVP analysis, calculation of contribution margins per unit, cost accounting and profits, and makes projections for future profitability, based on the company's specific business operations.

## 5.3 Variables

The tool measures volume per time. The length of the tenancy, and projection period are the most crucial variables based on which the tool makes predictions.

## 5.4 Limitations to the tool

It has been recognized by the author that the company ignores operational expenses such as payroll, administrative and other daily occurring costs when calculating profitability from single tenancies. Those are categorized and recorded as fixed costs, a portion per rental apartment. The portion in question should be subtracted from the revenues from sales for each apartment, in order to determine a single apartment's profitability. However, due to a request from the management, the operational costs have been disregarded

when designing and testing the tool, and the fixed cost portion amount has been deemed confidential and therefore does not participate in any of the calculations.

## **5.5 VAT treatment**

Rental prices to private individuals include 24% of value added tax, which is the standard rate stated by the Tax Authorities in Finland. However, the tool is to be used at the Regional Management level, where VAT is found irrelevant, especially in projection of future cash flows from sales. VAT treatment is executed by the Financial Services department at a higher portfolio. Since VAT is not calculated per apartment, but rather corporate wide, the tool disregards VAT calculations, and therefore all rents input by the user are VAT exempt.



## **6 Recommendations and Discussion**

### **6.1 Recommendations**

The following recommendations have been drawn solely from the author's own opinion and understanding and knowledge of the industry, theory and the company itself. All suggestions have been proposed to the management, and taken into account for future corporate development possibilities.

#### **6.1.1 Hierarchy of the profitability analysis**

In order to better understand which tenancies are more profitable, it has been suggested by the author to further analyze the profitability by categorizing each apartment's individual profitability by geographical location. Location seems like a reasonable factor for hierarchical analysis due to its major effect on the rent prices.

#### **6.1.2 Customer turnover**

Clearly, SATO's current focus in business strategy falls upon acquiring new clients. However, one thing the management could implement to improve the analysis of profitability from tenants is to examine turnover rates and categorize them. Organizing tenant turnover by location seems like the most logical solution to determine the level of customer satisfaction from certain apartments and their location. Furthermore, segmentation of customers will help the management in making decisions when it comes to company's resources and value offers, and assist in development of new strategies for specific clients in order to optimize their customer experience (Hinterhuber & Liozu 2013, 161).

#### **6.1.3 Customer retention**

The sole purpose of a business is to generate profits. A successful business however, not always means being exceptionally profitable, as there's more to making profits. Business success comes from customers, which is why they are an important variable in the success equation. It is a common belief that competitive pricing, and unique product offerings are the key to customer satisfaction and their loyalty. However, our clients nowadays pay more and more attention to intangible offers such as services, loyalty programs, and experiences. Naturally some of these cost the businesses money, and some don't. For SATO new customers are expensive, due to the high amount of turnover costs. A longer tenancy results in elimination of some of these expenses. Therefore, a further research on how strategy focused around customer retention, rather than client acquisition at all costs

could provide SATO with valuable information about profitability of the company in the long run.

#### **6.1.4 Cost accounting**

The company's current cost system is highly complex and ineffective when it comes to analyzing the profitability from single apartment's sales revenues, which is why it was recommended that the expenses are better allocated to each unit of sales. Furthermore, the categorization of operational expenses could be revised and cost of goods sold (variable expenses) could be included when calculating tenancies' profitability to the fullest. Cheverton (2012, 359) argues that pretending to measure profits from clients after all incurring costs is senseless unless those expenses are accurately allocated.

#### **6.1.5 Template for cost accounting**

A separate template has been created in order to help the company more accurately calculate profits by also including corporate-wide fixed expenses such as administration, salaries, taxes and others. Currently, such overheads are calculated as a portion per apartment per month based on size and rates for adaptation because of differences in location. Due to a request from the management, they have been ignored when designing the profitability tool. However, a template for overheads allocation as part of the tool has been suggested to the commissioning party, and cost accounting has been promised to be integrated in the profit calculation process in the future.

The figure below (Figure 15) shows the cost accounting appendix in the tool's section for manual input. All the user has to do is insert the overheads allocation portion for the given apartment per month. The tool will then interpret it depending on the projection's length and deduct it from total profits. The user does not need to calculate the overhead allocation portion on their own, as this is executed at a corporate level.

**Projection**  Years

**Turnover associated costs**

Marketing  €

Clean up  €

Vacancy  Months inbetween tenants

**Other possible costs at turnover**

Renovation(s)	<input type="text"/>	<input type="text"/>	0 €
Appliances	<input type="text"/>	<input type="text"/>	0 €

**Other expenses**

Overheads allocation  € per month

Figure 15. Overheads allocation template.

## 6.2 Discussion

Reliability and validity in the theoretical framework have been ensured through studying a sufficient amount of relevant, proven and well-known theories, concepts and models. The majority of books used as a reference are part of the materials for specialization courses at Haaga-Helia and contain well-argued and contemporary theories with a wide range of applicability.

The industry-specific research has been based primarily on official statistical data from historical events and information gathered from reports published by independent from the State investment companies in the real estate field.

The ethical issues occurring during the qualitative data collection method have been resolved with care and responsibility from both commissioned parties. High level of trustworthiness of the information provided by the interviewees has been possible by conducting the research in a friendly, but critical way, and by asking various questions about different operations. Confidentiality between the author and the informants has played an important role in achieving such a safe and efficient environment for conducting interviews.

The conclusions and recommendations to the commissioning company have been drawn from the results presented in this thesis, their critical evaluation and analysis, and from the

author's professional opinion, formed while conducting the thesis project. Those include development ideas and suggestions for further research.

## References

Best, R. 2005. Market-Based Management: Strategies for Growing Customer Value and Profitability. 4th ed. Pearson Education. Upper Saddle River.

Braun, K. & Tietz, W. 2015. Managerial Accounting. 4th ed. Pearson Education. Harlow.

Catella 2015. Property Market Trends Finland | Spring 2015. Helsinki. URL: <http://www.catella.com/PageFiles/25605/Market%20Review%202015%20spring.pdf?epsIanguage=e>. Accessed: 11 May 2015.

Cheverton, P. 2012. Key Account Management. 5th ed. Kogan Page. London.

Expat Finland 2015. Investment Property in Finland - Residential & Commercial. Helsinki. URL: [http://www.expat-finland.com/housing/investment\\_property\\_in\\_finland.html](http://www.expat-finland.com/housing/investment_property_in_finland.html). Accessed: 11 May 2015.

Haaga-Helia 2014. Writing reports and theses at Haaga-Helia. Helsinki. URL: [https://mynet.haaga-helia.fi/en/studies/thesis-bachelor/reporting-guide-lines/reportingguidelines/Writing\\_reports\\_and\\_theses\\_at\\_HAAGA\\_HELIA.pdf](https://mynet.haaga-helia.fi/en/studies/thesis-bachelor/reporting-guide-lines/reportingguidelines/Writing_reports_and_theses_at_HAAGA_HELIA.pdf). Accessed: 30 November 2014.

Hinterhuber, A. & Liozu, S. 2013. Innovation in pricing. Routledge. New York.

Huefner, R. 2011. Revenue Management: a Path to Increased Profits. Business Expert Press. New York.

Kaplan, R. & Atkinson, A. 2014. Advanced Management Accounting. 3rd ed. Pearson. Harlow.

Kivistö, J. 2012. An assessment of housing price developments against various measures. Bulletin 3. Bank of Finland. Helsinki. URL: [http://www.suomenpankki.fi/en/julkaisut/bulletin/economic\\_outlook/Documents/B\\_3\\_12\\_An\\_assessment\\_of\\_housing\\_price.pdf](http://www.suomenpankki.fi/en/julkaisut/bulletin/economic_outlook/Documents/B_3_12_An_assessment_of_housing_price.pdf). Accessed: 30 April 2015.

Newsec 2015. NEWSEC PROPERTY OUTLOOK FINLAND SPRING 2015. Helsinki. URL: <http://www.newsec.fi/globalassets/suomi/ajankohtaista/markkinaraportit-ja-property->

outlook/property-outlook-finland-2015-spring/newsec-property-outlook-finland-spring-2015.pdf. Accessed: 1 May 2015.

Official Statistics of Finland 2015. Rents of dwellings 1st quarter 2015. Helsinki. URL: [http://www.stat.fi/til/asvu/2015/01/asvu\\_2015\\_01\\_2015-05-08\\_tie\\_001\\_en.html](http://www.stat.fi/til/asvu/2015/01/asvu_2015_01_2015-05-08_tie_001_en.html). Accessed: 10 May 2015.

Ryals, L. 2008. *Managing Customers Profitability*. John Wiley & Sons Ltd. Chichester.

San Miguel, E. 2013. *Thesis tools*. Jan 2014 ed. Helsinki.

SATO Corporation 2015. *SATO as a company*. URL: <http://www.sato.fi/en/sato-as-a-company>. Accessed: 25 March 2015.

## Attachments

### Attachment 1. Overlay matrix

The project task of this thesis is to design a profitability analysis tool for the commissioning party SATO Oyj. The project was completed by integrating seven separate tasks in order to organise the whole process and synthesize the data collected. Each of the tasks during this project thesis has been executed with the help of a theoretical framework, and research method of its own. The outcomes have then been interpreted into the respective chapter of the thesis report.

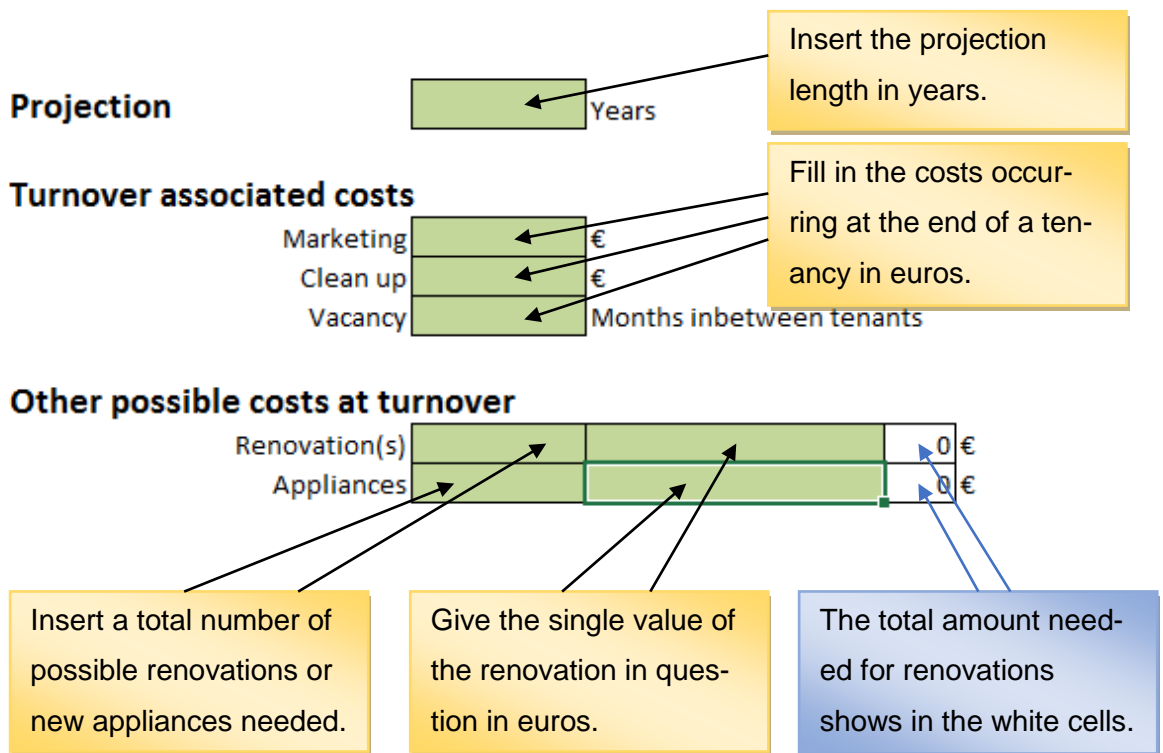
	PROJECT TASK	THEORETICAL FRAMEWORK	TIMEFRAME	METHOD	OUTPUT
1	Establish the need for profitability analysis	Case company specific information	January 2015	Qualitative interviews	Purpose of the project
2	Research the real estate industry in Finland	Field or industry specific information	February 2015	Desktop research	International aspect of the thesis; industry specific characteristics
3	Study related theory on profitability and sensitivity analysis	Theories, concepts, models, prior research	March 2015	Desktop research	Theoretical framework – Chapter 2
4	Create the tool and write user's manual	Excel template, similar tools, instructions for writing manuals	March 2015	Excel	The tool and user manual
5	Present the thesis package to the commissioning company.	Research data and its interpretation	March 2015	Feedback collection	Feedback
6	Adjust and finalize the tool	Feedback evaluation	March 2015	Analysis of feedback	Final product (Thesis package)
7	Learn, evaluate and debrief	Thesis project report and own experience	April – May 2015	Evaluation and analysis	Produce recommendations – Chapter 6 (Discussion)

## Attachment 2. User Manual

The cells for manual input are marked in **light green**.

The commands in the **yellow boxes** give instructions to optimize the usage of the tool, and the **blue boxes** give interpretations to the results calculated.

No strict steps are required when filling in the cells. However, it is recommended that you begin by filling in the required information from the very top of the Excel sheet. Input only numbers in the cells. The cells contents can be changed at any desired time to adjust the projections.





## Normal rent

Length of single tenancy  Months

Give the length of a single tenancy in years (on average).

Tenants during projection: **0** whole tenancies, **0** months

Fill the initial vacancy before the first tenancy has begun in months.

Initial vacancy  Months

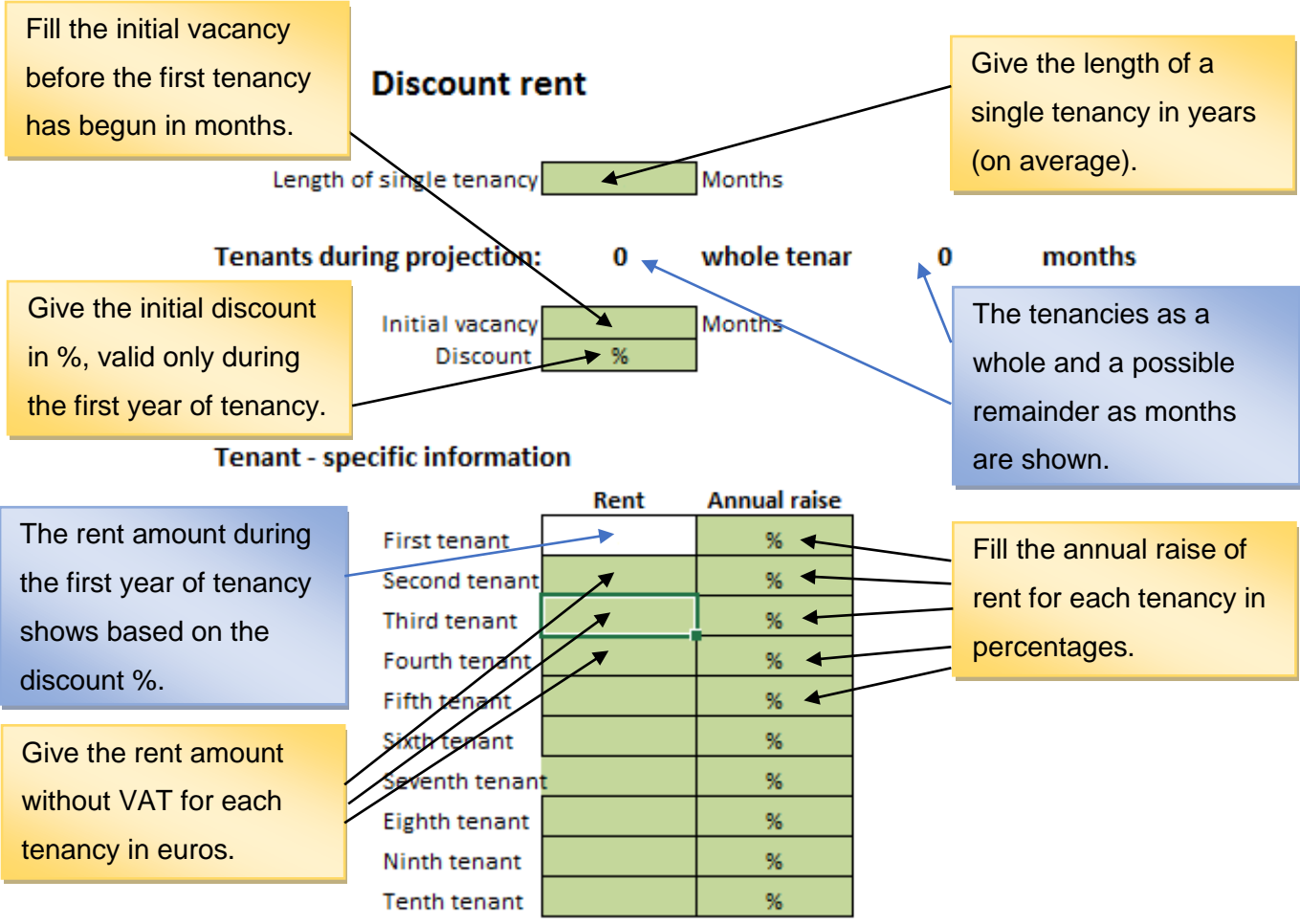
The tenancies as a whole and a possible remainder as months are shown.

## Tenant-specific information

Give the rent amount without VAT for each tenancy in euros.

	Rent	Annual raise
First tenant	<input type="text"/>	<input type="text"/> %
Second tenant	<input type="text"/>	<input type="text"/> %
Third tenant	<input type="text"/>	<input type="text"/> %
Fourth tenant	<input type="text"/>	<input type="text"/> %
Fifth tenant	<input type="text"/>	<input type="text"/> %
Sixth tenant	<input type="text"/>	<input type="text"/> %
Seventh tenant	<input type="text"/>	<input type="text"/> %
Eighth tenant	<input type="text"/>	<input type="text"/> %
Ninth tenant	<input type="text"/>	<input type="text"/> %
Tenth tenant	<input type="text"/>	<input type="text"/> %

Fill the annual raise of rent for each tenancy in percentages.



**TOTAL PROFITS PER PROJECTION**

Tenancy	Normal rent	Discount rent	Change
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
<b>Total profit before turnover costs</b>	- €	- €	- €
<b>Total turnover costs</b>	- €	- €	- €
<b>Total profit during projection</b>	- €	- €	- €

Results are shown as a table. Each row contains profits from the tenancy in question.

The profit before turnover costs, and total turnover costs are shown, as well as total profit per projection.

The change between profits, costs and total profits are shown. If positive, the cells turn green, if negative – red.

### Attachment 3. Example of a projection

The tenancy information below is meant to solely serve as an example. The numerical data is completely fictional, and irrelevant to SATO's own profitability projections.

The results, however, come from using the exact numerical variables as in the input parts of the tool.

**Projection**

7
---

 Years

#### Turnover associated costs

Marketing	1000	€
Clean up	120	€
Vacancy	3	Months inbetween tenants

#### Other possible costs at turnover

Renovation(s)	1	5000	5000	€
Appliances	1	500	500	€

## Normal rent

Length of single tenancy  Months

**Tenants during projection:                    2            whole tenancies,            4            months**

Initial vacancy  Months

### Tenant-specific info

	Rent	Annual raise
First tenant	1 000 €	4,0%
Second tenant	1 050 €	4,3%
Third tenant	1 120 €	5,0%
Fourth tenant		
Fifth tenant		
Sixth tenant		
Seventh tenant		
Eighth tenant		
Ninth tenant		
Tenth tenant		

### Potential Profitability - Normal Rent

Tenant/Year	1	2	3	4	5	Total per tenant	Vacancy loss	Total profit
First tenant	12 000,00 €	12 480,00 €	12 979,20 €			37 459,20 €	2 000,00 €	35 459,20 €
Second tenant	12 600,00 €	13 141,80 €	13 706,90 €			39 448,70 €	3 150,00 €	36 298,70 €
Third tenant	13 440,00 €	14 112,00 €	14 817,60 €			42 369,60 €	3 360,00 €	39 009,60 €
Fourth tenant	- €	- €	- €			- €	- €	- €
Fifth tenant	- €	- €	- €			- €	- €	- €
Sixth tenant	- €	- €	- €			- €	- €	- €
Seventh tenant	- €	- €	- €			- €	- €	- €
Eighth tenant	- €	- €	- €			- €	- €	- €
Ninth tenant	- €	- €	- €			- €	- €	- €
Tenth tenant	- €	- €	- €			- €	- €	- €

## Discount rent

Length of single tenancy 42 Months

**Tenants during projection:                    1            whole tenancies,            38            months**

Initial vacancy 1 Months  
Discount 5%

### Tenant - specific info

	Rent	Annual raise
First tenant	950 €	4,0%
Second tenant	1 050 €	0,4%
Third tenant	1 120 €	5,0%
Fourth tenant		
Fifth tenant		
Sixth tenant		
Seventh tenant		
Eighth tenant		
Ninth tenant		
Tenth tenant		

### Potential Profitability - Discount Rent

Tenant/Year	1	2	3	4	5	Total per tenant	Vacancy loss	Total profit
First tenant	11 400,00 €	11 856,00 €	12 330,24 €	6 411,72 €		41 997,96 €	950,00 €	41 047,96 €
Second tenant	12 600,00 €	12 654,18 €	12 708,59 €	6 381,62 €		44 344,39 €	3 150,00 €	41 194,39 €
Third tenant	13 440,00 €	14 112,00 €	14 817,60 €	7 779,24 €		50 148,84 €	3 360,00 €	46 788,84 €
Fourth tenant	- €	- €	- €			- €	- €	- €
Fifth tenant	- €	- €	- €			- €	- €	- €
Sixth tenant	- €	- €	- €			- €	- €	- €
Seventh tenant	- €	- €	- €			- €	- €	- €
Eighth tenant	- €	- €	- €			- €	- €	- €
Ninth tenant	- €	- €	- €			- €	- €	- €
Tenth tenant	- €	- €	- €			- €	- €	- €

## TOTAL PROFITS PER PROJECTION

Tenancy	Normal rent	Discount rent	Change
1	35 459,20 €	41 047,96 €	- 5 588,76 €
2	36 298,70 €	40 089,98 €	- 3 791,28 €
3	4 480,00 €		4 480,00 €
4			
5			
6			
7			
8			
9			
10			
Total profit before turnover costs	76 237,90 €	81 137,94 €	- 4 900,05 €
Total turnover costs	7 740,00 €	6 620,00 €	1 120,00 €
<b>Total profit during projection</b>	<b>68 497,90 €</b>	<b>74 517,94 €</b>	<b>- 6 020,05 €</b>

## Attachment 4. The tool in Finnish

**Aikajakso**  vuosia

### Asukkaanvaihtoon liittyvät kustannukset

Markkinointi	<input type="text"/>	€
Siivous	<input type="text"/>	€
Tyhjäkäynti	<input type="text"/>	kuukautta sopimusten välissä

### Muita mahdollisia kuluja asukasvaihdon yhteydessä

Remontti	<input type="text"/>	<input type="text"/>	0 €
Kodinkoneet	<input type="text"/>	<input type="text"/>	0 €

## Normaali vuokra

Yksittäisen vuokrasuhteen kesto  kuukautta

Sopimuksia aikajaksolla: **0** kokonaista, **0** kuukautta

Tyhjäkäynti ennen ensimmäistä sopimusta  kuukautta

### Sopimusvuokrat

	Vuokra	Korotus
1. sopimus		%
2. sopimus		%
3. sopimus		%
4. sopimus		%
5. sopimus		%
6. sopimus		%
7. sopimus		%
8. sopimus		%
9. sopimus		%
10. sopimus		%

### Laskettu tuotto per sopimus: normaali vuokra

Sopimus/Vuosi	1	2	3	4	5	Yhteensä	Tyhjäkäynti	Tuotto yhteensä
1. sopimus	- €					- €	- €	- €
2. sopimus	- €					- €	- €	- €
3. sopimus	- €					- €	- €	- €
4. sopimus	- €					- €	- €	- €
5. sopimus	- €					- €	- €	- €
6. sopimus	- €					- €	- €	- €
7. sopimus	- €					- €	- €	- €
8. sopimus	- €					- €	- €	- €
9. sopimus	- €					- €	- €	- €
10. sopimus	- €					- €	- €	- €



## Alennettu vuokra

Yksittäisen vuokrasuhteen kesto  kuukautta

Sopimuksia aikajaksolla: **0** kokonaista, **0** kuukautta

Tyhjäkäynti ennen ensimmäistä sopimusta  kuukautta  
Alennus  %

### Sopimusvuokrat

	Vuokra	Korotus
1. sopimus		%
2. sopimus		%
3. sopimus		%
4. sopimus		%
5. sopimus		%
6. sopimus		%
7. sopimus		%
8. sopimus		%
9. sopimus		%
10. sopimus		%

### Laskettu tuotto per sopimus: alennettu vuokra

Sopimus/Vuosi	1	2	3	4	5	Yhteensä	Tyhjäkäynti	Tuotto yhteensä
1. sopimus	- €					- €	- €	- €
2. sopimus	- €					- €	- €	- €
3. sopimus	- €					- €	- €	- €
4. sopimus	- €					- €	- €	- €
5. sopimus	- €					- €	- €	- €
6. sopimus	- €					- €	- €	- €
7. sopimus	- €					- €	- €	- €
8. sopimus	- €					- €	- €	- €
9. sopimus	- €					- €	- €	- €
10. sopimus	- €					- €	- €	- €

### Aikajakson kokonaistuottovertailu

Sopimus	Normaalivuokra	Alennettu vuokra	Ero
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Tuotto ilman vaihtokuluja		- €	- €
Vaihtokulut yhteensä		- €	- €
<b>Aikajakson kokonaistuotto</b>		<b>- €</b>	<b>- €</b>