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# Cash Budget versus Financial Budget: Advantages and Disadvantages – a case study

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# Resumo

O objetivo desta tese foi o de apresentar um orçamento alternativo ao orçamento de tesouraria. Esse projeto é interessante porque permite consolidar o conhecimento sobre orçamentos e colocar o que foi aprendido em prática. Esta tese também pretende mostrar com dois exemplos de orçamento diferentes como estes podem ser aplicados numa empresa específica.

O método de pesquisa escolhido foi o estudo de caso, porque pretende-se explicar com este trabalho, quais são as vantagens e desvantagens verificadas com o orçamento financeiro e com o orçamento de tesouraria.

Algumas das vantagens verificadas com o orçamento de tesouraria são as informações detalhadas que contém; o foco no curto prazo e a descrição de e para onde vai o fluxo monetário. Por outro lado, temos o orçamento financeiro. Ele tem algumas vantagens em comum com o orçamento de tesouraria - o foco de curto prazo. Ele permite-nos estimar se a empresa vai ter lucro ou prejuízo no final do mês ou do ano em análise.

O orçamento financeiro foi criado com as informações da empresa. Ambos os tipos de orçamento tem informações importantes e diferentes que se complementam. Os meus resultados foram obtidos numa empresa específica, mas que podem ser aplicáveis a outras empresas.

Palavras-chave: Orçamento, Orçamento de Tesouraria, Orçamento Financeiro

JEL Code: H61, G30



# Abstract

The purpose of this thesis is to present an alternative budget to the cash budget. This project is interesting because it allows me to consolidate my knowledge about budget and put what I have been learning into practise. This thesis also pretends to show two budget examples and how they could be applied in a specific company.

The research method chosen was a case study because this work pretends to explain what are the advantages and disadvantages verified with the financial budget and with the cash budget.

Some of the advantages verified with the cash budget are the detailed information because it contains short-term focus, and more information about how the cash flows. On the other hand, we have the financial budget. It has some advantages in common with the cash budget – short-term focus. It provides an expectation if the company is going to have profit/loss in the end of the month or year in analysis.

The financial budget was created with the company information. Both types of budget have important and different information and they complement each other. My results were obtained related to a specific company but these results could be applicable to other companies.

Keywords: Budget, Cash Budget, Financial Budget

JEL Code: H61, G30





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# Introduction

This thesis was developed to obtain a Master Degree in Auditing and Taxation.

I had the possibility to choose between an internship in a company which main goal was to implement a budget for the company. The company teaches complementary lessons on English and technologies to children and provides additional training to adults.

Creating a budget is important because it is be a tool of management. It allows the management to preview how the company evolution is going to be in a short-term period, to analyze information and help in decision making. There are many types of budget and this subject is a commonly studied in several scientific papers.

In order to propose a budget, it is necessary to find the answer to the question “what is the best budget type that could be proposed to the company and how I will allow it to achieve its goals?”

This thesis will be organized by chapters. Chapter one is dedicated to a literature research. The main purpose is to explain what is a budget, what types of budget exist, how they should be implemented and its main advantages and disadvantages. The next chapter, research methodology, will be detailed and explained the methodology adopted in this thesis (study case). In chapter three, a budget purpose will be presented and it will be compared with the cash budget (budget used by the company).



# Chapter 1.

## Literature Research

### 1. Budget and Budgeting

According to Pizzey (1989), “A Budget is a plan quantified in monetary terms, prepared and approved prior to a defined period of time, showing the planned income to be generated and/or expenditure to be incurred during that period, and the capital to be employed to attain a given objective.”

Another definition, presented by Kaliski, Maxwell, & Maxwell (2007), “A budget is a financial plan for the upcoming period. (...) A budget is a quantitative plan of operations that identifies the resources needed to fulfil the organization’s goals and objectives.”

Atkinson, Young & Kaplan (1997) consider that a budget is the allocation of the resources to the operational subunits taking into account the short term goals and the activities developed by the company.

Therefore, a **budget** is a plan for a specific period in monetary currency (euro) that includes the estimated profit and loss needed to achieve organization goals and objectives. The profit and losses are measured considering the resources allocation to the activities.

Another important concept is **budgeting**. “Budgeting is the process of preparing a plan, commonly called a budget” (Kaliski et al., 2007). This definition is the one that I will consider during this analysis.

## 2. Functions of Budgeting

There are several functions (advantages) of budgeting. Drury (2008), Anthony & Govindarajan (2007) and Merchant & Steede (2007) say that a budget is a tool for planning and control (Livingstone & Grossman, 2002; Welsch, 1958), for coordinating all the activities /departments in the firm (Atkinson et al., 1997; Welsch, 1958), communicate plans to various responsibility centre managers (Noreen, Garrison, Brewer, & Sanvicente, 2007); motivate managers to attempt to achieve the budget goals (Hofstede, 1968; Jordan, Neves, & Rodrigues, 2011); evaluate the performance of managers (Noreen et al., 2007). Jordan et al. (2011) also says the budget is a tool to create/delegate responsibilities along the workers of the company (way of decentralisation).

Planning the activities for the next period (month, trimester, quarter or year) is an essential step to have a more accurate budget. The manager plans the income and expenditure for the next period. After the income and expenses are estimated, it is necessary to define goals and then communicate those goals to the different departments. This way, the company can be motivated to achieve those goals and all the departments can be focused in those goals. It also allows comparing what has been the reality with the budget (monitoring). Relatively to directors or managers, it is possible to evaluate their performance and, if they achieved the targets fixed in the budget, they may receive a yearly bonus.

Atkinson et al. (1997) also argues that a budget is a tool to identify problems and to find solutions. It can be used to explore and understand what have failed, how can it be corrected and what to do to correct the mistakes identified.

Noreen et al. (2007) adds other advantages of budgeting. It allows the correct resources allocation to the activities, it is easy to implement and to maintain costless.



Hofstede (1968) alerts to the fact that the budget has to be accepted by the managers because their personal motivation is highly related with the budget. If the managers do not feel motivated to achieve or fight for the budget, it may have negative consequences. Another point noticed is that the targets have to be motivating and difficult but not extremely difficult because, if they are impossible to achieve, the managers will not be motivated for those goals and may produce less than was expected usually. So, the targets should be measurable, motivating and refer to a period (Hofstede, 1968; Jordan et al., 2011; Merchant & Stede, 2007).

### 3. Characteristics of a Budget

Emmanuel, Otley, & Merchant (2004) and Otley (1978) say that a budget should be suitable for multiples purposes, however these purposes may conflict with each other.

A budget should add value to the company in short and long-term. Bunce (2007) says that the traditional command and control management model with short-term performance contracts fail to support long-term value creation. The budget should be flexible and updated in short periods of time, for example, quarters as suggested by Hope & Fraser (2003). It may also allow changes when serious conditions influence the economy, in other words, when the real accounts of the company are too far from the budget implemented due to not expected events, for example, an external crisis.

A budget should reflect internal and external information (Bio, 1985). Internal information is the one that is provided by the company (history of incomes and expenses, production capacity, cost of labour, products costs, etc.) and external is information that may have influence in how the company works

but it is not controlled by the company. It is defined by politics, laws, environment, economic conditions, social and demographic indicators and economic trends.

## 4. Types of Budget

There are several types of budget. The most commonly referred in papers and books are financial budget, operating budget, master budget, incremental budget and zero-based budget. In the next paragraphs, there is an explanation of these types grouped by related types of budgets.

### 4.1. Operating Budget versus Financial Budget versus Master Budget

According to Chartered Institute of Management Accountants (2005), an **operating budget** is a “Budget of the revenues and expenses expected in a forthcoming accounting period.” Kaliski et al. (2007) explains it in other words as the identification of the necessary resources that will be used in the operational activities (to do so, it is necessary to create a production budget, a purchase budget, a human resources budget and a sales budget). The cash budget, which is a subtype of the operating budget, is the revenues and expenses that are going to be received or paid in the coming period.

Kaliski et al. (2007) define **financial budget** as the identification of sources and outflows of funds for the budgeted operations and the expected operating results for the period.

The last type of budget, **master budget**, combines the operational budget with the financial budget. It is also known as the group budget or a profit plan. According to Livingstone & Grossman (2002) “a profit plan is a company’s total

budget used in achieving a desired profit goal. Sometimes the term refers only to the operating budget, and sometimes it is used synonymously with the term master budget." Neely, Sutcliff & Heyns (2001) says this type of budget takes short and long term strategy into account. They also say that this type of budget allows the enterprise evaluate if economic value is being created, the financial resources obtained are enough and if it is being generated sufficient cash.

## 4.2. Flexible Budget versus Static Budget

Caplan (2006) and Kaliski et al. (2007) agrees with the definition for a **flexible budget**. They define this type as a budget that adjusts to the current level of performance. Caplan (2006) also says that it is necessary to "compare the same unit" for example, if the company produces 10.000 bananas, it is necessary to compare the current costs with the cost that the company should have to produce 10.000 bananas. However if the company produces 20.000 bananas it is not possible to compare with the cost expected to produce 10.000 bananas. It is necessary to adjust the company's budget proportionately (fixed costs cannot be adjusted because they are not related directly to the production, only variable costs can fluctuate) Kaliski et al. (2007). This type is also known as dynamic budget (Livingstone & Grossman, 2002). Hopwood (1973), cited by Otley (1978), says that a flexible budget "tends to cause less anxiety to subordinate managers, promotes cooperation, reduces dysfunctional decision making, recognizes its shortcomings and the concern with long-term economic performance was maintained".

"The **static budget** is the budget that is based on this projected level of output, prior to the start of the period. In other words, the static budget is the 'original' budget"(Caplan, 2006). Hopwood (1973) concluded in his work that with this type of budget, managers tend to make decisions having in account short term period and ignore long-term decisions. For the managers, according

to Hopwood (1973), not only creates the opportunity to show better results (which are not the real situation, because they are manipulated), but the managers are worried, stressed and feel the evaluation is unfair.

### 4.3. Incremental Budget versus Zero Based Budget

**Incremental budget** is usually used when a company has history. The budget is made with last year budget or account and updated to the expected fluctuation of inflation, production and other critical factors that may influence the budget. (Kaliski et al., 2007; Technology Ilt, 2004). Jordan et al. (2011) argue the budget is more than a prevision and should not be incremental.

In **Zero Based Budget (ZBB)** it is necessary to justify all costs and all the benefits expected for next year. Instead of starting adding variations from the previous year account, like the incremental budget, this budget starts from zero, so every expense and profit has to be justified. (Chartered Institute of Management Accountants, 2005; Kaliski et al., 2007)

This budget may take more time to produce than the incremental budget and might be more sophisticated but it prevents the budget being built with the inefficiencies and inaccuracies of previous years. (Neely et al., 2001) This author also suggests that, in a stable environment, this type is not the most appropriate and would not create great value added in a continuous basis. He suggests do this type of budget in a cycle period of three to five years.

We can see bellow, in Table 1, from Wetherbe & Montanari (1981) the differences between these two types:

<b>Traditional incremental budgeting</b>	<b>Zero based budgeting</b>
Changes in amounts based on increments differing from prior appropriation only	Review and justification for total expenditures (not just incremental changes) for each program
Justification of magnitude (amount) of increment only	Justification from zero for every program, reconsidering basic funding for programs and any incremental

	changes for next fiscal year
Reference frequently made to base case or previous level of appropriation	No base case: defense of entire budget request, not simply changes from previous level of appropriation, must be reference point.
All programs are perpetuated unless clear and dramatic evidence suggests abolition from budget	Continuation of each program questioned and must be documented: this approach encourages reallocation of funds to new program when old program cannot be fully justified or better use of resources is identified.

Table 1. Comparison of traditional incremental and zero based budgeting

#### 4.4. Top to Down Budget versus Participative Budget

The **top to down budget** is defined by the CEO or the director and is implemented to bottom. The departments do not contribute to the construction of the budget. The first consequence of this is that the employees are not committed to the targets (Chartered Institute of Management Accountants, 2005). According to Ehrhart, Von Hagen, Keser, & Gardner (2006) is fixed the global budget and then it is allocated to each category of the profit and loss.

The **participative budget** is the opposite of the previous one. It is also called bottom-up budgeting. In this case, departments define the budget for his own department. Then it is aggregated and approved or adjusted by the CEO. This type is more participative and has a better contribute to the targets previously defined. (Chartered Institute of Management Accountants, 2005)

#### 4.5. Kaizen Budget, Activity-Based Budgeting and Rolling Budget

All these types are alternatives to the traditional budget, which usually refers to the incremental budget planned for one year.

Kaizen budget according to Kaliski et al. (2007) is a “budget that demands continuous improvements and incorporates all the expected improvements in the budget that results from such a process.”

Chartered Institute of Management Accountants (2005) and Kaliski et al. (2007) say that Activity-Based Budgeting is based on the costs of the activities or cost drivers necessary (Activity Based Management or Activity Based Cost) for the company operate. This theory says that in order to produce products it is necessary activities and these activities need resources. That’s why there are cost drivers based in activities instead of products. The cost drivers are not necessarily based on the production volume. It can be based, for example, on time to assist one customer, time needed to produce, number of customer complaints. Kaplan & Steven (2004) explains it with an example: “For example, the costs of warehousing goods would be driven to activities – such as Receiving, Inspection, Put- away, Picking, Packing, and Shipping – based on estimates by warehouse personnel of the percentage of their time they spent on each of the activities. The project team then calculated activity cost driver rates, used to assign activity costs to individual products or customers, by dividing these activity costs by the outputs of each activity – such as number of receipts, number of inspections, number of items picked, and number of shipments. This procedure for estimating an ABC model, while feasible for initial pilot studies, has proved difficult and costly to extend to company-wide applications.”

According to Neely et al. (2001) this kind of budget involves organize the company in activities and business processes in order to meet the customer and external needs. When the business is well organized, the company can save 10% to 20% of costs, having better methods of working and eliminates the paper work.

The next type, the rolling budget, is also known as continuous budget, perpetual budget or rolling horizon budget. This budget shows the plan for the

next twelve months. For example, in December 20X0 the manager makes a budget for the next twelve months. In January 20X1, the manager has to do one month so the budget is from February 20X1 to January 20X2. According to Neely et al. (2001) the rolling budget was created in order to make budgeting and forecasting more frequent to adapt to the circumstances changes.

Update budgeting more frequently has a greater cost, however, this type of budget may avoid dubious practices at the year-end (for example, combine with costumers to send the product but they only pay in the next year/month – managers almost do this at year end in order to achieve the target defined and get their year bonus).

## 5. Disadvantages of Budget

Although there are several types of budget, and each one has its own advantages, there are also some disadvantages.

One disadvantage of using the traditional budgets (financial, top-down, command-and-control orientation (Hansen, Otley, & Van der Stede, 2003)) is myopic decision making because the managers can focus only in short term and ignore long term decision (Otley, 1978).

Neely et al. (2001) in their study agree with last point but also add more disadvantages: the time needed to prepare the budget, the little value added taking into account the time required to build the budget, the focus on cost reduction instead of value creation; budgets are contradictory and not focused strategically; they limit the reaction of the managers and they don't allow managers to invent or think in better ways to produce even better; most budgets are developed and updated annually, which is not the ideal period, and it should be developed and updated in a shorter period of time; the vertical

command and control becomes more tight with budget; organizations have to implement a developing network structure to support the budget, however, the budget doesn't reflect it; budgets assume assumptions and forecasts which sometimes are not supported by the facts; departmental barriers become even more accentuated instead of opening communication between each department; budgets make people feel undervalued.

Jordan et al. (2011) also argue that difficulties with the budget might be found if the organization is not well organized by departments or if the targets or action plans are not well defined.

Hope & Fraser (2003) and Tung (1975) argue that a budget can be very far from the reality but sometimes that is due to inadequate organizational structure, lack of history data, lack of cost system or bad managing.

## 6. How to implement a budget

According to Bremser (1990) and Jordan et al. (2011), it is necessary to define the goals and targets. Then, between each department, think what activities should be done to achieve those goals (action plans) and then translate those activities into numbers (how much is it in € - create the budget). The next stage is to aggregate all the information from the departments and give it to the CEO of the organization. Finally, if necessary, adjust the budget and then approve the budget.

In order to understand correctly how a budget works, there is an analogy:

“Budgeting in a company is like navigation on a ship. On a ship, the crew keeps a log of the happenings on and position of the ship from hour to hour. The captain learns valuable lessons by studying the factors that caused misadventures in the past. But, to pilot the ship safely, he requires his



navigation officer to plan the course ahead, and to constantly check the ship's position against that plan. If the ship is off course, the navigation officer must report it immediately, so that the captain can take prompt corrective action. In addition, the navigation officer should be in a position to foresee possible deviations and to minimize losses by taking early corrective action in case the ship is off course."(Technology Ilt, 2004)

With this analogy, I intend to say that the company is like a ship and needs to be driven. The log of happenings is the previous year accounts or the previous budgets and we can learn from the previous years. Although, when the reality is different from the planned budget, the managers have to take actions in order to correct the deviation from the budget.

Merchant (1998) suggests the creation of a budget manual in order to describe the targets defined and the coordination plan that will be developed in order to achieve those targets.

Anthony & Govindarajan (2007) suggest that the creation of a budget department that would help in the creation of the budget. That department should give detailed information (data analysis and interpretation), motivate the communication between departments, schedule the tasks that are related to the budget department, coordinate and delegate tasks by managers/co-workers.

It is important to mention that, with the zero budget, the implementation works in another way. It is necessary to create decision packages for each activity or group of activities developed by the company. It is also required to create decision packages for new activities. Then, each package has to be organised by hierarchy (from the activities that have to be done to the activities that are not mandatory).

The manager from each division should identify the activities developed in their departments and create a decision package, describing the activities done, the goals for those activities and explain the consequences if each activity is not

done in the next period. The managers should also present alternative ways to develop those activities and the estimated cost, for example the benefits of doing the same activity with one person less or one person more (this is called exemplifying the efforts level). For the managers to take into account the levels of effort expected, it is necessary to have some guidelines from the company owners.

Then, the decision packages have to be grouped by department and approved by the shareholders. If necessary, changes are made to the packages and, finally, the budget is implemented. (Pyhrr, 1977)

# Chapter 2.

## Research Methodology

### 1. Research Methodology applicable

Bryman (2008) defines case study as “A research design that entails the detailed and intensive analysis of a single case. The term is sometimes extended to include the study of just two or three cases for comparative purposes”.

According to Yin (2009) a case study is an option for question that have “how” or “why”, the intervenient has little control over events and focus on an actual content.

Yin (2009) says that to apply a case study research it is necessary to design it. First is necessary to define a research question, then do a research literature in order to achieve concepts, types and know what has been done in the scientific community. The next step is the suggestion of theories that might answer to the question. Then we need to collect information that allow us to test our theory and that is comparable between them. Then we have to analyse the information collected. Finally, we have to reach to a conclusion (if our initial theory was right or wrong, and if it was wrong build a new theory).

During this analysis I will follow the steps mentioned in the previous paragraph according to Yin (2009).

The research question defined was “what is the best type that could be proposed to the company that fits its needs?”. Then was made a literature

research (chapter one) to find definitions and types of budgets. Then it was studied what activities the company does in a daily routine, how that activities are made and what type of expenses and revenues the company has. Then were made interviews to the CEO and Sales Director to understand how they use the budget and what additional functions they would like the budget proposal to have. Then, with all this information, it was necessary to choose a type of budget and create it. Finally, comparisons were made between the advantages and disadvantages of the budget created and the budget that the company uses, allowing to know if there would be advantages in adopting the proposed budget instead of the one used by the company.

## 2. About the Company

This project will be applied in the company XPTO. For security reasons and privacy of information used, the company name will not be revealed.

XPTO is a company, located in Portugal, oriented to professional training and it was created in the years of 90's. It provides courses about safety and health at work; training young professionals, based on the results of a career test; training skills for companies and professional training for the ones who wish to start their career as trainers. According to ("SABI," n.d.), the operating revenue in 2012 was about two millions and half euros and in 2011 was less than one million and eight hundred euros. The company employs around 40 people in 2012 and 2011.

XPTO is a small company (SME) because the sales are lower than 10 million per year and the number of employees is lower than 50.

XPTO has two buildings to assist customers, one in Oporto and another in Lisbon. Although, the activity of XPTO is developed in most of the cities of Portugal.

The company has a top to bottom management. The decisions are made by the top management and then are communicated to the bottom managers. XPTO uses the cash budget as a management tool.

### 3. Types of incomes and expenses that we can find in XPTO

The incomes of XPTO are provided by the courses/lessons revenue.

About the costs, the company has fixed, semi-variable and variable costs. It is fixed if it is a constant value during the year and does not depend on how much is produced. If it varies with the production, it is a variable cost. If it has a part fixed and another part variable with the production, it is a semi-variable cost.

As fixed costs, the company has the rent of the building that it is using, the maintenance of the elevators, accounting services, telephone bills, security services, garage parking, printing services, cleaning services, car insurance and other suppliers.

As semi-costs, XPTO has personnel expenses, utilities bills and communications.

Last, as variable costs, the company has printing services, interest expenses, agreement with the schools for paying a fee, salary of the teachers, books purchased, legal expenses to try to collect debts from the clients, other suppliers, estimated taxes, tolls and nights stayed in hotel.

Some costs are in more than one category because the cost depends on the supplier.

## 4. Interviews

The interviews were done in Portuguese; However, I will translate the questions made to English. The answers will be introduced during this thesis when relevant. The questions made can be seen on appendix one and two.

## 5. Advantages and Disadvantages of Cash Budget

The cash budget is the budget used by the company. The cash budget takes into account the short-term period and is reviewed monthly. With this budget it is pretended to know where the company uses its money, and if it is capable of paying its responsibilities. It can also be used to control the expenses and the revenues.

This budget has some characteristics that a budget should have: is reviewed in a short period as suggested by Hope & Fraser (2003) and fights one disadvantage pointed by Neely et al. (2001); is a way of controlling the expenses of the company (one of the function mentioned (Anthony & Govindarajan, 2007; Drury, 2008; Livingstone & Grossman, 2002; Merchant & Stede, 2007; Welsch, 1958)).

However, reviewing it monthly has its own costs. It is necessary to spend time every month and that is not always easy because people have other tasks to do and there is no one focused only in reviewing the budget so frequently. That might be a negative aspect but the budget can be more accurate and realistic when it is reviewed monthly. It also contributes the fact that, if it is done monthly, the person has in mind the most relevant facts/events that occurred during that month. Additionally, it allows to have a better explanation for the variation that occurred when compared with the forecasted budget,

which allows the company to make better decisions to correct the accounts achieve the planned budget.

Another point that is important to mention is that, in a daily routine, the person responsible for that might be too focused in what happens day after day and ignore a short-term global view. For example, in a working day, the person has to pay the suppliers, receive money from the clients, pay direct labour and many other tasks and might be so focused in this, that may lose the big picture (how the business is going).

After being reviewed monthly, it is necessary to plan a new month, in a way, that we are planning for a yearly budget. This works as a continuous budget (it is necessary to always have one year of budget).

To create this budget, it is necessary to create a sales budget, a production budget, a direct labour budget, a purchases budget, an interest payment budget, an expenses budget and a tax budget.

The sales budget was created taking into account the courses that were occurring (the courses for children usually have the duration of three years), and those courses start on a monthly basis. The courses have either four classes or one class per month, depending on the type of course chosen.

The purchases budget has been calculated taking into account the history of purchases and the number of courses that are going to start during the current year because the number of books bought has a direct proportion of the lessons sold.

The direct labour budget was calculated according to the rules established with each employee.

The interest payment budget was planned according to the tables that came with the loan.

The other types of expenses were planned taking into account the nature of the cost and agreements to pay to suppliers.

With this type of budget is possible to study scenarios. For example, is it better to incur today in a loan to pay more bills or is it better to not pay today and ask for a loan tomorrow when the interest rate is expected to be lower.

Table 2 presents the cash budget made by the company XPTO.



Cash Budget	Jan/2014	Feb/2014	Mar/2014	Apr/2014	May/2014	Jun/2014	July/2014	Aug/2014	Sep/2014	Oct/2014	Nov/2014	Dez/2014	Yearly
<b>Operating Activities</b>													
<b>Receipts</b>													
sales	124 539,67 €	124 461,66 €	125 232,15 €	124 723,02 €	128 899,02 €	135 786,59 €	141 696,50 €	134 609,05 €	147 215,35 €	149 482,82 €	153 345,98 €	157 748,62 €	1 647 740,42 €
exploration subsidies	- €	- €	20 000,00 €	- €	- €	- €	- €	- €	- €	- €	- €	- €	20 000,00 €
<b>Sub-Total</b>	<b>124 539,67 €</b>	<b>124 461,66 €</b>	<b>145 232,15 €</b>	<b>124 723,02 €</b>	<b>128 899,02 €</b>	<b>135 786,59 €</b>	<b>141 696,50 €</b>	<b>134 609,05 €</b>	<b>147 215,35 €</b>	<b>149 482,82 €</b>	<b>153 345,98 €</b>	<b>157 748,62 €</b>	<b>1 647 740,42 €</b>
<b>Payments</b>													
Cost of googs sold	8 155,64 €	8 150,53 €	8 200,99 €	8 167,65 €	8 441,12 €	8 892,16 €	9 279,18 €	8 815,05 €	9 640,58 €	9 789,07 €	10 042,06 €	10 330,37 €	107 905,11 €
other external expenses	26 834,69 €	20 460,68 €	27 148,30 €	20 454,09 €	22 228,12 €	22 482,85 €	24 104,09 €	16 921,08 €	27 199,06 €	18 294,73 €	22 228,12 €	22 262,85 €	270 620,51 €
agreements with schools	6 950,02 €	8 362,52 €	8 200,02 €	6 450,02 €	9 612,52 €	5 825,02 €	8 825,02 €	8 654,19 €	7 830,15 €	6 955,15 €	8 586,40 €	5 173,90 €	91 425,60 €
doorman school	6 250,00 €	6 250,00 €	6 250,00 €	6 250,00 €	6 250,00 €	6 250,00 €	6 250,00 €	3 125,00 €	6 250,00 €	6 250,00 €	6 250,00 €	4 162,50 €	69 787,99 €
teachers	18 164,53 €	18 055,86 €	17 805,09 €	17 303,53 €	17 805,09 €	18 181,25 €	18 055,86 €	17 366,23 €	18 682,80 €	18 557,41 €	18 853,89 €	19 405,59 €	218 238,60 €
Part-Time	- €	1 950,00 €	1 950,00 €	1 950,00 €	975,00 €	1 950,00 €	1 950,00 €	1 950,00 €	1 299,99 €	1 950,00 €	1 950,00 €	1 950,00 €	19 825,12 €
employee expenses	37 846,10 €	38 025,27 €	36 517,02 €	35 654,89 €	35 644,12 €	35 668,11 €	35 672,40 €	30 437,41 €	35 354,54 €	35 823,31 €	35 785,80 €	58 815,31 €	451 247,21 €
social security	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	13 701,74 €	164 422,04 €
tax	6 074,60 €	6 074,60 €	6 074,60 €	6 074,60 €	5 910,60 €	5 910,60 €	5 910,60 €	5 910,60 €	5 246,60 €	5 910,60 €	5 910,60 €	5 910,60 €	70 755,68 €
surcharge	344,07 €	344,07 €	330,26 €	330,26 €	330,26 €	330,26 €	330,26 €	330,26 €	330,26 €	330,26 €	330,26 €	330,26 €	3 990,75 €
health insurance	- €	- €	1 191,76 €	- €	- €	1 108,38 €	- €	- €	- €	1 108,38 €	369,46 €	369,46 €	4 147,47 €
earnings taxes	- €	- €	- €	- €	- €	- €	23 091,27 €	- €	- €	- €	- €	- €	23 091,43 €
<b>Sub-Total</b>	<b>124 321,40 €</b>	<b>121 375,28 €</b>	<b>127 369,78 €</b>	<b>116 172,79 €</b>	<b>120 898,57 €</b>	<b>120 300,37 €</b>	<b>147 170,42 €</b>	<b>107 211,55 €</b>	<b>125 535,73 €</b>	<b>118 670,66 €</b>	<b>124 008,33 €</b>	<b>142 412,58 €</b>	<b>1 495 457,50 €</b>
<b>Net cash of operating activities</b>	<b>218,27 €</b>	<b>3 086,37 €</b>	<b>17 862,37 €</b>	<b>8 550,23 €</b>	<b>8 000,45 €</b>	<b>15 486,22 €</b>	<b>(5 473,92) €</b>	<b>27 397,50 €</b>	<b>21 679,62 €</b>	<b>30 812,16 €</b>	<b>29 337,65 €</b>	<b>15 336,03 €</b>	<b>172 294,08 €</b>
<b>Investments activities</b>													
interest expenses	4 546,58 €	4 703,70 €	5 199,83 €	4 392,28 €	4 457,78 €	4 984,76 €	4 192,31 €	4 281,94 €	4 726,98 €	4 003,01 €	3 990,31 €	4 384,23 €	53 864,08 €
other financial expenses													- €
<b>Net Cash Used In Investing Activities:</b>	<b>4 546,58 €</b>	<b>4 703,70 €</b>	<b>5 199,83 €</b>	<b>4 392,28 €</b>	<b>4 457,78 €</b>	<b>4 984,76 €</b>	<b>4 192,31 €</b>	<b>4 281,94 €</b>	<b>4 726,98 €</b>	<b>4 003,01 €</b>	<b>3 990,31 €</b>	<b>4 384,23 €</b>	<b>53 864,08 €</b>
<b>Financing activities</b>													
<b>Receipts</b>													
Loans short-term	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	360 002,45 €
<b>Sub-Total</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>30 000,00 €</b>	<b>360 002,45 €</b>
<b>Payments</b>													
Loans long term		12 807,65 €	17 316,22 €	17 336,62 €	11 107,29 €	11 128,23 €	17 399,44 €	11 170,93 €	17 442,69 €	20 589,75 €	14 487,58 €	16 550,96 €	167 338,46 €
Loans stakeholders	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Loans short-term	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	30 000,00 €	360 002,45 €
earnings distribution	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
<b>Sub-Total</b>	<b>30 000,00 €</b>	<b>42 807,65 €</b>	<b>47 316,22 €</b>	<b>47 336,62 €</b>	<b>41 107,29 €</b>	<b>41 128,23 €</b>	<b>47 399,44 €</b>	<b>41 170,93 €</b>	<b>47 442,69 €</b>	<b>50 589,75 €</b>	<b>44 487,58 €</b>	<b>46 550,96 €</b>	<b>527 340,91 €</b>
<b>Net Cash Used In Financing Activities</b>	<b>- €</b>	<b>(12 807,65) €</b>	<b>(17 316,22) €</b>	<b>(17 336,62) €</b>	<b>(11 107,29) €</b>	<b>(11 128,23) €</b>	<b>(17 399,44) €</b>	<b>(11 170,93) €</b>	<b>(17 442,69) €</b>	<b>(20 589,75) €</b>	<b>(14 487,58) €</b>	<b>(16 550,96) €</b>	<b>(167 338,46) €</b>
<b>Balance of the period</b>													
<b>(operating+investing+financing)</b>	<b>(4 328,31) €</b>	<b>(14 424,98) €</b>	<b>(4 653,68) €</b>	<b>(13 178,67) €</b>	<b>(7 564,62) €</b>	<b>(626,77) €</b>	<b>(27 065,66) €</b>	<b>11 944,63 €</b>	<b>(490,05) €</b>	<b>6 219,40 €</b>	<b>10 859,76 €</b>	<b>(5 599,16) €</b>	<b>(48 908,47) €</b>
<b>cash in the beginning</b>	<b>(58 898,26) €</b>	<b>(63 226,57) €</b>	<b>(77 651,54) €</b>	<b>(82 305,23) €</b>	<b>(95 483,89) €</b>	<b>(103 048,51) €</b>	<b>(103 675,28) €</b>	<b>(130 740,95) €</b>	<b>(118 796,32) €</b>	<b>(119 286,38) €</b>	<b>(113 066,98) €</b>	<b>(102 207,21) €</b>	<b>(107 806,37) €</b>
<b>cash in the end of period</b>	<b>(63 226,57) €</b>	<b>(77 651,54) €</b>	<b>(82 305,23) €</b>	<b>(95 483,89) €</b>	<b>(103 048,51) €</b>	<b>(103 675,28) €</b>	<b>(130 740,95) €</b>	<b>(118 796,32) €</b>	<b>(119 286,38) €</b>	<b>(113 066,98) €</b>	<b>(102 207,21) €</b>	<b>(107 806,37) €</b>	<b>(156 714,84) €</b>

Table 2.Cash Budget planned by XPTO

## 6. Advantages and Disadvantages of Financial Budget

As mentioned above, the financial budget is the identification of sources and outflows of funds for the budgeted operations and the expected operating results for the period (Kaliski et al., 2007).

This budget proposal was created taking into account the ideas that the company pretends for the budget.

According to the CEO, the company's strategy is to obtain profit, focus on selling products and services that have a greater profit margin, pay all the debt to the bank in the next two years in order to have extra money that allows the company to invest on other projects.

The sales manager likes to work with goals (he had been working with goals). He evaluates himself with the achievement of the goals and with the monitoring of the activities developed in a daily basis. About the goals defined for 2014, he thinks they are ambitious and complicated to achieve, but it is possible to achieve them with hard work and in a scenario where the things have to occur according to planned.

The database of this budget is based on some of the data contained in the cash budget, XPTO's accounting and other documents.

My budget proposal was also made on a monthly basis. This is better to compare with the cash budget. Most of the costs are regular and similar from month to month, however some of the cost are incurred once a year so it is necessary to make a proportionality and apply it monthly. The financial budget can be reviewed monthly; however, it has a more flexible time that can be reviewed (three to six months) because most of the cost are similar every month. After reviewing it, is necessary to take actions to correct the planned

budget or to influence the reality in order to converge with the planned budget – here is visible some functions/advantages of the budget – planning, control (Anthony & Govindarajan, 2007; Drury, 2008; Livingstone & Grossman, 2002; Merchant & Stede, 2007; Welsch, 1958) and monitoring (Noreen et al., 2007).

This type includes the revenues and the expenses expected, the depreciation of the assets, provisions for what is undervalued and provisions for what we expect that we are not going to receive from the costumers during the period of analysis.

With this definition, it is possible to identify that this type of budget is different from the cash budget (profit versus liquidity). The revenues and expenses received or paid might be related to another period. For example, one expense (electricity) paid in January 2015 is relative to December 2014.

In this case, it is also possible study scenarios, but again here the question is if there is an expense this year, how it would affect the profit.

It has already been mentioned but, even though these two type of budget are too similar, the purpose and the results obtained in the end are different.

We can see in the following table which description/categories each one has:

<b>Cash Budget</b>	<b>Financial budget</b>
<b>Operational Activities</b>	Sales and services
Receipts:	Operating Subsidies
Sales	Cost of Goods Sold
Interest	External services - Electricity, Advertising, Security, Hire of Equipment, Accounting, Insurance, Office Supplies, Postage and Printing, Rent, Repairs and Maintenance, Telephone, Internet
Other	Wages and On costs
Payments:	Other income
Employee Expenses	other costs
Supplies And Services	<b>EBITDA</b>
State	Depreciation
Other	<b>EBIT</b>
<b>Net Cash From Operating Activites</b>	Interest income
<b>Investing Activities</b>	Interest expenses
Receivment For Equipment	<b>EBT</b>
Payment For Plant And Equipment	Taxes
<b>Net Cash P rovided By (Used In) Investing Activites:</b>	<b>Profit/Loss</b>
<b>Financing Activities</b>	
Equity Injections	
Equity Withdrawal	
<b>Net Cash P rovided By (Used In) Financing Activites:</b>	
Net Increase (Decrease) In Cash Held	
Cash At The Begining Of The Month	
<b>Cash At The End Of The Month</b>	

Table 3.Cash Budget vs Financial Budget – categories

In the end, cash budget pretends to preview how much cash the company has in the end of month and financial budget previews if the company is going to have profit or loss in the end of month.

This budget was made having in account the sales budget, purchases budget, plan of amortizations/depreciations of the action, interest expense budget, tax budget, direct labour expense, provision for not receivable debts.

In the next table (presented in the next page) we can see, the result obtained with the financial budget.

Financial budget	Jan/2014	Feb/2014	Mar/2014	Apr/2014	May/2014	Jun/2014	Jul/2014	Aug/2014	Sep/2014	Oct/2014	Nov/2014	Dec/2014	Annual
Sales and services	189 000,65 €	189 431,65 €	189 774,40 €	188 352,15 €	193 392,15 €	202 172,25 €	205 917,95 €	181 476,65 €	208 764,65 €	211 172,20 €	215 780,70 €	221 133,30 €	2 396 368,70 €
Operating Subsidies	- €	- €	10 000,00 €	- €	- €	- €	- €	- €	- €	- €	- €	- €	10 000,00 €
Cost of Goods Sold	6 505,63 €	6 520,47 €	6 532,27 €	6 483,31 €	6 656,79 €	6 959,02 €	7 087,95 €	6 246,65 €	7 185,93 €	7 268,81 €	7 427,44 €	7 611,68 €	82 485,94 €
External services - Eletricity, Advertising, Security, Hire of Equipment, Accounting, Insurance, Office Supplies, Postage and Printing, Rent, Repairs and Maintenance, Telephone, Internet	54 690,21 €	52 240,71 €	54 071,31 €	49 593,09 €	53 719,04 €	49 555,38 €	51 677,66 €	36 068,60 €	49 805,07 €	45 052,36 €	49 304,66 €	41 221,10 €	586 999,19 €
Wages and On costs	59 284,87 €	59 464,05 €	59 100,81 €	58 238,68 €	58 227,91 €	58 251,90 €	58 256,19 €	51 824,80 €	57 938,33 €	58 407,10 €	100 045,51 €	58 369,59 €	737 409,74 €
Other Income	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Other Costs	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Estimated Uncollectible Debts	51 975,18 €	52 093,70 €	52 187,96 €	51 796,84 €	53 182,84 €	55 597,37 €	56 627,44 €	49 906,08 €	57 410,28 €	58 072,36 €	59 339,69 €	60 811,66 €	659 001,39 €
EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization)	16 544,76 €	19 112,72 €	27 882,05 €	22 240,22 €	21 605,56 €	31 808,59 €	32 268,72 €	37 430,53 €	36 425,03 €	42 371,58 €	( 336,59 € )	53 119,28 €	340 472,44 €
Depreciation	2 512,94 €	2 534,33 €	2 555,98 €	2 577,89 €	2 600,08 €	2 622,54 €	2 645,27 €	2 668,29 €	2 691,59 €	5 965,67 €	1 780,30 €	1 788,68 €	32 943,55 €
EBIT (Earnings Before Interest and Taxes)	14 031,82 €	16 578,40 €	25 326,08 €	19 662,33 €	19 005,48 €	29 186,05 €	29 623,45 €	34 762,24 €	33 733,44 €	36 405,92 €	( 2 116,90 € )	51 330,60 €	307 528,89 €
Interest income	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Interest expenses	4 109,70 €	4 276,98 €	4 926,07 €	3 985,88 €	4 074,32 €	4 701,18 €	3 828,52 €	3 916,15 €	4 473,87 €	3 668,71 €	3 655,03 €	4 172,09 €	49 788,50 €
EBT (Earnings Before Taxes)	9 922,12 €	12 301,42 €	20 400,00 €	15 676,45 €	14 931,17 €	24 484,87 €	25 794,93 €	30 846,08 €	29 259,57 €	32 737,20 €	( 5 771,93 € )	47 158,51 €	257 740,39 €
Taxes	2 480,53 €	3 075,35 €	5 100,00 €	3 919,11 €	3 732,79 €	6 121,22 €	6 448,73 €	7 711,52 €	7 314,89 €	8 184,30 €	( 1 442,98 € )	11 789,63 €	64 435,10 €
Profit/(Loss)	7 441,59 €	9 226,06 €	15 300,00 €	11 757,34 €	11 198,37 €	18 363,66 €	19 346,19 €	23 134,56 €	21 944,68 €	24 552,90 €	( 4 328,95 € )	35 368,88 €	193 305,29 €

Table 4. Financial Budget – proposed budget

## 7. The Results

The financial budget was chosen in other to allow the company not to have too much additional work and to have a better perspective about the profit or loss that is expected for the period.

Comparing the cash budget and the financial budget, they are both important and they complement with each other. The financial budget only needs information related to expenses and incomes in order to be created. The cash budget, beside this information, also needs information from balance (purchase of assets, payments of loans).

In the financial budget, we see that the company has profit through the year with an exception to the month of November. However, in the cash budget we see that the company has some trouble paying its own debts. This huge difference is explained by the fact that, in the cash budget, the company has allocated another loan from other company. It was made this way because the cost of this loan is related to XPTO, however, it is supported by another company of the group. Other differences are the subsidy in the financial budget and in the cash budget and that the financial budget does not included payments of loans (it includes the interest expenses but not the amortization of the capital). The financial budget includes a more accurate estimated value because the accounts of the project have been closed in December 2013. The financial budget in that date was being created while the information in the cash budget was updated in October.

Both budgets need a lot of effort to create but it is easy to maintain when it is reviewed monthly or even with a less period. These budgets also provide monthly information but it is possible to aggregate it in other periods

(bimестrial, trimestral, quarter, half year, annual). It also has a lot of detailed information (sub budgets created – sales budget, interest payments, taxes, employee expenses). It is possible to compare them with the reality (monitoring) and take measures to adjust the budget to the reality. Both focus on short-term and the results obtained and ignore the long term (myopic vision). Last, but not least, each month, when the monitoring with the reality is being done, it is necessary to spend some time and effort to doing that. After that, it is also needed to create the preview for another month (idea of continuous budget).

With the financial budget, I would have expected to add value to the company, but not replace the budget that the company uses. The budget suggested would be complementary to the cash budget and would provide additional information to the company (estimated profit or loss of the period in analysis).





## Conclusion

The goal of this work was to make a budget proposal. Taking into account the needs of the company, I decided to compare the one they use in the daily routine (cash budget) with the financial budget (it would imply a minus level of effort in terms of cost to the company).

Before deciding that the financial budget would be the budget that would fit the company better, I made an analysis of the types of budget that existed and its own advantages and disadvantages.

It was hard to find study cases about budgets that are applied in SME, so I think that, with this work, I can provide an example of two types that can be applied to a SME.

With my work, I concluded that, although the cash budget is too similar to the financial budget, the results obtained are different. Therefore, my suggestion to the company was to adopt my budget to provide additional information to the company. However, the company would have to spend more time reviewing and correcting the budget. It is important to note that the amount of time needed to monitoring the financial budget was not an expensive increase, because some of the information is common to both budgets. Furthermore, time is a crucial factor in a SME, and the person responsible for monitoring the budget has other tasks to do so it probably would be necessary to hire a new person and that is why my budget was not chosen.



## Further Research

It would be interesting to implement the financial budget, monitor the results and take measures to correct the deviation from reality.

Another interesting point would be to investigate what were the consequences of the budget implementation in a long term (5 years for example).

Last, but not least, it would be important to design another budget (activity-based budget, for example), implement it and evaluate it.



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# Appendices

## 1. Interview to CEO

Is it possible to record this conversation? It will be used to take notes.

- **Characteritcs**

How many years do you work in the company? In what department do you work?

Did you work in another department in this company?

- **Strategy of the company**

What is the strategy of this company?

What are the targets for the year 2014?

What are you/the company going to do to achieve those goals?

- **Understand how the company works**

What are the departments of the company?

How are defined the targets for each manager?

What do you think about targets for the organization? And what about personal targets?

Do you feel that the targets are self-motivating?

How do you evaluate if the targets are being achieved or not?

- **About the budget**

What do you think about what will be the role played by the budget in the company?

What are the most relevant questions/topics to take into account when creating the budget?

What are the advantages and disadvantages that you could feel with the budget implementation?

Interviewed on 14th of October of 2013 (Monday)

## 2. Interview to Comercial Director

Is it possible to record this conversation? It will be used to take notes.

- **Characteristics**

How many years do you work in the company? In what department do you work?

Did you work in another department in this company?

What are the activities that you develop in your job? What are the targets for your job?

- **Strategy of company**

What is the strategy of the company?

What are the targets to achieve in 204?

How do you think you are going to achieve those goals?

- **About the budget**

How do you define the targets to your department?

Do you like to work with goals?

How do you evaluate the goals?

Do you consider that the goals are motivating?

How do you evaluate yourself?

- **Colaboration**

Would it be possible to make a list with the costs for each activity that you/your department have to do? For example, telephone, light, water, nights out, paper, cars, etc. For each activity is possible to give them an hierarchy according to

the importance that is needed to do in the next year? Could you have it done in the next three to five days?

Do you have any questions?

Entrevista realizada em 22/Outubro/2013 (tuesday)