Budgeting tool for a non-profit organization

Haaga-Helian liiketalouden opiskelijat Talko ry

Juha-Matti Peltola
The idea for this thesis came from the thesis authors personal experience as a board member and chairman of the student association Talko ry. During this period it was noticed that a simpler way to view the associations current financial position was needed. Through discussions with other board members the idea of a budgeting tool which could gather all the key information of the associations finances would be useful.

This thesis covers the creation of a budgeting tool for a non-profit organization, what theory was used and why, also a user manual is included. The projects purpose was to build a tool for the student association that would help them with their financial planning and control. Based on interviews with association board members this was decided to include a combined cash budget and a variance analysis / budget control tool that would be linked to various budgeting elements to be able to easily and effectively measure the current financial position of the organization.

The project was demarcated to consist only of a budgeting tool for Talko ry, while the theoretical elements of the thesis could be used in a wider project it is not the main purpose of this thesis.

The final product contains the original plans for a variance analysis / budget control tool and a monthly cash budget tool to help understand the monthly cash balance. To aid in importing actual expenses and revenues also a direct method to add reports from the associations accounting program was included.

The project took place from the spring of 2015 to the fall of 2017.
# Table of contents

1 Introduction ................................................................................................................... 1  
1.1 Background ........................................................................................................... 1  
1.2 Project Objective ................................................................................................... 2  
1.3 Project scope ........................................................................................................ 3  
1.4 International Aspect .............................................................................................. 3  
1.5 Benefits ................................................................................................................. 3  
1.6 Key Concepts ....................................................................................................... 4  
1.7 Case Company ..................................................................................................... 5  
1.8 Project management methods .............................................................................. 6  
2 Defining the budgeting elements ................................................................................... 8  
2.1 Combined cash budget ......................................................................................... 9  
2.2 Non-profit organizations ........................................................................................ 9  
2.3 Variance analysis ................................................................................................ 10  
3 Budgeting tool for a non-profit organization ................................................................. 11  
3.1 Variance analysis in the budgeting tool ............................................................... 13  
3.2 Combined cash budget in budgeting tool ............................................................ 14  
3.2.1 Visualization of the combined cash budget ............................................... 14  
3.2.2 Operating the combined cash budget ....................................................... 14  
3.2.3 Tilitin reports for the actual expenses and revenues .................................... 15  
4 User guide ................................................................................................................... 16  
4.1 Gathering information .......................................................................................... 16  
4.2 Variance analysis & cash flow sheet ................................................................... 19  
4.2.1 Variance analysis tool .............................................................................. 19  
4.2.2 Cash budget tool ...................................................................................... 20  
4.3 Updating the tool ................................................................................................. 20  
5 Discussions ................................................................................................................. 21  
5.1 Further work ........................................................................................................ 21  
5.2 Evaluation of the thesis process .......................................................................... 21  
Bibliography ..................................................................................................................... 22
1 Introduction

The purpose of this chapter is to familiarize the reader with the project objectives, and what is expected from each project objective. This chapter also includes a brief look to the case company, as well as the project scope.

1.1 Background

The idea for this thesis comes from the writer's year as the chairman of the student association Haaga-Helian liiketalouden opiskelijat Talko ry, henceforth either Talko or “the association”. During that time, it became apparent that there was a lack of proper financial management in the organization, which could be fixed by someone taking a careful look at how the association uses its money and assets. A well-made budget can help the association use its capital with more care, and help with investing it through better decision making, and this tool was designed to aid in keeping track on where you are in accordance with the budget, and to also provide an easy way of executing simple variance analysis which can be compared to actual revenue and expense accounts. The association operates on a low annual budget, and that makes it even more important that financial management is handled well. With a low budget mishandling the finances can lead to a situation where there are no finances available for an event that the association was supposed to organize leading to a loss of revenue.

Many times throughout the year, my own decision making was impaired by a lack of knowledge about current money flows within the association. When was money coming in and how much could be spent now? The annual budget tells you that certain activities will provide a certain amount of income, but it does not bring any clarity in to how that income will be made. If the prices are changed what can we expect? If we organize a completely new event, how much can we invest and how much can we expect in return? These were all calculations I needed to do without anything but my studies to rely on, so a tool to help the chairmen make these decisions was necessary.
1.2 Project Objective

There will be total five project objectives that will build the core of this thesis process from start to finish.

<table>
<thead>
<tr>
<th>Project Task</th>
<th>Knowledge base*</th>
<th>Project Management Methods</th>
<th>Outcomes **</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT1: Define the budget elements</td>
<td>Books on financial management</td>
<td>Research</td>
<td>Clear view of what elements will be in the final tool</td>
</tr>
<tr>
<td>PT2: Interview the current chairman of the board and treasurer to find out their needs for the budget framework</td>
<td>-</td>
<td>Schedule a meeting</td>
<td>Find out their needs for the budget framework</td>
</tr>
<tr>
<td>PT3: Work on a budget for the NPO</td>
<td>Courses about financial management</td>
<td>Theory research</td>
<td>A framework of the tool presented to the current board</td>
</tr>
<tr>
<td>PT4: Finalize the budget tool.</td>
<td>Suggestions the current board gave.</td>
<td>Theory research</td>
<td>Finalized tool</td>
</tr>
<tr>
<td>PT5: Teach the current board to utilize the tool and make it a part of the financial management of the association</td>
<td>Finalized thesis</td>
<td>Meetings of the board</td>
<td>Project tool integrated as an essential part of the financial management in the association.</td>
</tr>
</tbody>
</table>

Table 1: Project tasks for the Project tool.

The purpose of task one is to search for the relevant theory related to making the budgeting tool, and to provide a framework for the budgeting tool. In task 2 these views will be presented to the associations treasurer and chairman to find out if their needs align with it. Task 3 is the most crucial part and it is to design the actual budgeting tool in Microsoft Excel. Microsoft Excel was chosen as the platform for this tool because the association already has a licence for it, which helps in the integration process. The association can at a later stage consider upgrading to a more sophisticated platform for financial management if there is a need for it. At this stage, a Microsoft Excel tool will be adequate for the needs and the scope of the financial management in the association. In task 4 once the budgeting tool is finalized the board will give out their suggestions on any improvements that could be made, and also the writers suggestions on how to implement this tool as a decision-making element in the association. The final task is to teach the board to utilize the
tool efficiently and to integrate it to the associations work routine. For the integration to work properly and the tool to be a part of the decision making in the association for a longer time, it is crucial that there are clear instructions within the tool to guide the user in how to update it each year, and how to use it to maximize utility.

1.3 Project scope

The idea began as a tool that will provide a way for the decision makers in the association to have a clearer understanding of how decisions they make affect the financials of the association. A clear vision of the financial position of the organization will be helpful when decisions are made about large investments. As the project moved further the needs of the association became clearer, and a cash budget was also included to help visualize the full year cash flows.

The main focus will be on helping the association with understanding the real time effect of each decision, how it effects the cash flow in the present, and how it looks like in the budget.

The thesis will not focus on the accounting of Talko, and will be solely about the budgeting tool for the association.

1.4 International Aspect

International aspect of this project is that the student association also represents GloBBA (International Business programme, Haaga-Helia University of Applied sciences) students and this tool will be required to be able to be used by future board members of any nationality.

1.5 Benefits

The aim of this tool is to help the association with financial management within the association. In Talko the chairman, vice-chairman and the treasurer carry out most of the financial decisions. With this tool the association can understand better what the financial position of the association is, and make more effective decisions. The tool can be also used to take a quick summary of the current financial position for the board members, this way the treasurer does not need to prepare these reports separately.
The benefit to stakeholders can be for example lower prices for members and other students when the revenues are understood better, and there is a clear plan on how much and at what price to sell. The other benefit will be that it is easier to invest cash to bigger purchases when there is more knowledge of how much cash is needed in the future. Sometimes these bigger investments are held back by the fear of running out of cash, which leads to non-dynamic decision making and has a negative effect on the speed at which the association can grow.

1.6 Key Concepts

**Strategic planning** helps reach long-term goals, and budgets can help reflect these expectations (Braun, Tietz & Harrison 2013, 520). The strategic decisions made by the association will reflect the financial status as well. This is why a sound monetary policy is required to support, and be at the core of any strategic decision making.

**Benchmarking** helps companies attain their long-term goals (Braun & al. 2013, 520). Benchmarking sales goals for example can help the association focus their efforts more on the things that require it.

**Operating budgets** are used to run the day-to-day operations in an organization. These will help the managers to decide how to allocate funds (Braun & al. 2013, 520).

**Budgeted income statement** is formed from the operating budgets (Braun & al. 2013, 520). This can help to give a realistic idea to the chairman of how the accounts will look like at the end of the year, and what type of things must happen to reach that point.

**Budgets** are used ... to plan for the future and control the revenues and expenses related to those plans (Braun & al. 2013, 476)

**Cash budgets** are used in this budgeting tool for analysing the associations monthly cash position.

**Variance analysis** is used to determine how different scenarios will look like when compared with actual data in the budgeting tool.
1.7 Case Company

Talko is a student association operating in the Haaga-Helia University of Applied Sciences Pasila campus. The association represents approximately 700 hundred students from HELI (a Bachelor of Business Administration programme in Finnish), GloBBA (a Bachelor of Business Administration programme in English) and Sales programmes (a Bachelor of Business Administration specialized in sales). The main objectives for Talko are to provide activities for its members throughout their studying years, to act as a unifying element within the student bodies, to bring professional opportunities for its members, and to cooperate with the Haaga-Helia administration and faculty so that the students have the best possible studying environment.

The case company has an annual turnover of about 20000€, and it is typical for such associations to operate on low budgets. The income comes mainly from two sources:

- Membership fees (20€ for the whole study time)
- Organized events

About 150 students join the association each year, and the board actively seeks new ways to increase this revenue stream. Events are organized for the members and other students from various universities. This is one key revenue stream for the association. Members are always charged less for the tickets, so the profit is made mostly from the other students who are charged a higher fee. Also for other types of events such as the annual gala, academic table parties etc., any other students that want to come must pay a higher price.

These revenue streams are highly dependent on the board members actively selling the memberships, and selling tickets to the parties. A party with a low number of visitors can have a serious effect on the whole years budget if it was not anticipated or prepared for.

This problem is common throughout student associations and due to the unpredictable nature of each associations revenue one that is difficult to fix. Through a proper understanding of the financial situation of the association, long term planning and careful consideration of the budget obligations it is possible to build the association on a sustainable foundation with long-term benefits.
Talko acts as a representative of the union TRAL ry (the union of professional business graduates in Finland) and their student body TROL ry (the national union of BBA-students) in Haaga-Helia Pasila campus. TRAL is the union of Professional Business Graduates in Finland, with a purpose to provide services related to working life and employment relations to its members (Tradenumiliitto 2016). Each Talko member gains a student membership of the union when joining Talko. The union provides financial incentives to Talko to recruit as many members as possible. The amount of the financial incentive is decided by the type of union membership the student chooses. There are three types of union memberships available to students.

- Silver (No additional cost for the student)
- Gold (annual fee of 9€, the student gets all the benefits the union provides)
- Black (annual fee of 120€, the student gains all the benefits the union provides plus unemployment fund)

Each student is asked to decide between these three options as they join. For the silver membership Talko gets 0,5€ for each member that joins, for the Gold and Black memberships Talko gets 10€ for each member. This provides Talko with financial motivation to get as many Gold and Black memberships as possible.

Other services offered for the students include various events, varying from parties to members social evenings to company visits. During the offices opening hours, they sell cover-all patches, tickets to many student events and movie tickets for a discount.

1.8 Project management methods

The main sources of information for the thesis will be books on financial management, and the courses I have taken on the subject. Another source will be the past experience I personally have with the association, and also the current members of the board and the chairman. Combining the theory with the users experiences will be key in formulating a tool that can be useful for the association for many years.
Table 3: Project graph Describing the steps taken in the creation of the tool.

In the first part the theory is laid out in the Thesis Plan and personal research. This information is then used when negotiating with the current leaders of the association. Preparing a preliminary tool will be a consequence of this meeting.

Based on the meeting the tool is then optimized and sent to the board for evaluation and feedback. When the feedback is received the tool will be finalized.

Final step in this plan is to integrate the use of the tool in to the association, so that the current treasurer and chairman will know how to use it, and also that they know how to teach the upcoming members of the board to use it.
2  Defining the budgeting elements

CIMA, an organisation of managerial accountants, defines budgeting as the process of expressing the expected expenses and resources for an outlined way of action over a certain period (Ross 2005, 14.). The terms predicted and planned are key in this statement. The better the association can predict and plan their actions over a specified period, the better they will be able to perform.

Defining the right budgeting elements required by the association is one of the key elements of this thesis. For a non-profit that does not run a heavy cash flow, it is necessary to keep all budgeting and accounting as lean as possible. If these elements require too much work it will hinder the associations operational capabilities instead of supporting them. For these reasons a clear definition of what is needed is essential.

Currently Talko defines their budget on an annual basis in the fall meeting, where members are present. The meeting will approve it for the following year and it is the task of the chairman to make sure that the budget is followed. Due to the nature of how the association makes its profits, it is necessary to keep a closer eye on what the current situation is regarding the budget, and if any revisions will need to be made. The chairman will always have to respect the original budget in terms of where money is allocated, but being able to predict how the year is going to look like will be beneficial in allocating cash to different operations that could benefit the association. If the actual amounts have variations from the original budget, the Chairman will need to explain these variations when the finances are evaluated at the end of the year in the Fall meeting.

To help this process the tool will include a variance analysis tool and a cash flow budget. The variance analysis tool will show the overall financial position by comparing cash flows to the annual budget. The cash flow budget will give a monthly breakdown of the cash position of the association. For the cash flow analysis, the user will have to manually input the predicted expenses and revenues for each month. Once this is done the tool will be able to calculate how much cash is available during each month, which can help to enable the leadership of the association to make additional purchases for example. When used properly these two should give a clear indication of how the financial decision affect the future months of the association, and if they are able to make budget for the whole year.
2.1 Combined cash budget

The combined cash budget compiles all cash payments and collections for each month to predict the ending cash position for the month. (Braun & al. 2013, 493.) It enables the treasurer with a way of understanding what the financial position of the association is at the end of the month, when all expected cash flows are accounted for. It does it simply by adding together budgeted cash flows with the beginning cash balance, and then subtracting expected expenses from the total. This gives the ending cash position for the month. In a regular combined cash-budget the need for capital investment and loans are accounted for after the expenses are counted. With the case company these are not necessary, because as a non-profit student association it has not historically had the need to do so. The combined cash budget simply acts as a way to recognize the cash position at the beginning of the month and at the end of the month.

The combined cash budget allows managers know to in advance when they will be short on cash and need to borrow money, or when they may have extra funds to invest. (Braun & al. 2013, 494.)

This quote summarizes well why it is necessary for the case company to apply a budgeting tool in to its financial management activities. To be able to predict cash flow in a simple, visual way can save the decision makers from making poor decisions that might make the association run into cash flow problems.

The tool features a combined cash budget tool, which is linked with the cash inflows and outflows worksheet in the budgeting tool.

2.2 Non-profit organizations

Proctor sees budgeting as a way for a non-profit organization to promote the completion of their larger goals via internal financial control. For this reason, the budgeting tool must account for different needs than a regular company. (Proctor 2009, 492.) There is no need for the case company to try and cut down costs as investments are not necessarily made to seek profits. An investment might be made just to be able to increase members satisfaction with the organization. Despite this the budgeting tool is necessary for a responsible way of tracking expenses and revenues. Proctor also describes that the difference for normal companies and not-for-profit organizations is not that companies need to make a profit, but rather what is done with them. This means that Non-profit organizations often
should find ways to feed the surplus money back in to the organization to advance its purpose instead of paying dividends to shareholders, or bonuses for executives.

The challenges for budgeting in a non-profit organization is that there must be the desire to keep a financial control in the company. The board changes annually, which makes it more difficult for a budgeting tool to reach its maximum usefulness. If it is not taught properly to the next chairman or treasurer, its use might diminish despite its effectiveness. For this reason it is paramount that the tool is clear and simple to use, with clear instructions on how to use it and update it.

### 2.3 Variance analysis

Variance analysis is the quantitative investigation of the difference between actual and planned behaviour. (Bragg 2017, 1.)

The tool will allow the user to quantitatively express planned and actual accounts, then take all of that in to a summarized context in which the user can thoroughly analyse the current financial situation of the association in accordance with the budget.

To help the user with inputting actual costs the tool also includes the possibility of importing actuals straight from the accounting program Tilitin that the association uses. This will make it quick and easy for the user to get accurate actual costs in to the system, and then easily look at the summary of what it all means. By inputting also predicted costs in to the tool, the user will be able to gain a wholesome understanding of the current financial position of the association.

Variance analysis is used to determine how changing conditions will affect budgets. For example, if a profit-based operation such as arranging a large-scale party with ticket sales will have a maximum profit of 3000€ and a minimum expected profit of 500€, it changes substantially how you can plan for the upcoming months. Will you be able to purchase the new office computer that would streamline operations in the office and cut down working resources or not? This type of questions the leadership of the association should be able to answer and with the use of the tool they can apply more knowledge in to their decisions.
3 Budgeting tool for a non-profit organization

In this chapter, the theory will be applied to the practical elements of the tool. As we understand the theoretical elements we can utilize them to the associations benefit.

The main idea is to have a tool assist the Chairman and the Treasurer of Talko make decisions how to use money more efficiently. This tool could be made universal for all associations, but for the scope of this project it is made for just the case company.

A common problem for student associations is lack of understanding of the immediate financial situation of the association. This leads to money often not being used for purchases that could be useful or increase revenue, when there is a fear that the association will not meet the annual budget. This is due to the structure of how these associations work. In the fall meeting the board and the chairman is chosen, and they carry out the annual budget that is used to guide the financial decision making throughout the year. (Yhdistyslaki 2010/678). The chairman is responsible that financial decisions are handled responsibly, which creates pressure for a more conservative decision making. A tool to help guide these decisions could also provide encouragement along with proof for the fall meeting, that necessary precautions were taken if for example a bigger investment was made during the year. The purpose of the tool however is not to provide motivation for risky decision making.

This tools purpose is to ease the understanding of the current financial situation, by linking together the annual budget and a cash budget which will be easy to update and compare with the annual budget. The tool will make it easier to recognize the different elements and risks involved in investing money when the association has events coming up that will need money in the bank. The tool will also be able to import data from Tilitin spreadsheets, which can be used to gather accurate actual data from which to make comparisons to the current year budgets.
Table 4: An example of how cash flow is operated in student associations. Events are used as an example because they create the largest part of the ingoing and outgoing cash in the budget.

As seen in the graph there is a concurring state of cash that is coming in from an event, where the club for example has not delivered it yet, then a new event coming up where money is going to be used. On top of this the evaluation of the financial position might only happen once both events have already taken place, because it is usually done at meetings of the board and when the treasurer has had a chance to catch up with the finances.

The problem that arises is that the chairman and the treasurer might not be informed on how much cash is available and how much cash should be reserved in the bank for the upcoming events. This type of situation results in very conservative decision making about the finances, as it is always the better option to act safely when you do not have all the information. This conservative decision making is what results in not using the money in many associations, discouraging decision making that might result in bank account closing to zero for a short period.

There are several benefits to being able to use all the money possible throughout the year. Coverall patch sales for example are a steady source of income for Talko which are generally sold for a very large profit margin. Buying more patches and being able to sell more of them is a guaranteed way to increase the annual revenue. Coveralls are a piece of clothing worn by students for certain events, and each event that has a requirement to
wear coveralls will also include these patches in the price, or sell them during the event. Patches are also play a certain part in the student culture and many variations of them are sold by different associations and individuals. A typical price for a coverall patch is 2-3€ with manufacturing costs from 0.5€ to 1.5€.

Other benefit is ability to make larger investments with possible extra cash, with the knowledge that even if the bank account has a small amount of money for a while, the user can be sure that it will change. This kind of big investments with long depreciation periods can substantially increase member satisfaction with the association in the long term.

### 3.1 Variance analysis in the budgeting tool

This thesis considers variance analysis from the management accounting point of view as a difference from the original budgeted or planned amount. Variance analysis in this context means a study on how certain scenarios will look and how much money the association will have left over in these financial scenarios.

By preparing thorough variance analysis scenarios the chairman of the association can be prepared for multiple different scenarios and not be caught by surprise by unexpected events.

The profits of the case company are often dependent on how many people decide to join an event, which can be hard to predict despite previous popularity of an event. There are many variables when organizing events such as the weather, other similar events happening at the same time and upcoming tests of students. This means the leaders should be prepared for everything and why a variance analysis tool is necessary.

The tool includes a variance analysis method in which the user can see the effect of each investment and profit compared to the annual budget by counting what is called a net budget from all the expenses and profits for that certain category within the annual budget. This is explained further in the user guide.

Variance analysis was included to show how a big purchase for example would affect the whole budget for the year. It is a difficult task to be able to predict if the association will have enough cash at the end of the year, and this tool is designed to help with that. Utilizing the cash budget it is possible to see the status for each month, but the user can also
add expenses or investments for the rest of the year to see where the money will be short, and when there will be extra to use.

3.2 Combined cash budget in budgeting tool

The theory behind a combined cash budget was discussed in chapter 2.1. This chapter focuses on how the combined cash budget operates in the budgeting tool and what purpose it serves.

3.2.1 Visualization of the combined cash budget

The visualisation of the combined cash budget part is done in a way that it would be easy for the user to understand what can be found on each row. The timeline of the year moves from left to right on a monthly basis January to December, and the current cash position of each month is the ending cash position of the previous month. The only number that needs to be inserted is the beginning cash position in January, which can either be taken from the annual budget or inserted to test different scenarios.

The combined cash budget was placed under the combined budget / variance analysis part of the summary sheet in order to be able to analyse everything with one glance without the need to jump from one worksheet to another.

Conditional formatting was also applied to this table to show when the monthly cash position will be below zero. Excel will automatically highlight these numbers as red to make it very easy to visualize where the negative months are.

3.2.2 Operating the combined cash budget

The combined cash budget is linked straight to the variance analysis to ease the operating of the budgeting tool. On a separate sheet the user can input when a transaction happens, what category it belongs in and how much it was worth. The user can list everything that is expected to happen and everything that could happen, and then follow from the summary sheet how these will look during the year. If the user notices that by making these decisions, it is likely that the cash position will be negative at the end of one month a conclusion can be made that some action must be taken. This might include focusing on sales, recruiting more members or simply holding on to an investment for a while.
3.2.3 Tilitin reports for the actual expenses and revenues

Tilitin is the accounting software used by Talko and it is operated by the treasurer of the association. In an interview with the treasurer of 2017 (Säteri 23 May 2017.), he suggested that it would make the usage of the tool easier if it was possible to add reports straight from Tilitin to this budgeting tool.

As a result of this conversation a separate worksheet called “Tilitin” was added to the budgeting tool where the user can import a Tilitin report. The budgeting tool uses the account number on the Tilitin report to match the category with the Annual Budget to be able to combine it to a combined sheet in the Variance Analysis & cash flow worksheet.
4 User guide

The user guide explains how a new user will be able to use the budgeting tool. The tool contains many formulas which need to be understood by the user to be able to update it correctly. Every year the user is required to update the new annual budget on to a separate sheet correctly, so that the formulas will be able to update. Any changes made to the annual budget will have to be also applied in the budgeting tool. The structure of the user guide will follow the logic of how the budgeting tool was built. First is explained how the tool gathers information from the annual budget, then how new data can be input in to the tool, and then is explained how the summary sheet works.

4.1 Gathering information

To be able to aggregate the data enough, it was necessary to create categories that would contain the larger concepts within the association. The main categories are the following:

- Parties
- Annual gala
- Culture
- Sports
- Freshmen cruise
- Kustanne
- Office
- Fund raising
- Representation
- KOPO
- SOPO
- TROL
- Other revenue
- Siirtosaamiset

This was aggregated from the following accounts that the association uses:

3021 Juhlatuotot
3022 Vuosijuhlatuotot
3032 Kulttuuritoiminnan tuotot
3033 Liikuntatoiminnon tuotot
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3034</td>
<td>TROL-rekisterimerkintäpalkkiot</td>
</tr>
<tr>
<td>3039</td>
<td>Muut virkistystoiminnan tuotot</td>
</tr>
<tr>
<td>4301</td>
<td>Juhlakulut 0 %</td>
</tr>
<tr>
<td>4302</td>
<td>Vuosijuhlakulut 0 %</td>
</tr>
<tr>
<td>4311</td>
<td>Fuksiristeilykulut</td>
</tr>
<tr>
<td>4312</td>
<td>Aktiivien juhlakulut</td>
</tr>
<tr>
<td>4314</td>
<td>Elokuvalippukulut</td>
</tr>
<tr>
<td>4315</td>
<td>Liikuntatoiminnon kulut</td>
</tr>
<tr>
<td>4316</td>
<td>Lehtitilausmaksut</td>
</tr>
<tr>
<td>4317</td>
<td>Muut kulttuuritoiminnan pääsyliput</td>
</tr>
<tr>
<td>4318</td>
<td>Muut kulttuuritoiminnan illanvietto- ja juhlakulut</td>
</tr>
<tr>
<td>4319</td>
<td>Muut kulttuuritoiminnan kulut</td>
</tr>
<tr>
<td>4321</td>
<td>Kustanne -lehti</td>
</tr>
<tr>
<td>4331</td>
<td>Kurssimaksut ja avustukset</td>
</tr>
<tr>
<td>4333</td>
<td>Koulutuspoliittisen toiminnan kulut</td>
</tr>
<tr>
<td>4334</td>
<td>Sosiaalipoliittisen toiminnan kulut</td>
</tr>
<tr>
<td>4339</td>
<td>Muut opinto- ja koulutustoiminnan kulut</td>
</tr>
<tr>
<td>4349</td>
<td>Muut varsinaisen toiminnan kulut</td>
</tr>
<tr>
<td>6500</td>
<td>Edustuskulut</td>
</tr>
<tr>
<td>6575</td>
<td>Pr-kulut alv 0 %</td>
</tr>
<tr>
<td>6615</td>
<td>Postikulut alv 0 %</td>
</tr>
<tr>
<td>6630</td>
<td>Puhelin- ja telefаксkulut alv 0 %</td>
</tr>
<tr>
<td>6650</td>
<td>Pankkikulut</td>
</tr>
<tr>
<td>6710</td>
<td>Toimistokulut alv 0 %</td>
</tr>
<tr>
<td>6775</td>
<td>Kirjanpito ja tilintarkastus alv 0 %</td>
</tr>
<tr>
<td>6795</td>
<td>Kokouskulut alv 0 %</td>
</tr>
<tr>
<td>6990</td>
<td>Varsinaisen toiminnan muut kulut</td>
</tr>
<tr>
<td>7001</td>
<td>Haalarimerkki- ja pinssituotot</td>
</tr>
<tr>
<td>7003</td>
<td>Kirjojen väliyspalkkio</td>
</tr>
<tr>
<td>7005</td>
<td>Jäsenmaksutuotot</td>
</tr>
<tr>
<td>7009</td>
<td>Muut varainhankinnan tuotot</td>
</tr>
<tr>
<td>7501</td>
<td>Haalarimerkki- ja pinssikulut</td>
</tr>
<tr>
<td>7503</td>
<td>Kirjojen väliyskulut</td>
</tr>
<tr>
<td>9599</td>
<td>Edellisten tilikausien menoihin kohdistuvat olennaiset oikaisut</td>
</tr>
<tr>
<td>2500</td>
<td>Ostovelat</td>
</tr>
<tr>
<td>1910</td>
<td>Aktia 405510-2273417</td>
</tr>
<tr>
<td>1920</td>
<td>iZettle</td>
</tr>
<tr>
<td>1680</td>
<td>Siirtosaamiset</td>
</tr>
</tbody>
</table>
The list is included to show the large amount of accounts and why it was necessary to narrow it down.

The categorization was done based on my own experience from what are the main categories and on an interview conducted with Arsi Päänilä (Päänilä 21 November 2016). It is important that it is easy for the user of the tool to categorize the accounts in any way they see fit, as it is not possible to make a clear categorization that would fit all purposes.

By using the categorization the tool can count a net-budget on a category basis. Net-budget in this thesis means all the revenues and expenses listed in the annual budget counted together. This was done based on the interviews conducted with the current leadership of the association. Instead of calculating it for each original insertion specifically, the tool can show clearly which main categories are in budget and which ones are not. It was necessary to keep the tool clear and easy to use, and so that it provides a better understanding of the overall situation with the association. Whenever a new lower category is made in accounting, it should be assigned an upper category in the tool so that the formulas will know to include it in the calculations.

In the cash inflows and outflows sheet the user can add expenses and revenues for the cash budget and the variance analysis tool. This works combined with the cash analysis tool so that the user will insert only actual numbers for past events, then budgeted costs and profits for the future. When this is done the both calculations together will show the cash position at the beginning and end of each month, and also compare the budgeted situation against the annual budget.

<table>
<thead>
<tr>
<th>Category</th>
<th>Month</th>
<th>Revenue</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juhlat</td>
<td>Tammikuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Vuosijuhlat</td>
<td>Helmikuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Juhlat</td>
<td>Maaliskuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Kulttuuritoiminta</td>
<td>Huhtikuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Vuosijuhlat</td>
<td>Toukokuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Juhlat</td>
<td>Kesäkuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Vuosijuhlat</td>
<td>Heinäkuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Juhlat</td>
<td>Elokuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Kulttuuritoiminta</td>
<td>Syyskuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Vuosijuhlat</td>
<td>Lokakuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Juhlat</td>
<td>Marraskuu</td>
<td>100 €</td>
<td>200 €</td>
</tr>
</tbody>
</table>
The numbers and insertions in this table are examples of how the table can be used. The user can insert individual transactions which will cumulate to the summary sheet, or for example everything that is expected to happen in the month of December can already be cumulated in this worksheet to make the view clearer.

First the user will specify which category the investment or expense belongs to. Second step is to select the month of the transaction, and third to insert the revenue, expense or both allocated for that instance. Both the cash budget and the variance analysis tool will take the data from this table, so it is crucial that each insertion is accurate. For upcoming months, the user can insert any numbers they wish to, and be able to look at the cumulative financial positions from the summary sheet.

4.2 Variance analysis & cash flow sheet

This is the key worksheet of the whole tool. In this sheet, the user can find the variance analysis tool and the cash budget tool linked with the actual data from Tilitin reports.

4.2.1 Variance analysis tool

The variance analysis tool shows the actual and budgeted expenses and investments on a category basis. This means it does not take in to account the time of the transaction at all, instead it is only there to provide the user with a simple way to view how the current financial position reflects against the annual budget.

First it calculates a net-budget which shows the total amount of each low-category row in the annual budget summed together. In the second and third columns, it splits the total in to revenue and expenses. The last columns show the net budget against the total expenses and investments. This number should be viewed against the figure in the net budget column, as some categories have negative budgets and some have positive ones. To help visualize this a conditional format was applied to the numbers in the last columns, so that the user can instantly see if the estimate is over or under the annual budget figures.
4.2.2 Cash budget tool

The cash budget tool uses the inputs from the expenses sheets to calculate a monthly cash position. It simply shows the beginning cash position and cash collections added together as total cash available. From the total cash available all cash payments are deducted to show the ending cash position for the month. This is a useful addition to the budget variance tool so that the user can get a monthly breakdown of events throughout the year, and can easily keep track of the financial position of the association.

<table>
<thead>
<tr>
<th>Cash budget</th>
<th>Tammikuu</th>
<th>Helmikuu</th>
<th>Maaliskuu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning cash balance</td>
<td>3 000 €</td>
<td>2 800 €</td>
<td></td>
</tr>
<tr>
<td>Cash collections</td>
<td>200 €</td>
<td>200 €</td>
<td></td>
</tr>
<tr>
<td>Total cash available</td>
<td>3 200 €</td>
<td>3 000 €</td>
<td></td>
</tr>
<tr>
<td>Less: cash payments</td>
<td>400 €</td>
<td>400 €</td>
<td></td>
</tr>
<tr>
<td>Ending cash balance</td>
<td>2 800 €</td>
<td>2 600 €</td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Talko cash budget tool from January to March.

4.3 Updating the tool

For updating the tool in the beginning of the year the user must copy the new annual budget, which was approved in the Fall meeting, in to the excel. After this is done, the formulas will need to be adjusted in the Budget Control and Cash budget worksheet so that they are counting the correct row and column. Then the user will need to look at the A-column of the TA-worksheet and see that the categories are updating properly. If the user wishes to add more categories, it can be done in the categories worksheet, otherwise that worksheet does not need to be used. Everything else happens automatically and does not need to be changed. If the user wants, a new Tilitin update can also be imported to see the current actuals. When adding a new Tilitin report the user should export from Tilitin the time period the user wants to analyze, and then copy that in to the Tilitin worksheet. Make sure to delete all data from previous reports apart from the named columns.
5 Discussions

The purpose of the tool was to provide a clear and easy way for the key members of the student association Talko to be able to view their current financial position and make easy variance analysis. In its current state the tool performs the actions that it was supposed to in a clear visual way, where it is easy with a short amount of time to gain the knowledge the user is looking for.

Through many versions of the budgeting tool I believe we have arrived at a version that is helpful for the association, especially for creating scenarios on how the year can play out and how it will look like on a monthly cash basis. The addition of Tilitin reports, which was a result of an interview of the 2017 treasurer of the association, was especially useful for helping input all the actual data as the year moves forward.

One of the key issues on how well the tool performs is the categorization of different financial accounts. I have provided a way that I decided was a good approach, but I also believe it is just a suggestion, and a final categorization will be reached once the current members of the association receive the tool and are able to use it in their monthly activities.

The final product combines the elements that were intended to be included, which is the variance analysis capability and the possibility to evaluate monthly cash positions.

5.1 Further work

For this tool to be useful it is crucial it is implemented in to the training of new board members when they are chosen. When new users get to access the tool they can modify it to do the things that they need. In time the tool can become larger and contain more elements of the financial planning, and might be key even in creating budgets for next year.

5.2 Evaluation of the thesis process

The thesis process starting with a course on what the thesis should contain and the mentoring has been very supportive in Haaga-Helia. The problem for my own learning and process was that the thesis writing period stretched to over two years, which made the process very fragmented. Having a mentor guide me through the whole process was extremely helpful.
Bibliography


Päärnilä, A. 26 November 2016. Treasurer, Talko ry. Interview via Facebook.


