UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

Master Degree Project in Accounting

On the Complementary Role of Budget and Rolling Forecast

A case study of Philips Company (consumer Lifestyle sector) in the Netherlands

Shabnam Ilchikabir

Supervisor: Mikael Cäker
Master Degree Project No. 2013:75
Graduate School

Acknowledgement

This work was performed, at the School of Business, Economics and Law at the University of Gothenburg. Studying this topic was an interesting experience and provided me with an invaluable opportunity to enrich my understanding of this topic.

I would like to thank and express my appreciation to those individuals collaborated and supported me along the whole developing process of this study. Special appreciation is devoted to my supervisor Mikael Caker for all help, support, valuable tips, helpful discussions and comments from the very beginning to the end of this work. This study would not have been possible without his guidance and support.

I would also like to thank interviewees who participated in the interviews and provided me with their experience and all required information concerning Budgeting process in Philips Consumer Lifestyle, regardless of their limited time.

The deepest gratitude and regards are dedicated to my beloved parents for their continuous support in my whole life and I would also like to express my greatest appreciation to my beloved husband, Salar Mostofizadeh, for his motivational support and everlasting encouragement throughout my studies that has enabled me to complete this study.

Abstract

Current business atmosphere is considered much more dynamic and complex than before that makes traditional management accounting tools such as annual budgeting inappropriate to confront such enduring competition. According to Bescos et al. (2003), the degree of environmental uncertainty is one important contingency factor which can be a major driver of dissatisfaction with budgeting system. There are two viewpoints concerning altering the dissatisfaction with budgeting. One is better budgeting and the other is beyond budgeting. Better budgeting helps to keep annual budget and complementing annual budget with advanced managerial techniques such as rolling forecast. Nowadays in order to keep competing, companies are increasingly adopting rolling forecast because it is more adaptive and by employing rolling forecast they are capable of updating the forecasts and plans quickly that enables them to obtain a better position to respond to threats and opportunities.

Therein, the current study aims to understand better budgeting process and to explore why and how the rolling forecast can be employed together with fixed budgets and how the use of rolling forecast can support fixed budget in an uncertain environment. In order to deepen this study, a case study – Philips (Consumer lifestyle sector) - is applied, and its empirical findings were compared and analyzed with respect to the results found in the literature review. Finally empirical findings indicate that the objectives such as setting a goal and commitment and motivation functions that are of high importance and cannot be covered by rolling forecast are covered by annual budgeting. It is also shown that rolling forecast would be an adaptation of the budget to bring more flexibility and an improved level of decision-making to the process in an uncertain environment specifically when it comes to resource allocation, supply chain management, and production planning.

Key words: Contingency theory, Traditional budget, Forecasting, Rolling forecast.

Table of Contents

1. Introduction

1.1 Background and problems discussion

An organizational plan concerning financial terms of a forthcoming period of time is called budget. As a financial plan, budget, which has been in used for a long time, foresees expenditures and revenues for a definite period of time. It is considered in most organizations as the main part of the management accounting process that enables the organizations to follow and fulfill strategies by allocating resources according to strategic targets. It is also the means by which activities and communication between departments are coordinated, managerial performance is assessed, activities are controlled and also managers are motivated to accomplish predefined goals (Collier, 2006). They are typically annually and define level of activities such as sales revenue, production capacity, or sales volume. It is stated by Otley (1999, p. 370) that "Annual Budgeting has traditionally been a central plank of most organizations' control mechanisms" and it is emphasized by Hansen et al. (2003, p. 95) that "Budgeting is the cornerstone of the management control process in nearly all organizations".

Although traditional budgeting (also referred to as fixed budgeting) is often criticized by practitioners and academics (Wallander, 1999; Hope and Fraser, 2003; Jensen, 2003), studies have revealed that the huge number of organizations still employ budgets. Practitioners are concerned about utilizing budgets for planning and performance evaluation. It is also argued that there are some problems with budgets such as: it can hinder the allocation of organizational resources to their best functions; it can lead to shortsighted decision-making and other useless budget games. These problems stem from traditional budgeting's financial, top-down, command and control orientation, which is enclosed in annual planning and performance evaluation processes. It is also criticized for being too costly and time consuming for management (Hope and Fraser, 2003a).

Development of the idea of the annual budgeting was carried out during the time whose characters were stable markets, predictable inflation and static costs. Nowadays it is not easily feasible to run businesses according to fixed plan business models due to emergence of rapidly changing markets. The world is becoming more globalized and consequently it is necessary for organizations to react quickly to changes in order to remain part of the developments and be able to compete worldwide [1]. According to Hope & Fraser (2003a), the current business atmosphere is regarded much more dynamic and complex than before that makes traditional management accounting tools such as annual budgeting inappropriate to confront enduring competition. Wallander (1999) calls traditional budgeting "an outmoded way of controlling and steering a company". Traditional annual budget is incapable of achieving desired business targets as planned one year ago in competitive environment as it changes quickly (Hope & Fraser, 2003a).

It is observed that there are two viewpoints concerning altering the dissatisfaction with budgeting. One aims at adapting or complementing the traditional budgeting process using other managerial techniques which is known as Better Budgeting while the other seeks to go Beyond Budgeting by abandoning it and replacing it with a lean control system which is based on some market-oriented performance indicators together with using Balanced Scorecards (O'Sullivan 2010, Richards 2006). The goal of Better Budgeting process is to improve the functional role of traditional budgeting as control and planning via reducing the number of planning objects, and carrying out the vital parts of the business processes that are required for the success of the organization such as production and purchase. Some of the managerial techniques using which the Better Budgeting approach can be realized are Activity Based Budgeting, Zero Base Budgeting, Value Based Management, Profit Planning, Rolling Budgeting and Rolling Forecasts (Neely, Bourne and Adams, 2003). There are studies showing that many European companies have successfully abandoned budgeting for control purposes. According to Eckholm and Wallin (2000), it is only 15% of the Finnish companies planning to abandon traditional budgeting while 61% aim at improving it and it is only 24% want to keep using the current budgeting system as it is. Therefore, although budgeting practices needs to be improved, there are many companies dependent on budget as the only tool to coordinate, communicate and control within the organizations. It implies the fact that it is not the beyond budgeting to be employed widely by organizations, but rather it is typically choice of the better budgeting as the dominant approach to be taken by companies. Given these facts, however it seems that the better budgeting approach, so far has not received sufficient attention from the academy. Herein, this gap is to be comprehensively investigated and addressed.

One main reason behind both abandoning as well as improving the budgeting is the planning limitations of traditional budgets caused by instability of the environment. It raises the question on whether keeping budgets, but complementing it by employing rolling forecasts and/or relative performance targets to modify its application and lower its importance make it capable of coping with uncertain environment or not (Hansen et al. 2003). Nowadays, in order to keep competing, companies are increasingly adopting rolling forecast because it is more adaptive and consequently supports control processes and planning of the company in a better way. Companies adopting rolling forecast are capable of updating the forecasts and plans quickly that enables them to obtain a better position to respond to threats and opportunities [1].

Rolling forecast approach deals with forecasts for sales and costs during a definite period of time in the future. By the term "roll" it emphasizes on typically the monthly or quarterly updates of the predictions and plans whereby organizations can adapt their expectations and plans periodically within an annual period in order to take into account the realities of the current markets. Employing the rolling forecasts, predictions are made more often than the traditional annual budgets which provide companies with a proper means to decrease the influence of the uncertainty on budgeting. In practice, rolling forecast is often utilized as a complement to the budget rather than replacing it. It is also mentioned by Ekholm and Wallin (2000) that rolling forecast rather than being a new concept is often employed together with annual budgeting. Given all the aforementioned points, it seems that there has been so many studies on the benefits of the rolling forecasts and its comparison with budgets, nonetheless there has not been so many research on why and how rolling forecast can be used in large companies to complement budgets.

To understand how performance of an organization is influenced by different variables, there have been numerous studies based on the contingency theory discussing practices adopted by the organizations to enhance the efficiency. Therein it is argued that those practices depend mainly on organizational variables such as strategy, size, culture, organizational structure, technology and external environment, where the latter one is of significant importance in the current study. According to Bescos et al. (2003) cited by Hansen et al. (2003), the degree of environmental uncertainty is one important contingency factor and a survey of French companies shows that uncertainty of the environment can be a major driver of dissatisfaction with budgets.

1.2 Purpose of the research

The objective of this study is to understand Better Budgeting process and to explore why and how the rolling forecast can be employed together with fixed budgets and how the use of rolling forecast can support fixed budget in an uncertain environment. Therefore motivations behind employing both approach together as well as the way they interact in organizational process are to be studied.

1.3 Research questions

The research question to be considered in this study is:

- Why and how fixed budgets and rolling forecasts complement each other in an uncertain environment?

In order to answer the main research question these two sub questions are considered:

- What are the motives to employ both fixed budgets and rolling forecasts together in an uncertain environment
- How fixed budget and rolling forecast can interact in organizational processes which deals with an uncertain environment

2. Methodology

In this part the purpose is to describe the methods that will be employed as well as the structure of the research according to which this study will be carried out. It is also to detail on how required data can be collected.

2.1 Research Paradigm

There are two main research paradigms, namely interpretivism and positivism. They can be described as philosophical frameworks of how research should be carried out depending on people's assumptions concerning the world and the nature of the knowledge (Collis and Hussey, 2009). Interpretivism approach considers that social reality is subjective and the social reality can be affected by appropriate investigation. The interpretivism paradigm aims at obtaining the interpretive understanding by seeking the complexity of social phenomenon within a certain context (Collis and Hussey, 2009). Therefore in this study in order to achieve the purpose of the study and to answer the research questions, it is vital to understand the background of better budgeting process and try to interpret why and how the rolling forecast can be employed together with fixed budgets. It is also of high importance to find out how the use of rolling forecast can support fixed budget in an uncertain environment. Thereby the interpretivism approach suits this study.

Moreover, according to Bryman & Bell (2007), research strategy aids researchers to clarify and demonstrate different orientations in research conduction. Researchers have two major strategies to select among, a qualitative research approach or a quantitative research approach. Regarding quantitative approach, the focus is more on numbers and quantification in gathering and analyzing of data, while in qualitative approach the emphasis is more on words and meanings and also on how or why something may take place (Bryman & Bell , 2007). Herein, the qualitative research strategy is more appropriate to answer the proposed research questions. Therefore this study collects qualitative data and analyzes them by utilizing interpretive method in order to achieve the purpose of the study.

2.2 Research design

According to Blumberg et al. (2008), the structure of investigation and research in order to achieve goal of the study is called research design. The research design separates itself into ranges of how it is explored, explained and described (Yin, 2009). There are different types of research design such as case study, cross sectional, experimental and exploratory design. Case study design is one of the most common research designs. Case study can be used to grasp a real life phenomenon in depth (Yin, 2009). Additionally it presents a detailed analysis of a single or multiple cases on an organization, event, person and so on (Yin, 2009). This study applies a single case study in order to answer the research questions and to understand the real phenomenon.

Case study description:

The case under investigation in this study is Philips (Consumer lifestyle sector) which was established in 2008 by the integration of Philips Consumer Electronics, Philips Domestic Appliances and Personal Care with 17000 employees in 50 countries, and is headquartered in Amsterdam. Current case study explores how Philips (Consumer lifestyle sector), in an uncertain environment can improve traditional budgets by employing rolling forecasts, and which are the motives to employ both traditional budgeting and rolling forecast approach together and how they interact. The purpose of selection of Philips Company is that it employed annual budget and rolling forecast and it is also exposed to an uncertain environment. Therefore, Philips is a suitable case which helps to achieve the objective of the thesis and to complement the research questions by focusing on interviewee's interpretation and perceptions of improving budgeting process.

2.3 Literature review

In order to prepare theory and framework for this study, a systematic literature review is performed. There are some keywords and search terms chosen for conducting a review based on which search is followed. The following keywords were searched in databases as: Google Scholar, Business Source Premier, Emerald and Science Direct in order to find the relevant literature to build the framework.

Key words: Contingency theory, traditional budget, forecasting, rolling forecast.

2.4 Data collection

According to (Yin, 2009) for a qualitative research, the case study data can be extracted from various sources such as: documentation, interviews, physical artifact, direct observation, and participant-observation. It should be also noticed that there is a difference between primary and secondary sources of data. The difference stems from the fact that primary data can be collected from a first-hand data like interviews and observation, while secondary sources can come from Internet, articles, books and other general sources.

The collection of data in this study is based on two major sources. The first source is semi-structured interviews with key members of Philips Consumer lifestyle whereas second source is achieved from data archive of companies, such as annual reports, Internet websites and also another important source of secondary data such as available academic books and academic articles.

2.4.1 Semi-structured Interview

In this study, four semi-structured interviews with four key members of the Philips Consumer Lifestyle were conducted in order to achieve first hand empirical findings and get an insight into Philips budgeting system. It was tried to find the most knowledgeable people at the company such that they can provide information concerning the reasons and ideas behind employing rolling forecast together with fixed budget, as well as how these two interact and complement each other. Two interviews were done with senior managers in financial planning and analysis group, one with management consultant in control group and one with Business Specialist since they had sufficient information regarding budgeting process and forecasting. The interviewees had responsibilities concerning annual operating planning as well as forecasting processes. They mainly hold a positive attitude towards the annual budgeting but they also acknowledge the role of environmental uncertainty and regard rolling forecast as an addition to the fixed annual budget which may improve deficiencies involved. Thereby by obtaining their perspective, it is possible to investigate on how it relates to the existing literature, and respond to the research questions.

Structured questions were formulated for respondents and were used for face-to-face interviews. Questions were sent to each interviewee in advance, so that the interviewee could realize the goal of the study and be prepared for the interview. Face-to-face interviews are advantageous since it enables the researcher to gain respondent's cooperation by establishing a relationship with them and it provides the researcher with the chance to clarify the vague responses by asking follow-up questions if required. It also lets the interviewees develop their ideas and views concerning the subject. In this study all interviews were recorded and transcribed.

2.5 Delimitation

- This research is designed based on a single case study and only one large company will be chosen to focus on.
- As already mentioned, this study is collected information of one large company which means few responses that makes generalizing the result to all companies problematic.

- The company selected is in the Netherlands which is a developed country, and it makes it hard to generalize the results to any other country including undeveloped ones.
- It is only one important contingency factor, external environment (environmental uncertainty), which is considered in this study

2.6 Data Analysis

Data analysis describes the way of analyzing collected data in this study. It utilizes both empirical data and theory to develop analysis. In the analyses part of the current study, the theory of budgeting and rolling forecast that already exist in the literature is used. Moreover, one of the contingency factors, namely environmental uncertainty, is considered in order to achieve the objective of this study. During the process of developing the theory based on the data obtained, an iterative approach is utilized in which collection of data and analyses were influenced from development of each other. Therefore to assure further development of investigation, the transcribed interviews were analyzed afterwards so that the influence of emerging findings could be captured in the future interviews and development of the research.

3. Contingency Theory

There have been many studies investigating the reasons of difference between organizations in terms of various management accounting systems and practices employed. According to Hoque et al., (2001) contingency theory can be used to find out the influence of adopting different budgeting practices. It explains why there are different management accounting systems adopted by different firms in different countries (Hoque et al., 2001). Therefore, contingency theory can be a relevant theory for conducting this study in order to fulfill the objective of the current study.

In the old days, there was only one universal approach to provide a management accounting system. The bases for the idea were that there is one unique package for organizational control applicable for all organizations and in all situations to make the performance as efficient as possible.

Later on, the contingency approach to management accounting was developed. The premise based on which this approach is established is that there is no unique accounting system that can be employed for all companies with different situations. Instead, features of a proper accounting system are closely related to circumstances in which a company exists. Therefore particular features of an accounting system that are related to certain circumstances and can provide proper matching need to be identified by contingency theory (Otley, 1980). Investigating all major contingency-based studies Chenhall (2003) recognized six main types of contingency factors that are namely, technology, external environment (such as environmental uncertainty, turbulence, complexity …), size, organizational structure, strategy, and culture. The dominant contextual variable is external environment which is the basis of contingency-based research. Uncertainty, turbulence, complexity, hostility and diversity are the most researched environmental variable (Chenhall, 2003).

External environment is of significant importance in the current study. According to Bescos et al. (2003) cited by Hansen et al. (2003), the degree of environmental uncertainty is one important contingency factor and a survey of French companies shows that uncertainty of the environment can be a major driver of dissatisfaction with budgeting system. There are two types of environmental uncertainty elements. These two types are called external and internal uncertainties. The former one consist of competition, supply and demand uncertainty that are related to outside of an organization and the later one consist of technological uncertainty which is related to within an organization (Hansen and Van der Stede, 2004).

According to Otley (1980), there is a relation between organizational effectiveness and contingent variables. Considering the organizational objectives, and contingent variables that the organization deals with, the management decides about the organizational control package. Therefore, the organizational design and management accounting system are influenced by the contingent variables and the management in company plans to realize the organizational effectiveness by adapting to the contingencies. Fisher (1998) also presents an approach that is in line with the model presented by Otley (1980). However, Fisher has also considered the fact that there might be interdependencies between the contingencies chosen by the management or some contingencies may conflict with each other that should be taken into account. Therefore an organizational objective may be influenced by various disagreeing contingencies and it needs to be decided by the management which variables to be addressed. It is also likely that contingent variables have different effects on different objectives of the organization, and in this case it is required to assess their combined effects on the organizational effectiveness.

3.1 Environmental uncertainty and budgeting

Influence of uncertainty on management control and the evidences of that presented by early contingency theorists have attracted broad attention on the relation between controls and uncertainty in environments (Malmi, 2008). Controls in an organization aims at guiding the performance and the extent to which an organization is influenced by uncertainty shows its management capability to control. Also choosing of management control system in an organization depends on uncertainties the organization is exposed to (Malmi, 2008).

Environmental uncertainty is regarded as a key notion in organizational design theories. It is considered as a primary problem with which organizational management should deal (Malmi, 2008). There has been a wide range of studies that has investigated possible responses for the management once environmental uncertainty is present. It is found by Gul and Chia (1994) that in the presence of environmental uncertainty, aggregation of accounting information may provide assistance to alter the performance (Malmi et al., 2008). According to Hansen and van der Stede (2004), presence of environmental uncertainty has a negative influence on formal budgetary control and accounting performance measures. Hence fixed budget loses its relevance once high uncertainty is present. According to Malmi (2008) planning in uncertain environment is of higher importance than in stable environment, and because of uncertain future, budgeting is consequently much more difficult than planning for a known future.

Budget has traditionally played an important role in organizations' systems of management control (Libby & Lindsay, 2010). However, traditional form of the budgeting has been criticized during recent years, and it is argued that process of budgeting and the way it is used is fundamentally wrong (Hope and Fraser, 2003a). According to European investigations, there is an increasing dissatisfaction among companies and organizations regarding the traditional budgeting system. The traditional budgeting has been criticized mostly by Hope and Fraser (2003b) considering it as a main consumer of management time which results in a flawed behavior specially in changing business environment. Furthermore, traditional budgeting denies firms capability to behave adaptively and follow their strategies once they encounter unpredictable environment which results in lack of competitiveness (Libby & Lindsay, 2010).

Limitations of budget planning in uncertain environment raised the question whether instable environments may be dealt with by keeping the traditional budgets but complementing it with alternative approaches (Hansen et al. 2003). As an alternative to the traditional budgeting in an uncertain environment, rolling forecast which is often carried out monthly or quarterly, is increasingly being utilized (Sivabalan et al. 2007). This increase in employing the rolling forecasts is due to the fact that it allows for less forecasting error and it is much in line with reality in an uncertain environment (Neely et al. 2001). Compared to fixed budget, the updating characteristic of rolling forecast improves budget numbers which may be used to enhance the coordination of resources or action plans in an uncertain environment (Haka and Krishnan, 2005). Employing the rolling forecasts, predictions are made more often than the traditional annual budgets which provide companies with a proper means to decrease the influence of the uncertainty on budgeting (Sivabalan et al., 2009). It also delivers updated indicators more often, which can lead to more flexible and adaptable organizations capable of dealing with difficulties as new environmental scenarios (Gracia, 2008b). Among the main advantages of the rolling forecast are its flexibility and the fact that it does not take into account obsolete figures, and it consequently results in more timely allocation of resources (Gurton, 1999).

According to Ekholm and Wallin (2000), rolling forecast is often employed together with traditional budgets and it is not a new concept. It concerns prediction of the most feasible outcome yet variance from the forecast is possible. It is found by Sharma (2002) that higher competition and turbulence lead to increased focus on forecasting, and Ekholm and Wallin (2000) suggested that complementing budgets with rolling forecast is common. Thereby, higher competition requires more management accounting systems and in an unpredictably changing environment such management accounting system should be quick and future oriented (Amigoni, 1978).

It is mentioned by Haka and Krishnan (2005) that in a highly uncertain environment, the most important means to success is learning. For industries in such environment, learning first increases the chance of success and survival. Learning is usually obtained via feedbacks to find the correlation between the actual performances and predicted one (Vollmeyer et al, 1996).

Learning process may be enhanced employing rolling forecasts because of its forward-looking characteristic, which updates the predictions continuously. There is no such characteristic in the traditional budget which is created for a fixed period of time into the future, due to the fact that no mechanism to update the budget forecasts is predicted. For the traditional budgets there are two requirements needed to be useful. Firstly, the environment should be quite stable such that the plan is valid over the period it covers and secondly, the managers should have a sound predictive model such that the budget offers a reasonable performance. Obviously these requirements hold for companies dealing with low level of environmental uncertainty (Hansen et al., 2003). In the presence of high level environmental uncertainty rolling forecasts utilizing its updating mechanism perform better than the traditional fixed budgets. However, once the environmental uncertainty is low, it does not improve the performance due to the fact that setting specific goals and commitments may be regarded more important than learning about the environment. Therefore, once environmental uncertainty is high, rolling forecasts makes enhanced decisions while in environments with little uncertainty traditional one works better. The reason for that is the forecasting feature of the rolling forecast that improves the decision making process and learning about the environment, while it also provides less clear goal due to the same feature. However it does not influence the performance in a negative way because in highly uncertain environments, it is the learning which is of utmost importance for performance rather than set goals (Malmi, 2008).

To sum up, the main characteristics provided by rolling forecast are responsiveness and capability to trace changes in market scenarios, to deal with environmental uncertainties and at the same time considering the strategic objectives. The most important functions of continuous financial planning are (Gracia, 2008a):

- Considering market changes, as well as financial risks, and also altering action plans regularly.
- to exploit operational and financial resources required for business development
- to fulfill expectations of shareholders such as profitability and values creation
- to provide companies with a sustainable growth

4. Literature review

4.1 Traditional budgeting

Budget may be regarded as a quantitative economic plan in terms of a forthcoming period of time. To clarify, it involves allocation and usage of economic resources expressed in monetary terms. It needs to be a plan, a reliable intention made in a certain period of time rather than a hope or a forecast (Harper, 1995). Provided that these entire characteristics are realized, thereafter it may be called a budget.

In fact, an organizational plan concerning financial terms of a forthcoming period of time is called budget. Budget primarily defines level of expected activities of an organization such as capacity or sales revenue. Budget, in particular, distributes resources according to strategic targets.

However, in a wider perspective, it can be viewed as a management tool in executives' hand to control the financial health of the company. It clarifies the financial structure of companies' operation and makes management responsible in a structured manner. As a management means, budget may not be regarded as positive or negative independently, but it also is how the budget is conducted by managers. Once it is conducted wisely, it assists with resource allocation and planning and helps with services and products offered by the company (Seer, 2000). However, it is emphasized in some literature that there may be conflicts if all these tasks are carried out by budget (Barrett and Fraser, 1977; Hope and Fraser, 2003).

Budgeting aims at giving the possibility of figuring out if income targets of the company is met, whether or not expenses are according to predictions, and if the controls are working. If budgeting is employed appropriately, excessive spending will be lowered, profit will increase, and required steps to expand markets will be defined (Thomsett, 1988). To provide such a budgeting system capable of accomplishing the aforementioned targets, management should consider some characteristics among which are (Gumpert, 1984):

- Proper targets in terms of expenses and revenues need to be set.
- Feasibility of achieving the set targets needs to be increased.
- In case of occurrence of difficulties, required opportunity to assess various options should be taken into account.

According to Barrett and Frazer (1977), different roles of the budget are explained as:

Planning: budget is plan which delivers details of what management really wishes to achieve and how .It turns out to be the main factor in decision making on how to allocate and spend the resources that will be essential to achieve goals.

Coordination: by preparing a consolidated plan of action, budget support to coordinate the activities of different sections of the organization.

Motivation: Management can utilize budget in order to motivate different members of the organization for attaining budgeted targets by committing them to predetermined plan of activity. One way that managers can obtain commitment is, link the incentive system of the company with manager's performance evaluation. As the budget denotes a pledge from the top management concerning resources to support the budget, it simultaneously implies the commitment from the managers of business units to apply their effort to achieve the performance required according to the budget, it terms of both level of sales and expenditure. Managers who meet the targets set by the budget will be accordingly rewarded.

Evaluation: The data in a budget offers a standard which help to compare the actual results of the business unit or managers. So, budget plays an important role in evaluating unit's performance

4.2 Benefits and problems of traditional budget

Nowadays most of the companies employ budgeting without any plan to abandon it. Nevertheless, many of them think it needs some improvement which implies that budget comes along with both problems and benefits (Starovic & Jackson, 2004). Some of the benefits that traditional budgeting can carry to an organization are (Lucey, 1996):

- It is the main way via which goals of the organizations are explained by tasks and objectives to be followed by individual managers.
- It communicates objectives, organizational plans, and the degree to which those objectives are achieved.
- It brings coordination among departments and functions of organizations
- Controlling and monitoring of the activities through the reports regarding organizational performance
- It results in lower cost and improved efficiency via budgetary planning and expenditure control

To summarize, according to Umapathy (1987), “There is no other managerial process that translates qualitative mission statements and corporate strategies into action plans, links the short-term with the long-term, brings together managers from different hierarchical levels and from different functional areas, and at the same time provides continuity by the sheer regularity of the process”. According to Otley(1999) one reason that budgets can be utilized in most firms is because ‘‘it is the only process that covers all areas of organizational activity’’

Although according to Otely (1994), Budget has traditionally played an important role in organizations’ systems of management control (Libby & Lindsay, 2010). However, traditional form of the budgeting has been criticized during current years, and it is argued that process of budgeting and the way it is used is fundamentally wrong (Hope and Fraser, 2003a). According to European investigations, there is an increasing dissatisfaction among companies and organizations regarding the traditional budgeting system. The traditional budgeting has been criticized mostly by Hope and Fraser (2003b) considering it as a main consumer of management time which results in a flawed behavior. Furthermore, traditional budgeting denies firms capability to behave adaptively and follow their strategies once they encounter unpredictable environment which results in lack of competitiveness (Libby & Lindsay, 2010).

According to Neely et al. (2003), there are 12 important weaknesses of traditional planning and budgeting practices identified by the literature research and they are criticized by users and constitute three main categories:

Competitive strategy:

- Budgets are barely strategically concentrated and they are frequently contradictory;
- Budgets focus on cost reduction rather than value creation;
- Budgets play a barrier-like role to changes and limit flexibility and responsiveness
- Budgets create insufficient value and discourage innovative thinking

Business process:

- Budget are time consuming and costly
- Budgets are updated usually annually which is not frequent enough
- Budgets are relied on unproven assumption
- Budgets increase gaming and dysfunctional behavior

Organizational capability:

- Budgets support vertical command-and-control
- Budgets do not reflect the emerging network structure adopted by the organizations
- Budgets are not in favor of knowledge sharing but rather adds to departmental barriers
- Budgets cause people feel undervalued

In addition to the aforementioned problems, one big problem of traditional budget is fostering short-term culture that aims at realizing the budget figure, instead of fulfilling business strategy and increasing shareholder value over a longer term. This is due to these drawbacks that it is believed these weaknesses contribute to the inefficiency of the business and it needs to be improved (Neely et al., 2003).

4.3 Alternatives to traditional budgeting process

Due to the aforementioned deficiencies of traditional budgeting, companies are trying to find a more flexible alternative as management accounting tool. Thereby management accounting innovations (MAI), i.e. the ideas that are regarded as new by the society, are being developed regularly (Ax &Bjørnenak, 2007). These alternatives to traditional management tools are being promoted by Beyond Budgeting Roundtable that consists of a group of companies aiming at proposing a new leadership model based on new set of principles. It concerns change in management style, culture, organization, processes, and new frame of leadership. Its objective is to relieve organizations of the "annual performance trap" (Hope & Fraser, 2003a). According to Ax & Bjørnenak (2007), the Beyond Budgeting concept is a management accounting innovation that "houses" other innovations such as balance scorecard, customer profitability measurements, rolling forecast, etc. Among the aforementioned alternatives, companies are increasingly adopting rolling forecast because it is more adaptive and consequently supports control processes and planning of the company in a better way. Companies adopting rolling forecast are capable of updating the forecasts and plans quickly that enables them to obtain a better position to respond to threats and opportunities [1]. By employing the rolling forecast, response to changes of the market by the companies becomes quicker due to the fact that self-managing units are more market-oriented and customer-focused which makes them empowered to fulfill the customer's expectation.

Since establishment of Beyond Budgeting Round Table (BBRT), its main concern was to find an approach to alter budgeting so that companies become more flexible facing quick changes in the environment (Ekholm and Wallin, 2000). Of course, there are advantages for using budgets such as performance evaluation, and coordination, yet many managers are unsatisfied with traditional budgeting and consider them as time consuming, costly, and more importantly, unable to compete in highly fast-paced environments Neely et al. (2003). During industrial age, budget was characterized by its functionally-based spirit which was a beneficial management accounting model due to its focus on hierarchy, command and control (Ekholm and Wallin, 2000). However, it is not any more capable to cope with the challenges of the information age. It is instead a process-based management model needed which aims at empowering the front-line people that can lead to a more competitive organization, with more innovation, high-level quality, and ability to fulfill customers' needs (Ekholm and Wallin, 2000).

In traditional budgeting goals are set at the beginning of a time period and assessment of the outcomes takes place with respect to that static time and plan, while in the contemporary decentralized organizations where employees may have so many initiatives for sake of the competitiveness it is not feasible anymore (Østergren & Stensaker, 2011). Therefore based on the abovementioned arguments it is clear that the traditional budgeting needs serious considerations.

4.4 Main viewpoints towards the budgeting process development

As a consequence of the aforementioned weaknesses, in unpredictable economic environments it is not an easy task to set realistic objectives (Lorain, 2010), and accomplish a reasonable performance evaluation while unforeseen events take place. Therefore, two different practices have been investigated in recent budget process developments that are improving the budgeting system or abandoning it (Hansen et al., 2003). By the first choice, it is intended to improve the budgeting with complementary techniques such as rolling forecasts while maintaining the process. The second choice advocates elimination of the budgetary process to deal with uncertainty.

- **Better budgeting approach:**

The first choice, the better budgeting process, concerns making the institutionalized roles of budgeting (e.g. planning and control) more desirable by simplifying the traditional budgeting approach. This simplifying process is carried out by reducing the number of planning objects. Therefore budgeting is only carried out in term of the business process that are of vital importance for the success of the company (Rickards, 2006). This approach may also be achieved by complementing the budgeting techniques with advanced managerial techniques as: Values Based Management, Zero Base Budgeting, Activity Based Budgeting, Profit Planning, Rolling Budgets and Rolling Forecasts (Neely, Bourne and Adams, 2003).

- **Beyond budgeting approach:**

The second approach is more radical changes towards budgeting and supports elimination of the budgeting process. It aims at making organizations capable of responding faster so that they can deal with uncertainties in a better way (Hope and Fraser, 2001). Some of the companies chose the second approach to treat the problems of the traditional budgeting are Svenska Handelsbanken, Volvo, Rhodia, Borealis, have already dismantled their budgeting process (Hope & Fraser, 2003a). Herein in this study, the former choice is of more importance and will be investigated deeply.

As it is clear, both approaches (better budgeting and beyond budgeting) in spite of having different focuses, represent a common idea according to which traditional budgeting is basically incompatible with current uncertain and fast changing environments and it should be changed.

4.5 Improving planning and budgeting process

In spite of the fact that the emphasis in the literature is placed on the cost of gathering and consolidating the budgets as the main reason why companies need to improve their process of planning and budgeting, it is argued by many practitioners that the most important value is to align plans and budgets with strategies (Neely et al., 2001- Accenture). The future of budgeting and planning is not only to obtain efficiency, but rather it is in planning for value (Neely et al., 2001- Accenture). It is why there is a theoretical model created by a consulting company called Accenture that presents how the goal of increased shareholder value may be achieved via improving budgeting process. It is suggested by their model that it is via three specific ways that an improved budgeting and planning processes leads to higher shareholder value (Neely et al., 2001- Accenture):

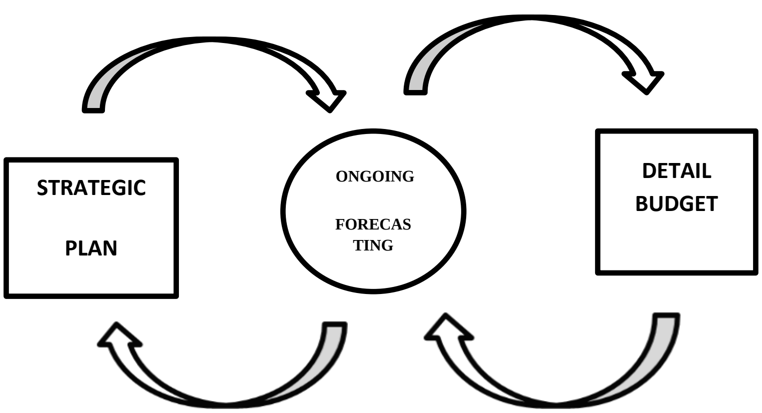
1. Enhanced management through budgeting and planning in a better way by:
   - Enhancing the execution and strategy formulation
   - Enhancing the budgeting activities and the cost efficiency of the planning
   - Enhancing the correctness of the forecasts to be used by organizations
2. Improving and handling market expectations by:
   - Communicating with investors in an efficient way
   - Enhancing the reliability of the management
3. Achieving an enhanced organizational performance by:
   - Improved financial performance
   - Improved expected future performance

▪ Improved predictability of performance versus expectations

4.6 Forecasting

According to Churchill (1984), there is a difference between forecast and budget. Regardless of using budget for planning or for control, it is always more than a forecast. It is mentioned by Churchill that, "forecast is a prediction of what may happen and sometimes contains prescriptions for dealing with future events. Budget, on the other hand, involves a commitment to a forecast to make an agreed-on outcome happen."

Employing forecasting, organizations are provided with the possibility to find the gap between the detailed operational budget and overall strategic plan in order to close it. A planning cycle as the one depicted in the following figure entails an ongoing forecasting that cycles between overall strategic plan and the operating budget. The outcome of such and advanced planning system influences the results of the detail budget (Montgomery, 2002).



Source: Montgomery, 2002

This type of continuous/rolling forecast that governs a target-based detail budget is considered as a key financial component of an advanced strategic planning in many organizations. The strategic plan consists of various nonfinancial processes and is regarded as the driver for the rolling forecasts. The forecast provides key statistical, operational elements and results. Given these elements, operating budget delivers plans as well as actual control functions for the lower levels in an organization (Montgomery, 2002).

4.7 Rolling forecast

In case of any business encompassed with a rapidly changing environment, management need to have access to management control systems that can provide reliable data. The accurate data needs to be provided on a regular basis such that the management can constantly adjust operations, weigh availability of the resources and consequently make the proper decisions at the right time. Thereby, alternative budget forms as rolling forecasts are gradually being employed by different organizations for management control purposes (Lorain, 2010).

In order to assist organizations in adjusting their annual budget according to the realities of the current market, rolling forecast may be created on a periodic basis (Haka and Krishnan, 2005). By the term "roll" it emphasizes on typically the monthly or quarterly updates of the predictions and plans (Clarke, 2007). According to the literature, employing rolling forecasts, companies forecast more often than once a year which will result in decreasing the detrimental influence of uncertainty on budget (Lorain, 2010). In some organizations, forecasts of year-end values are carried out on regular bases, while some advanced organizations take further steps and forecast beyond the fiscal year and cover 12 – 18 month period (Hope, 2007). As already mentioned, the rolling forecast can be performed on a regular basis, but it can also be performed upon occurrence of significant events like reaction to troubles in supply chain or announcing new services.

According to Bunce (2007) cited by Lorain (2010), in order to be efficient, forecasts require to be arranged within a few days, therefore the emphasis should be placed on a few key value indicators instead of lots of details. According to Lorain (2010), a new research confirms that ''keeping forecasts focused on key performance indicators and line items will permit for quicker turnaround and more value-added analysis and insight from finance''. In fact, it is feasible for most of the businesses to focus only on 3-5 key indicators to obtain an assessment of their long-term value creation (Lorain, 2010). For example in case of American Express, there are three key performance indicators, average card member spending, card attrition, and average assets per financial clients, employed to conduct its core business (Chenault, 2004).

4.8 Advantages of the rolling forecast

Employing the rolling forecasts, predictions are made more often than the traditional annual budgets which provide companies with a proper means to decrease the influence of the uncertainty on budgeting (Sivabalan et al., 2009). It also delivers updated indicators more often, which can lead to more flexible and adaptable organizations capable of dealing with difficulties as new environmental scenarios (Gracia, 2008b).

Among the main advantages of the rolling forecast are its flexibility and the fact that it does not take into account obsolete figures, and it consequently results in more timely allocation of resources (Gurton, 1999). Rolling forecast helps companies improving their operational and financial management, making their decision-making process quicker and dedicating more time to value-added activities. It also supports communication inside and outside the companies, continuous learning and enhanced corporate culture. Most importantly, due to employing forecasts over short period and shorter time intervals between planning and business reality, companies become more competitive and responsive facing rapid changes of the economic conditions (Sivabalan et al., 2009).

The annual budget has been criticized due to the fact, once prepared it is soon out of date (Myers, 2001). Rolling forecast more often may solve this issue, because employing rolling forecasts which brings in frequent and accurate predictions, organizational learning will be assisted and managers feel more confident to rely on budget numbers employed for planning of the short term operations (Hansen et al., 2003; Haka and Krishnan, 2005).

The main characteristics provided by rolling forecast are responsiveness and capability to trace changes in market scenarios, to deal with environmental uncertainties and at the same time considering the strategic objectives. The most important functions of continuous financial planning are (Gracia, 2008a):

- Considering market changes, as well as financial risks, and also altering action plans regularly.
- to exploit operational and financial resources required for business development
- to fulfill expectations of shareholders such as profitability and values creation
- to provide companies with a sustainable growth

It is believed by many analysts that planning systems and corporate strategic planning are of importance to assess shareholder value creation. In this respect, the reliability and accuracy of financial forecasts received high attention by financial analysts (Mikhail, Walther, & Willis, 1999, p. 185).

To summarize, rolling forecasts can be considered as a just-in-time process whose focus is placed on threats, strategy and opportunities which makes organizations capable to allocate and withhold resources much more efficiently. Rolling forecasts provide the image of what will take place in short term while budget provides us with a fixed image of the future in order to control operational measures and to realize the strategy. It is mentioned by Hope (2007) that the rolling forecasts differ from budgets in the sense that they are based on a few key drivers which makes it possible to prepare them within a few days. Thereby, they are carried out in a continuous manner and are not influenced by fixed targets during their preparation. However it is argued by Ekholm and Wallin (2000), that due to the flexibility of rolling forecasts compared with budgets, they are regarded to be not as strict.

4.9 Disadvantages of rolling forecast

Some of the drawbacks of the rolling forecast are that since it continuously changes, managers feel a bit uncertain towards that. Furthermore, designing a fair system for bonus remuneration based on rolling forecasts is more difficult than the traditional budgeting (Gurton, 1999 cited by Ekholm and Wallin, 2000). Therefore it is not easily possible for rolling forecasts to replace budgeting due to the fact that it cannot fulfill evaluation and motivation functions. Action plans created in budgeting process are obtained via communication and coordination throughout the organization. Budgets are typically regarded as a motivation tool which makes managers committed to achieve the action-plan objectives as a measure based on which they are rewarded (Gurton, 1999).

One of the main challenges of the rolling forecasts concerns its implementation in a successful manner. Its implementation needs skilled accountants who are capable of understanding the environment of the company, and employees who can predict future trends and analyze the obtained information (Sivabalan et al., 2009). Therefore, it is not possible for all companies to employ rolling forecasts and benefit from that. It might also be destructive to implement it for the companies that are not capable of doing so (Starovic & Jackson, 2004).

5. Case description

5.1 Philips Company

Royal Philips is a Dutch company headquartered in the Amsterdam (Netherlands). It is one of the largest electronic companies in the world with 122000 employees worldwide. Company's mission is to improve people's lives through sustainable and meaningful innovation. Thereby, Innovation is core to everything that company does. Moreover, Philips as a global company has an objective to try to make the world healthier and more sustainable through innovation and its goal is "to improve the lives of 3 billion people a year by 2025". Philips, as a company with diversified technology, consists of three sectors: Philips Consumer lifestyle, Philips health care and Philips lighting. This thesis is focused on budgeting process in Consumer lifestyle sector (Philips' website).

5.2 Consumer Lifestyle Sector

Consumer Lifestyle sector was established in 2008 by the integration of Philips Consumer Electronics, Philips Domestic Appliances and Personal Care with 17000 employees in 50 countries, and is headquartered in Amsterdam.

Consumer Lifestyle sector attempts to make the world healthier and sustainable by innovation. Philips has a leading global brand that is reliable worldwide. Consumer lifestyle sector is now presenting stable result by transformation program (The Accelerate). It is organized around its businesses and markets, and plans resource and manages performance through Business Market Combination (BMC). This model can help to make decisions closer to their customers and markets. The focus of Consumer Lifestyle sector is on value creation by category growth as well as distribution by operational excellence (Annual report, 2012).

Consumer Lifestyle sector involves the following ranges of business in 2012:

• Health and Wellness: mother and childcare, oral healthcare

• Personal Care: male grooming, skincare, and beauty

• Domestic Appliances: coffee, floor care, garment care, kitchen appliances, water & air, beverage appliances

• Lifestyle Entertainment: audio and video entertainment; communications, headphones and accessories

5.3 Strategic risks

Operations of Phillips are exposed to economic and political developments in countries around the world that could unfavorably affect its income and revenues. So business environment of Philips is affected by situations in the domestic as well as global economies (Philips' Annual report, 2012).

There are several factors such as fluctuation of energy, prices of raw material and global political instabilities in North Africa, the Middle East and other regions that can continue to influence macroeconomic factors and the international capital as well as credit markets. Economic and political uncertainty can have an adverse effect on financial situation of Philips and operations additionally can also make it more problematic for company to budget and forecast accurately. Philips can face difficulty in planning and managing operations because of political factors such as unexpected legal or regulatory changes like foreign exchange import or export controls. Moreover, technology, suppliers and distributors, consumer interest group which are becoming very important in operation of Philips due to its geographical growth (Philips' Annual report, 2012).

To cope with difficulties caused by these strategic risks -external environmental factors- Philips managed to incorporate budget with combination of forecasts that are mentioned in the empirical part of this study as well as analysis part.

6. Empirical Findings (interviews with senior managers, consultant manger and business specialist in Philips)

6.1 Business planning process in Consumer Lifestyle Sector

There are four planning processes in Philips consumer lifestyle. Once a year a strategic plan is prepared which is a five-year financial plan, therefore the forecast carried out each year concerns five years ahead. The second process is annual budget - annual operating plan (AOP) - which looks into two years ahead. The third process is quarterly forecasting process, and the last process is monthly forecasting which is a rolling forecast and projects 18 months ahead.

- Strategic plan: it is a long-term direction setting, carried out once a year and involves five-year financial plan.
- AOP (Annual Operating plan): It is intended to set a commitment and a performance contract within next two year ahead.
- Financial forecast: It is a quarterly forecast which helps to health check against budget and it is also basis for corrective actions.
- S&OP (Sales and Operations Planning): Rolling monthly 18 month forecast - operational demand planning and supply balancing.

6.2 Purposes of Annual Budget in Consumer Lifestyle Sector

In Consumer Lifestyle sector budget is used for different purposes such as planning, control, resource allocation, coordination, motivation and performance evaluation.

In terms of planning purpose, obviously in the annual operating plan, organization plans ahead for the whole year and based on that it can plan purchasing, and production capacity. This planning during the year needs to be adjusted based on the latest forecast. In order to extend the focus of AOP from short term to mid-term, Philips plans for two years ahead every year. It is mentioned by one of the senior managers that:

"For the annual budget (AOP) we do forecast four quarters (Q1, Q2, Q3, Q4 in 2014) and the next year on full year basis (2015). We do this to avoid full focus on the short term. By introducing the second year in the AOP, we want to make sure that our managers also look at the mid-term plans".

One of the management consultants in the company says the main purpose of the budget is setting a commitment or a performance contract. He mentioned that “We see budget being taken place in an overall planning and performance cycle. The budget cannot be seen in isolation”. By having budget and a target set for instance for sale for specific manager, it is needed to report against it in order to realize the budget. Otherwise how to assure that the budget is being realized. Therefor AOP is the target and incentive for every employee to work against.

It is said by one of the senior managers that: “the forecast is done monthly and quarterly to reach the targets in the budget. Before starting with budget, it is important to know what is the expectation of the company versus investors and also strategies. What is the strategy for which the company wants to create the budget so it enters into the AOP process. Therefore we have mapped that out entirely. We called it planning and performance cycle, therefore the budget has focused on basically strategic discussion happening first that leads to the budgeting process or target setting process. In target setting process we set a commitment and use a forecast to track whether or not the budget is being realized”.

The second key role of budget is resource allocation or resource reallocation, and its link to strategy of the organization depends on the budget. To clarify, there is specific amount of budget available, and it is laid down in the strategy that next year growth is expected in a specific market or product. Then it is needed to allocate resources to the new market and product.

During the year, the annual budget (AOP) is used as a kind of management KPI’s, to find out how far the actual situation differs from the AOP. That would be the control part of it. Moreover annual budget helps to align the objectives of different parts of the business between units and organization.

6.3 Problems behind annual budget

A big challenge for Philips is how to execute the budgeting process, and it is the most time consuming part of it. There are so many complexities that need to be decided on. Executing the budgeting process is the most time consuming part. It concerns timelines, level of information, level of details and cost accounting and allocations.

According to one of the management consultants: “Timetable is very critical, one of the ways to measure AOP efficiency and productivity is how short or long it is. Ours is still quite long. It starts from end of August to end of the November”.

6.4 Reasons for improving annual budget

Due to the fact that Philips found its AOP process time consuming, it was decided to improve the process so that the cost is reduced and the process is a lot quicker and does not take so much resources. It is mentioned by one of the senior managers that "in 2011, it took us very long time and it was a lot of back and forth between sectors and group and also between sectors and business units. In 2011 preparation of the AOP took Philips half a year because of many iterations between different level of management and people involved in AOP (Annual operating process) planning. It was a big trigger that caused Philips to decide to improve the budget such that it becomes quicker and takes fewer amounts of resources.

During 2012, the whole AOP planning process was revised and became more efficient. One main change made to the AOP process was to set clear target at the beginning of the process. According to one of the senior managers "it was decided to start with AOP before September. Therefore Philips should only do the AOP (Annual operating plan) in September and October. When it is done it will be reviewed and we make some adjustment and then in November we do a review and gap closure and then it is done. As of January it is the actual target for everybody to work against".

Another important change also made during 2012 was to clarify the difference between AOP as a target or commitment and quarterly forecast as a checkpoint. In order to do that, before starting with budgeting, it is of high importance to know about the expectation of the company and investors which is laid in the strategy of the company. Provided the strategy is available, it needs to enter into the AOP process. In the AOP process, targets and commitments are set according to the strategies. From this point forth, taking those targets and commitments as milestones, forecast is used to track whether or not is being realized. Consequently, four times a year, so called quarterly, the budget is being checked against a set of KPIs.

6.5 Reason behind forecasting (purpose of forecasting)

It is stated by Business specialist that "The main objective of the forecasting and planning is basically to obtain accurate decision making capability. It is all about predicting future events or conditions which is not under control of the company, yet foreseeing those taking place in advance enables the companies and their management to take right decision in early stages such that the detrimental effect becomes as limited as possible. Thereby, forecasting plays a key role for managers in their decision-making and it also is a necessity for companies to shape their future by using it as an input for their planning". The reason to incorporate forecasting into the process is laid in the fact that AOP is the target and incentive for every employee to work against. However forecast is about obtaining the latest realistic expectation of financial status of the year in the future.

A senior manager mentioned that “we are a public company and it also means that we need to report our financials externally on a quarterly basis. Obviously we need to make sure if the financials as we projected them, are not going to be realized. Then we need to warn the capital markets that we cannot achieve our targets. That is what happened in 2011 that we had to do a profit warning 3 times, because we were too way off from what expectations were. That is pretty bad and you are going to avoid that by having a realistic and clear forecasting process which give you a clear view on what is going to be the quarter and also what you expect from the rest of the year. So that is the reason why we have a rolling forecast process also”.

In changing environments, forecast is the key. It might be even required to carry out the forecast more often than quarterly forecast. Concerning most of the line items quarterly forecast is enough. For example there is a lot of indirect cost, fixed overhead cost that do not change from quarter to quarter in terms of the projections. Therefore these items can be managed easier. But sales need to be tracked daily, or weekly, and if anything goes substantially wrong immediate action needs to be taken. Hence in the forecast focus will be placed on all items, however with different approach. For those line items as sales and direct cost lines, more focus is required while others as indirect fixed cost are allocations, and once they are allocated then they remain fixed.

It is mentioned by one of management consultants that “forecast should be as a milestone or check point on whether the budget in being realized. So four times a year, quarterly, we check whether the budget is being realized against the set of high-level KPIs. Then you should identify any mitigating actions that can help you get back to the budgeting case you are not reaching it or case you are over performing. Then you can actually in some specific cases put down an additional target”.

It is also stated by one of the senior managers “purpose of forecast is to manage the cost and to manage the profitability. That means it gives insight in the projected sales and the development and of course using that information for marketing perspective if our market share is going in the right direction. And you will see by the operations if you are going to meet that objective or not. And if not or it is better, that is the input for doing some corrective actions operationally but it can also be strategically”.

6.6 Financial Forecasting in Consumer lifestyle sector

Before starting with budget, it is important to know about the expectation of the company and investors as well as strategies. Therefore the strategies for which the company wants to create the budget enter into the AOP process. Once it is mapped out entirely, then it is called planning and performance cycle. The budget has focused on basically strategic discussion happening first that leads to the budgeting process or target setting process. In target setting process a commitment is set and in order to find out that the budget is being realized the forecast is used to track it.

The financial forecasting at Philips is being done quarterly and it is an in year type of forecast which means the forecast is limited to the budget period. That means for example in March the forecast is done for March and the remainder of the year. So four times a year, quarterly, it is checked whether the budget is being realized against the set of high-level KPIs. Then mitigating actions need to be identified that can help the process to get back to the budgeting case that is not being reaching or in case it is over performing then it is required in some specific cases to put down an additional target.

6.7 Rolling forecast

Due to the fact that the business is quite dynamic, a structured way to carry out the corrections of the business is required such that the company is able to act proactively. In Philips, a monthly forecast is utilized to react on business dynamics, which influence sales, production and transportation. Doing that the immediate and mid-term financial effect incurred by business dynamics may be tracked.

The monthly forecast process is explained by one of the management consultants as follows:

"For the sales line item, there is another process and that is sales and operating plan process (S &OP). Basically, from the marketing and sales, they already have to prepare how the pipeline of new customers or new contracts looks like. They do need to align that with factories. Whether actually the factories can deliver against it, and finance has to see if sales forecasts happens to be true and the factory can deliver it, do we have the budget to actually start producing it. So it is a golden triangle, finance, operations and sales marketing which is an input to the budgeting process. This process is rolling forecasts. We often go to an 18 months cycle. So we look ahead 18 months and we update that monthly so it is rolling monthly 18 months forecast. It is used as an input to the financial process".

The monthly forecast process is to measure the deviation from the AOP. It looks for risks and opportunities compared to the plan prepared in the beginning of the year. One of senior managers in FP&A department mentioned that:

"The monthly forecast that we do is a very 'light' process that is indeed mainly driven by the Sales & Operational planning. These plans are available to support the operations of Sales and Inventory. By taking these as a basis and translating them into some financial KPIs, we have a monthly forecast, without going through a heavy workload forecast or budgeting process. The heavy process is only executed each quarter during the Quarterly forecast process, or the Annual budget process. The basis of the S&OP plan is a rolling 18 month (necessary for operational planning).

Concerning the time it takes to carry out rolling forecast every month, obviously it should not be as time consuming as budgeting process. The main reason it is faster is that it is based on an already operational planning. It is mentioned by a business specialist that:

"There is already a logistic planning process in place which plans for products to and pipeline of orders coming in. That can be used as a base for the sales estimation, and it is not needed to do a high level estimation. The sales funnel is available in the logistic tools, so that is the starting point of the forecasting process. Then because it should be a realistic forecast process, there is not so much negotiation involved. If you do the planning process once a year where the targets are used as the annual incentive, obviously there is a lot more negotiation involved and reviews going back and forth to arrive at the final step, for forecast process it should be from the bottoms up"

6.8 Key issues and challenges to incorporate forecasting in budgeting

One of the key challenges is to find out how to involve everybody in the process, and also to find out at what level of details people should be involved. The forecast can be done with small number of people or by involving the whole organization. It is of importance to find the most effective one without overburdening the organization. One of the business specialists mentioned that:

"Everybody has a natural tendency to try to manage everything at the lowest level of detail. When you report on actuals, it is really good to go to a lot of detail because you need to understand where the differences come from. In a budget you can go one level higher, so in terms of the line items, or the geographic scope, or whatever you do, you can take that to a much higher level which is I think good to do, but we have not worked that out what it should be for everybody".

Another challenge is the cultural change the company should go through, to set a new performance culture and to make people accountable for the results. More specifically for the processes with so many people involved, finding a way to coordinate those people is a crucial task. A senior manager at Philips mentioned that:

"I think all of these processes are very complex, processes with lots of people involved. So process coordination is a key. It is simply about setting timetables and structured meetings where you can talk with a range of people. It is almost administration. So 50% of the time is for process coordination and other 50% is for the process content".

Another key issue is misusing the forecast for target setting. Target setting process is quite tricky, and it sometimes is used mistakenly as another opportunity to set targets. A management consultant says that:

"Let say the budget says ten million for this quarter at one particular piece of the organization, but in my forecast I come up with eight million. So we cannot do more sales than that. Now because that eight million is under review by management layer I am going to put 10 instead of eight. So they are not putting in the right actual forecast but putting in the target. So, the two million is a gap that is not underpinned. It is not substantiated by any real possibility to get this additional sale, and that is an implicit target than a forecast and it does not show a real picture. Therefore then the forecasting is biased. So what should be done is that they should show the eight million gap, so two million gap is shown as well and then indicate what can be done to close the two million gap. Because then you can get really productive performance related discussion in the company".

Finally, it is tooling which plays an important role. There is a need to have a standard and harmonized tooling, as the same spreadsheet or templates, in every sector of the company, and everywhere in order to guarantee that everything is under control. A management consultant says:

"We have not got a dedicated planning tool yet. We have got planning tools, but they are eight or nine different ones. So we are now planning to go for one planning tool, we call it SAP, business planning and consolidation, and there is a huge challenge in moving towards a new tool. Although our overall timelines in the budget or forecast is standard, when somebody in the market in Germany or India receives the budget, he does something different afterwards, and we cannot control that because we do not have a view on that".

6.9 Necessity of rolling forecasts for different companies (Should every company incorporate rolling forecasts in its budgeting process?)

There is a huge difference across the companies in terms of necessity of employing rolling forecasts. It depends on so many external factors. One main factor is how quickly market changes. For example if something happens which is not under control of a company, then AOP for that company is not anymore accurate. It is mentioned by a senior manager that:

"We have also had years where we had the AOP and then something happened in the outside world, like tsunami or whatever, or we had japan disaster. That was external factor that make sure your AOP will not be realistic anymore for the full year. Another example would be if there were big changes in the foreign exchange currencies. If the dollar goes down by more than 10% make sure that AOP is not realistic anymore".

Another important factor for any company to consider is the product of the company and the specific market and environment to which the company belongs. A senior manager states:

"So now there are companies that do half a year operating plan. So what we do once a year (AOP) they do twice a year and on a monthly base they do forecasting. I think it really depends on what your products are or how quickly your environment changes. If you have products that really depend on environment, for example ASML which is a company that produces chips, they do half a year budget but they also only sell two hundred products a year. So if they do not sell a few products there is already a big problem with their AOP. If we do not sell enough MRI scanners there are always enough other products that are compensating for that. I think it depends on your own company, and also your environment. If you are in a chip market then it is really changing quickly and then you need to have another interval between your processes done as what we have in Philips."

6.10 Future of the budgeting (Would the budgeting be abandoned?)

Budget has a specific objective. It is a common financial management instrument with the purpose of setting a target, commitment or performance contract. Although it is time consuming yet there are many benefits by having budget in place mainly because it helps to know how company plans to perform next year against various expectations and sets employees' commitment to that performance contract. Forecast has a different objective which is tracking against the budget. Bearing that in mind, it is not easily possible to mix them and abandon the budget by replacing it with forecast. It is mentioned by management consultant that:

"Budget is a key. You cannot go without budget I would say. Some big companies tried to abandon the annual budget but it is very complex. Main reason is that they start mistaking budget for forecast or forecast for budget while they have different purposes. It is hard to mix them and say in rolling forecast company can also set a target then it is hard to distinguish these two objectives anymore. It sounds nice not having a budgeting process anymore, but I think in a lot of companies it is not seriously considered anymore. You can do it simpler, you can do it more top-down, you can make it shorter, but still you need a budget."

Concerning the time budgeting takes, using more advanced tooling it may become much more efficient. According to a senior manager:

"It gets less complex now to do the budget because you have better tools. So what takes a lot of time in budget is consolidation. So you got 500 spreadsheets that then become 300 spreadsheets and then become 10 spreadsheets and then become 1 spreadsheet. There is not going to be spreadsheets anymore in the future. It is all going to be a one tool, and then it adds up just automatically. So it takes out the complexity of budget."

6.11 Key success factors for implementation of forecasting

One of the most important factors to succeed with incorporating forecasting in budgeting is to clarify the intention of each process for employees. Once the employees of the organization have confidence in the plans, the feel more motivated to achieve their targets. Otherwise if the intention of the process is not clear or the targets are not realistic, employees may not work towards it. It is mentioned by one of the senior managers of Philips that:

"Once the intention of the process is clear, people know what is expected from them, and they will also fulfill it. But if it is not clear, people would also start negotiating during the forecasting process which should not take place during the forecasting process. I think it is really about the intention of the process, if you make that clear, it makes the process a lot more efficient. And obviously management needs to be involved. They need to understand what is the forecast so that if there is any issues that reflect within the forecast, they obviously take some measurements to offset the impact. So it is also helping management to the right direction."

7. Analysis

7.1 Benefits of annual budget

As it is already mentioned in the literature review part, budget involves allocation and usage of economic resources expressed in monetary terms. It is a plan, a reliable intention made in a certain period of time (Harper, 1995). Budget primarily defines level of expected activities of an organization such as capacity or sales revenue. Budget, in particular, distributes resources according to strategic targets.

It is also admitted by one of the management consultants in Philips that the main purpose of the budget is setting a commitment or a performance contract. He mentioned that "by having budget and a target set for instance for sale for specific manager, it is needed to report against it in order to realize the budget. Otherwise how to assure that the budget is being realized. Therefor budget is the target and incentive for every employee to work against."

According to him, "the second key role of budget is resource allocation or resource reallocation, and its link to strategy of the organization depends on the budget. It is laid down in the strategy that next year growth is expected in a specific market or product. Then it is needed to allocate resources to the new market and product."

Concerning the control and coordination purposes of the budget it is also mentioned by an interviewee "during the year, the annual budget (AOP) is used as a kind of management KPIs, to find out how far the actual situation differs from the AOP. That would be the control part of it. Moreover annual budget helps to align the objectives of different parts of the business between units and organization.

Obviously, the objectives of the budget found in the empirical findings are in line with the findings as "different roles of the budget are, planning, coordination, motivation and evaluation (Barret and Frazer, 1977)" in the literature.

On the necessity of the budget, according to Umapathy (1987), "There is no other managerial process that translates qualitative mission statements and corporate strategies into action plans, links the short-term with the long-term, brings together managers from different hierarchical levels and from different functional areas, and at the same time provides continuity by the sheer regularity of the process".

According to Otley(1999) one reason that budgets can be utilized in most firms is because ‘‘it is the only process that covers all areas of organizational activity’’.
In line with that, it is mentioned by a senior manager at Philips that “Budget has a specific objective. It is a common financial management instrument with the purpose of setting a target, commitment or performance contract. Although it is time consuming yet there are many benefits by having budget in place mainly because it helps to know how company plans to perform next year against various expectations and sets employees’ commitment to that performance contract. So budget is a key and you cannot go without budget I would say.”

7.2 Reasons behind improving annual budget process

Nowadays most of the companies employ budgeting without any plan to abandon it. Nevertheless, many of them think it needs some improvement, which implies that budget comes along with both problems and benefits (Starovic & Jackson, 2004). Traditional form of the budgeting has been criticized during current years, and it is argued that process of budgeting and the way it is used is fundamentally wrong (Hope and Fraser, 2003a). The traditional budgeting has been criticized mostly by Hope and Fraser (2003b) considering it as a main consumer of management time which results in a flawed behavior. Furthermore, traditional budgeting denies firms capability to behave adaptively and follow their strategies once they encounter unpredictable environment which results in lack of competitiveness (Libby & Lindsay, 2010).

It is mentioned by one of senior managers that “in 2011, it took Philips very long time and it was a lot of back and forth between sectors and group and also between sectors and business units. In 2011 preparation of the AOP took Philips half a year because of many iterations between different level of management and people involved in AOP (Annual operating process) planning. It was a big trigger that caused Philips to decide to improve the budget such that it becomes quicker and takes fewer amounts of resources”. Therefore Due to the fact that Philips found its AOP process time consuming, it was decided to improve the process so that the cost is reduced and the process is a lot quicker and does not take so much resources. It is in line with the findings in the literature: “Many managers are unsatisfied with traditional budgeting and consider them as time consuming, costly, and more importantly, unable to compete in highly fast-paced environments Neely et al. (2003)”.

In traditional budgeting goals are set at the beginning of a time period and assessment of the outcomes takes place with respect to that static time and plan, while in the contemporary decentralized organizations where employees may have so many initiatives for sake of the competitiveness it is not feasible anymore (Østergren & Stensaker, 2011). Therefore based on the abovementioned arguments it was decided to improve the budgeting with complementary techniques such as rolling forecasts while maintaining the process.

According to Loarin (2010), in case of any business encompassed with a rapidly changing environment, management need to have access to management control systems that can provide reliable data. The accurate data needs to be provided on a regular basis such that the management can constantly adjust operations, weigh availability of the resources and consequently make the proper decisions at the right time. Thereby, alternative budget forms as rolling forecasts are gradually being employed by different organizations for management control purposes.

It is in line with the empirical findings as a Business specialist mentioned that:

The main objective of the forecasting and planning is basically to obtain accurate decision making capability. It is all about predicting future events or conditions which is not under control of the company, yet foreseeing those taking place in advance enables the companies and their management to take right decision in early stages such that the detrimental effect becomes as limited as possible. Thereby, forecasting plays a key role for managers in their decision-making and it also is a necessity for companies to shape their future by using it as an input for their planning.

Aligned with that it is also mentioned by a management consultant that:

"In changing environments, forecast is the key. It might be even required to carry out the forecast more often than quarterly forecast. Concerning most of the line items quarterly forecast is enough. For example there is a lot of indirect cost, fixed overhead cost that do not change from quarter to quarter in terms of the projections. Therefore these items can be managed easier. But sales need to be tracked daily, or weekly, and if anything goes substantially wrong immediate action needs to be taken".

7.3 Difference between Budget and forecast

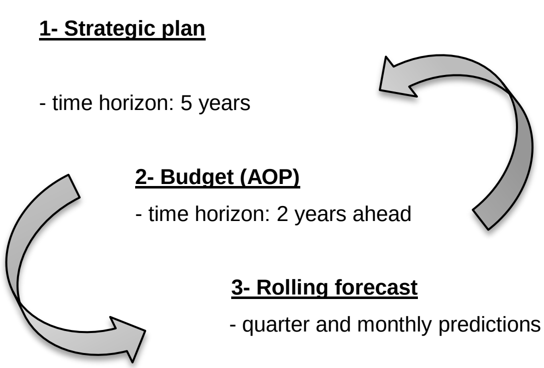
On the distinction between budget and forecast, according to Churchill (1984), there is a difference between forecast and budget. Regardless of using budget for planning or for control, it is always more than a forecast. It is mentioned by Churchill that:

"Forecast is a prediction of what may happen and sometimes contains prescriptions for dealing with future events. Budget, on the other hand, involves a commitment to a forecast to make an agreed-on outcome happen".

In agreement with that it is mentioned by a senior manager that “Budget has a specific objective. It is a common financial management instrument with the purpose of setting a target, commitment or performance contract. Although it is time consuming yet there are many benefits by having budget in place mainly because it helps to know how company plans to perform next year against various expectations and sets employees’ commitment to that performance contract. Forecast has a different objective which is tracking against the budget. Forecast should be as a milestone or check point on whether the budget in being realized so the forecast is used to track budget”.

According to Montgomery (2002), employing forecasting, organizations are provided with the possibility to find the gap between the detailed operational budget and overall strategic plan in order to close it. A planning cycle entails an ongoing forecasting that cycles between overall strategic plan and the operating budget. The outcome of such an advanced planning system influences the results of the detail budget. The comments concerning planning cycle emphasizes on this finding in the literature where a senior manager mentioned that:

“Before starting with budget, it is important to know about the expectation of the company and investors as well as strategies. Therefore the strategies for which the company wants to create the budget enter into the AOP process. Once it is mapped out entirely, then it is called planning and performance cycle. The budget has focused on basically strategic discussion happening first that leads to the budgeting process or target setting process. In target setting process a commitment is set and in order to find out that the budget is being realized, the forecast is used to track it.”



Forecasts and Planning Cycle in philips

7.4 Forecasting process:

In order to assist organizations in adjusting their annual budget according to the realities of the current market, rolling forecast may be created on a periodic basis (Haka and Krishnan, 2005). By the term "roll" it emphasizes on typically the monthly or quarterly updates of the predictions and plans (Clarke, 2007). According to the literature, employing rolling forecasts, companies forecast more often than once a year which will result in decreasing the detrimental influence of uncertainty on budget (Lorain, 2010). In some organizations, forecasts of year-end values are carried out on regular bases, while some advanced organizations take further steps and forecast beyond the fiscal year and cover 12 – 18 month period (Hope, 2007).

As already mentioned, the rolling forecast can be performed on a regular basis, but it can also be performed upon occurrence of significant events like reaction to troubles in supply chain or announcing new services. It is in line with the findings on the financial forecasting at Philips. That is, the financial forecasting at Philips is being done quarterly and it is an in year type of forecast which means the forecast is limited to the budget period. That means in March for instance the forecast is done for March and the remainder of the year. Thereby, four times a year, quarterly, it is checked whether the budget is being realized against the set of high-level KPIs.

According to Gurton (1999), advantages of the rolling forecast are its flexibility and the fact that it does not take into account obsolete figures, and it consequently results in more timely allocation of resources. Forecast helps companies improving their operational and financial management, making their decision-making process quicker and dedicating more time to value-added activities.

In line with findings in the literature, there is also another forecasting process in Philips, rolling 18 months forecast (in S & OP process), in which the line items related to supply chain are emphasized on. This monthly forecast is utilized to react on business dynamics, which influence sales, production and transportation. Doing that the immediate and mid-term financial effect incurred by business dynamics may be tracked.

This process is explained by the management consultants as follows:

"For the sales line item, there is another process and that is sales & operating plan process. Basically, from the marketing and sales, they already have to prepare how the pipeline of new customers or new contracts looks like. They do need to align that with factories. Whether actually the factories can deliver against it, and finance has to see if sales forecasts happens to be true and the factory can deliver it, do we have the budget to actually start producing it. So it is a golden triangle, finance, operations and sales marketing which is an input to the budgeting process. This process is rolling forecasts. We often go to an 18 months cycle. So we look ahead 18 months and we update that monthly so it is rolling monthly 18 months forecast. It is used as an input to the financial process".

Concerning the time rolling forecast takes, obviously given that this process is to be carried out number of times each year, it is required to be a lot faster than budgeting to be efficient. It is mentioned by a senior manager that:

"The monthly forecast that we do is a very 'light' process that is indeed mainly driven by the Sales & Operational planning. These plans are available to support the operations of Sales and Inventory. By taking these as a basis and translating them into some financial KPIs, we have a monthly forecast, without going through a heavy workload forecast or budgeting process."

Referring to literature, according to Bunce (2007) cited by Lorain (2010), in order to be efficient, forecasts require to be arranged within a few days, therefore the emphasis should be placed on a few key value indicators instead of lots of details. According to Lorain (2010), a new research confirms that ''keeping forecasts focused on key performance indicators and line items will permit for quicker turnaround and more value-added analysis and insight from finance''. In fact, it is feasible for most of the businesses to focus only on 3-5 key indicators to obtain an assessment of their long-term value creation (Lorain, 2010).

Concerning learning provided by implementing rolling forecast, it is mentioned by Business specialist that "by implementing the rolling forecast company can obtain better knowledge because regular reviews provide a continues learning loop. So rolling forecast is a bottom-up approach that helps us to really understand better in case of deviation positive or negative in what extent information is contributing to that and which product is contributing to that. Hence, we can learn from that". This observation is aligned with literature that reveals because of employing rolling forecasts which brings in frequent and accurate predictions, organizational learning will be assisted and managers feel more confident to rely on budget numbers employed for planning of the short term operations (Hansen et al., 2003; Haka and Krishnan, 2005). It is also mentioned by Sivabalan et al. (2009) that rolling forecast supports communication inside and outside the companies, continuous learning and enhanced corporate culture.

7.5 Role of Environmental uncertainty and the use of annual budget and rolling forecast

According to Otely (1994), Budget has traditionally played an important role in organizations' systems of management control (Libby & Lindsay, 2010) and huge numbers of organisations still use annual budget. It is mentioned by a senior manager that, in Philips annual budget (AOP) has specific objective. According to him, "budget has a specific objective. It is a common financial management instrument with the purpose of setting a target, commitment or performance contract. Although it is time consuming yet there are many benefits by having budget in place mainly because it helps to know how company plans to perform next year against various expectations and sets employees' commitment to that performance contract". Therefore, budget is the target and incentive for every employee to work against. For Philips budget is a key and they cannot continue without budget. The argument is in line with Ekholm and Wallin (2000) that although budget are criticized by practitioners and academics, but studies indicate that huge numbers of organizations still use budget. Traditional budget is still the common way of planning and control (i.e., for managerial motivation, setting goal and commitment and performance evaluation).

According to Malmi (2008) influence of uncertainty on management control and the evidences of that presented by early contingency theorists, have attracted broad attention on the relation between controls and uncertainty in environments. So choosing of management control system in an organization depends on uncertainties the organization is exposed to. According to Bescos et al. (2003) cited by Hansen et al. (2003), the degree of environmental uncertainty is one important contingency factor which can be a major driver of dissatisfaction with budgeting system. It is Noticeable that operations of Phillips are exposed to economic and political developments in countries around the world that could unfavorably affect its income and revenues. One main factor is how quickly market changes. For example if something happens which is not under control of a company, then AOP for Philips is not anymore accurate. It is mentioned by a senior manager that:

"We have also had years where we had the AOP and then something happened in the outside world, like tsunami or whatever, or we had japan disaster. That was external factor that make sure your AOP will not be realistic anymore for the full year. Another example would be if there were big changes in the foreign exchange currencies. If the dollar goes down by more than 10% make sure that AOP is not realistic anymore.

So business environment of Philips is affected by situations in the domestic as well as global economies. To cope with difficulties caused by these strategic risks - external environmental factors especially environmental uncertainty - Philips managed to incorporate budget with combination of rolling forecasts. This correlates to Libby & Lindsay (2010) who mentioned that traditional budgeting denies firms capability to behave adaptively and follow their strategies once they encounter unpredictable environment which results in lack of competitiveness. According to (Hansen et al. 2003) one main reason behind both abandoning as well as improving the budgeting is the planning limitations of traditional budgets caused by instability of the environment. As an alternative to the traditional budgeting in an uncertain environment, rolling forecast which is often carried out monthly or quarterly, is increasingly being utilized (Sivabalan et al. 2007). This increase in employing the rolling forecasts is due to the fact that it allows for less forecasting error and it is much in line with reality in an uncertain environment (Neely et al. 2001). Compared to fixed budget, the updating characteristic of rolling forecast improves budget numbers which may be used to enhance the coordination of resources or action plans in an uncertain environment (Haka and Krishnan, 2005). Moreover, employing the rolling forecasts, predictions are made more often than the traditional annual budgets which provide companies with a proper means to decrease the influence of the uncertainty on budgeting (Sivabalan et al., 2009).

In line with the literature, it is also confirmed by our interviews that, in Philips the main objective of the forecasting and planning is basically to obtain accurate decision making capability. Forecasting plays an important role for managers in their decision-making and it also is a necessity for companies to shape their future by using it as an input for their planning. In Philips, quarterly forecast is used as a milestone or check point on whether the budget in being realized. Concerning most of the line items quarterly forecast is enough. For example there is a lot of indirect cost, and fixed overhead cost that do not change from quarter to quarter in terms of the projections. Therefore these items can be managed easier. But there are some line items such as sales and direct cost lines need to be tracked daily, or weekly, and if anything goes substantially wrong immediate action needs to be taken. Thus, in Philips monthly forecast is utilized to react on business dynamics, which influence sales, production and transportation. Doing that the immediate and mid-term financial effect incurred by business dynamics may be tracked.

The rolling monthly forecast process is explained by management consultant as follows:

"For the sales line item, there is another process and that is sales and operating plan process (S&OP). Basically, from the marketing and sales, they already have to prepare how the pipeline of new customers or new contracts looks like. They do need to align that with factories. Whether actually the factories can deliver against it, and finance has to see if sales forecasts happens to be true and the factory can deliver it, do we have the budget to actually start producing it. So it is a golden triangle, finance, operations and sales marketing which is an input to the budgeting process. This process is rolling forecasts. We often go to an 18 months cycle. So we look ahead 18 months and we update that monthly so it is rolling monthly 18 months forecast. It is used as an input to the financial process".

In addition it is stated by Haka and Krishnan (2005) that in a highly uncertain environment, the most important means to success is learning. For industries in such environment, learning first increases the chance of success and survival. Learning process may be enhanced by employing rolling forecasts because of its forward-looking characteristic, which updates the predictions continuously. Therefore, once environmental uncertainty is high, rolling forecasts makes enhanced decisions. The reason for that is the forecasting feature of the rolling forecast that improves the decision making process and learning about the environment. In line with literature concerning learning provided by implementing rolling forecast, it is emphasized by business specialist that "by implementing the rolling forecast company can obtain better knowledge because regular reviews provide a continues learning loop. So rolling forecast is a bottom-up approach that helps us to really understand better in case of positive or negative deviation in what extent information is contributing to that and which product is contributing to that. Hence, we can learn from that".

According to Lorain (2010), employing rolling forecasts, companies forecast more often than once a year which will result in decreasing the detrimental influence of uncertainty on budget. It is also mentioned by Gracia (2008a) that the main characteristics provided by rolling forecast are responsiveness and capability to trace changes in market scenarios, to deal with environmental uncertainties and at the same time considering the strategic objectives. The most important functions of continuous financial planning are:

- Considering market changes, as well as financial risks, and also altering action plans regularly.
- to exploit operational and financial resources required for business development
- to fulfill expectations of shareholders such as profitability and values creation
- to provide companies with a sustainable growth

In line with the literature, it is also supported by our interviews that forecast is about obtaining the latest realistic expectation of financial status of the year in the future in order to fulfill expectations of shareholders. One of senior managers mentioned that "we are a public company and it also means that we need to report our financials externally on a quarterly basis. Obviously we need to make sure if the financials as we projected them, are not going to be realized. Then we need to warn the capital markets that we cannot achieve our targets. That is what happened in 2011, that we had to do a profit warning 3 times, because we were too way off from what expectations were. That is pretty bad and you are going to avoid that by having a realistic and clear forecasting process which give you a clear view on what is going to be the quarter and also what you expect from the rest of the year. So that is the reason why we have a rolling forecast process also".

Therefore Philips by adopting rolling forecast which is capable of updating the forecasts and plans quickly becomes a company capable of obtaining a better position to respond to threats and opportunities.

8. Conclusion

8.1 Motives and drawbacks of traditional budgeting:

The findings in this study show that the traditional budget is still going strong. It is emphasized by Hansen et al. (2003, p. 95) that "budgeting is the cornerstone of the management control process in nearly all organizations". Although traditional budgeting (also referred to as fixed budgeting) is often criticized by practitioners and academics (Wallander, 1999; Hope and Fraser, 2003; Jensen, 2003), studies have revealed that the huge number of organizations still employ budgets. The finding in this study indicates that annual budget (AOP) in Philips has specific objective. It is a common financial management instrument with the purpose of setting a target, commitment or performance contract. Therefore, budget is the target and incentive for every employee to work against. Although it is time consuming yet there are many benefits by having budget in place mainly because it helps to know how Philips plans to perform next year against various expectations and sets employees' commitment to that performance contract. For them budget is a key and they cannot continue without budget.

Practitioners are concerned about some problems of budgets such as: it takes a lot of management's time, it can hinder the allocation of organizational resources to their best functions; it can lead to shortsighted decision-making and other useless budget games. Since the world is becoming more globalized, consequently it is necessary for organizations to react quickly to changes in order to remain part of the developments and be able to compete worldwide. According to Hope & Fraser (2003a), the current business atmosphere is regarded much more dynamic and complex than before that makes traditional management accounting tools such as annual budgeting inappropriate to confront enduring competition.

It is observed that there are two viewpoints concerning altering the dissatisfaction with budgeting. One aims at adapting or complementing the traditional budgeting process using other managerial techniques which is known as Better Budgeting while the other seeks to go Beyond Budgeting by abandoning it and replacing it with a lean control system which is based on some market-oriented performance indicators together with using Balanced Scorecards (O'Sullivan 2010, Rickards, 2006). The goal of Better Budgeting process is to improve the functional role of traditional budgeting as control and planning via reducing the number of planning objects, and carrying out the vital parts of the business processes that are required for the success of the organization such as production and purchase. This study investigates Better Budgeting process and discovers why and how the rolling forecast can be employed together with fixed budgets in an international company-Philips Consumer Lifestyle in the Netherlands. Therefore motivations behind employing both approach together as well as the way they interact in organizational process are studied.

8.2 Motives of incorporating rolling and financial forecast in annual budget

This study shows that, considering all the benefits a budget brings to an organization, yet it provides a static view into the future and thereby it lacks the flexibility required to deal with fast-changing environment or unpredictable events. Therefore the accuracy of planning and budgeting yet needs to be improved. Based on contingency theory, the degree of environmental uncertainty is one important contingency factor and a survey of French companies shows that uncertainty of the environment can be a major driver of dissatisfaction with budgets (Bescos et al.,2003). Therefore utilizing the rolling forecast approach seems to be a necessity to overcome the aforementioned difficulties and to cope with a highly competitive environment. The findings in this study indicate that forecast has a different objective which is tracking against the budget. Forecast should be as a milestone or checkpoint on whether the budget is being realized, hence the forecast is used to track budget. In case of quarterly forecast, indirect and fixed costs that do not change quickly are focused on. In terms of monthly rolling forecast in sales and operating plan process (looking into18 months ahead), sales and direct costs that change quickly will be emphasized on. These two forecasting processes are employed by Philips so that in case of occurrence of any gap between targets and forecasts, it is required to identify any mitigating actions that can help the organization to get back to the right track according to its planned budget.

According to Sivabalan et al. (2009) by employing the rolling forecasts, predictions are made more often than the traditional annual budgets which provide companies with a proper means to decrease the influence of the uncertainty on budgeting. Among the main advantages of the rolling forecast are its flexibility and the fact that it does not take into account obsolete figures, and it consequently results in more timely allocation of resources (Gurton, 1999). Herein this study empirically indicates that the objectives such as setting a goal and commitment and motivation functions that are of high importance and cannot be covered by rolling forecast will be covered by budgeting and rolling forecast would be an adaptation of the budget to bring more flexibility and improved level of decision-making to the process in an uncertain environment when it comes to resource allocation, supply chain management, and production planning.

In addition it is stated by Haka and Krishnan (2005) that in a highly uncertain environment, the most important means to success is learning and it may be enhanced by employing rolling forecasts. Therefore, once environmental uncertainty is high, rolling forecasts makes enhanced decisions. The reason for that is the forecasting feature of the rolling forecast that improves the decision making process and learning about the environment. In this study it is observed that in Philips by implementing the rolling forecast company obtains better knowledge because regular reviews provide a continuous learning loop.

8.3 Future research

This study considers a single case study which makes generalizing the result to other companies problematic. Future researches might be able to complete this research by adding more case studies in order to increase the validity of finding and to realize whether these findings can apply to other companies. Moreover, such researches can also complement the understanding of how and why rolling forecast and annual budget employed together. Future researches can examine the problems and consequences of rolling forecast and to investigate the long-term impacts of adopting rolling forecast.

This study only focuses on one contingency factor namely external environment (Environmental uncertainty). It would be interesting if future researches can contribute more on other contingency factors such as organizational structure, strategy, technology and also their influences on the budgeting system.

This study considers better budgeting process it would interesting if future researches could also focus on some companies that regarded abandoning traditional budget in order to understand the reasons for abandoning it. It is interesting to investigate which type of organizations might benefit from abandoning traditional budget.

References

Ax, C., & Bjørnenak, T. (2007). Management accounting innovations: origins and diffusion. Issues in management accounting, 3, 357-376.

Amigoni, F. (1978), "Planning management control systems", Journal of Business Finance & Accounting, Vol. 5 No. 3, pp. 279-91.

Barrett, M. E., & Fraser, L. B. (1977). Conflicting roles in budgeting for operations. Harvard Business Review, 55(4), 137-146

Blumberg, B., Cooper, D. R., & Schindler, P. S. (2008). Business research methods (Vol. 2). London: McGraw-Hill Higher Education.

Bryman, A., & Bell, E. (2007). Business research methods. Oxford University Press, USA.

Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. Accounting, organizations and society, 28(2), 127-168.

CIMA-ICAEW (2004) Better Budgeting: A report on the Better Budgeting forum from CIMA and ICAEW

Clarke, P. October 2007 The Rolling Forecast As a Catalyst for Change. Accountancy,Ireland,Vol.39No.5.

Collis, J., & Hussey, R. (2009). Business research: A practical guide for undergraduate and postgraduate students. Palgrave Macmillan.

Churchill, N. C. (1984). BUDGET CHOICE-PLANNING VS CONTROL. Harvard Business Review, 62(4), 150.

Ekholm, B. G., & Wallin, J. (2000). Is the annual budget really dead?. European Accounting Review, 9(4), 519-539.

Fisher, J. G. (1998). Contingency theory, management control systems and firm outcomes: past results and future directions. Behavioral Research in Accounting, 10, 47-64.

Gurton, A. (1999). Bye bye budget... the annual budget is dead. Accountancy International, 123(1267), 61.

Gumpert, J. A. (1984). Small company budgets: targets are key. Harvard Business Review, 42-52

Haka, S. and Krishnan, R. (2005). Budget Type and Performance: The Moderating Effects of Uncertainty. The Australian Accounting Review. 15: 1. 3-13.

Hansen, S. C., Otley, D. T., & Van der Stede, W. A. (2003). Practice developments in budgeting: an overview and research perspective. Journal of management accounting research, 15(1), 95-116.

Hansen, S.C. and Van der Stede, W.A. (2004) “Multiple facets of budgeting: an exploratory analysis”

Management Accounting Research, Vol. 15, pp. 415-439.

Hope, J., & Fraser, R. (2003a). Beyond budgeting: how managers can break free from the annual performance trap. Harvard Business School Press.

Hope, J., & Fraser, R. (2003b). Who needs budgets?Harvard business review,81(2), 108.

Hoque, Z., Mia, L., & Alam, M. (2001). Market competition, computer-aided manufacturing and use of multiple performance measures: an empirical study. The British Accounting Review, 33(1), 23-45

Libby, T., & Lindsay, R. M. (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. Management Accounting Research, 21(1), 56-75.

Lorain, M. A. (2010). Should rolling forecasts replace budgets in uncertain environments? Studies in Managerial and Financial Accounting, 20, 177-208

Lucey Terry: Management Accounting, 4th ed. London: Letts, 1996, 599 pp.

Lynn, M. P., & Madison, R. L. (2004). A closer look at rolling budgets. Management Accounting Quarterly, 6(1), 60-64.

Malmi, T., Booth, P., Brown, D., & Sivabalan, P. (2008). Organisational characteristics, alternative reasons to budget and two budget forms.

Mikhail, M., Walther, B., & Willis, R. (1999). Does forecast accuracy matter to security analysis? The Accounting Review, 74(2), 185–200.

Montgomery, P. (2002). Effective rolling forecasts. Strategic finance, 83(8), 41-44.

Neely, A., Bourne, M., & Adams, C. (2003). Better budgeting or beyond budgeting?. Measuring business excellence, 7(3), 22-28.

Neely, A., Sutcliff, M. R., & Heyns, H. R. (2001). Driving value through strategic planning and budgeting. New York: Accenture.

Otley, D. T. (1980). The contingency theory of management accounting: achievement and prognosis. Accounting, Organizations and Society, 5(4), 413-428.

Otley, D. (1999). Performance management: a framework for management control systems research. Management accounting research, 10(4), 363-382.

O'Sullivan, K. (2010). From adversity, better budgets. CFO, 26(5), 44-48.

Østergren, K., & Stensaker, I. (2011). Management control without budgets: a field study of 'beyond budgeting'in practice. European Accounting Review,20(1), 149-181.

Rickards, R. (2006). Beyond budgeting: Boon or boondoggle?. Investment Management and Financial Innovations, 3(2), 62–76.

Sandalgaard, N. (2012). Uncertainty and budgets: an empirical investigation. Baltic Journal of Management, 7(4), 397-415.

Seer, G. (2000). Special library financial management: the essentials of library budgeting. Bottom Line: Managing Library Finances, The, 13(4), 186-193.

Sivabalan, P., Booth, P., Malmi, T., & Brown, D. A. (2009). An exploratory study of operational reasons to budget. Accounting & Finance, 49(4), 849-871.

Starovic, D., & Jackson, C. (2004). Better Budgeting: A report on the Better Budgeting forum

from CIMA and ICAEW. Chartered Institute of Management Accountants & Faculty of Finance and Management, ICAEW.

Thomsett, M. C. (1988). The little black book of budgets and forecasts. American Management Association.

Umapathy, S. 1987. Current Budgeting Practices in U.S. Industry: The State of the Art. New York, NY: Quorum.

Wallander, J. 1999. Budgeting: An unnecessary evil. Scandinavian Journal of Management 15: 405– 421.

Williamson, K. (2002). Research methods for students, academics and professionals (2 Uppl.). Wagga Wagga: Centre for Information Studies

Yin, R. (2009), Case Study Research: Design and Methods, Applied Social Research Methods Series. London: Sag Publicatio

Internet sources:

[1] http://www.johnstretch.com/pdf/intro_rollingForecasts.pdf

http://www.philips.nl/about/company/businesses/consumerlifestylehighlights/index.page

http://www.philips.com/shared/assets/Investor_relations/pdf/Annual_Report_English_2012.pdf