

Research program – *Beyond Budgeting*

This document outlines the program which forms bases for collaboration between StatoilHydro and SNF/NHH/AFF. The program described is by nature multidisciplinary and focuses on the link between organizational change, management, leadership and the design and use of management accounting systems. This competence will be used for project collaboration between the organizations, teaching of Master and PhD-students as well as more generally increasing the knowledge within this area.

Objectives:

The aims of the program are:

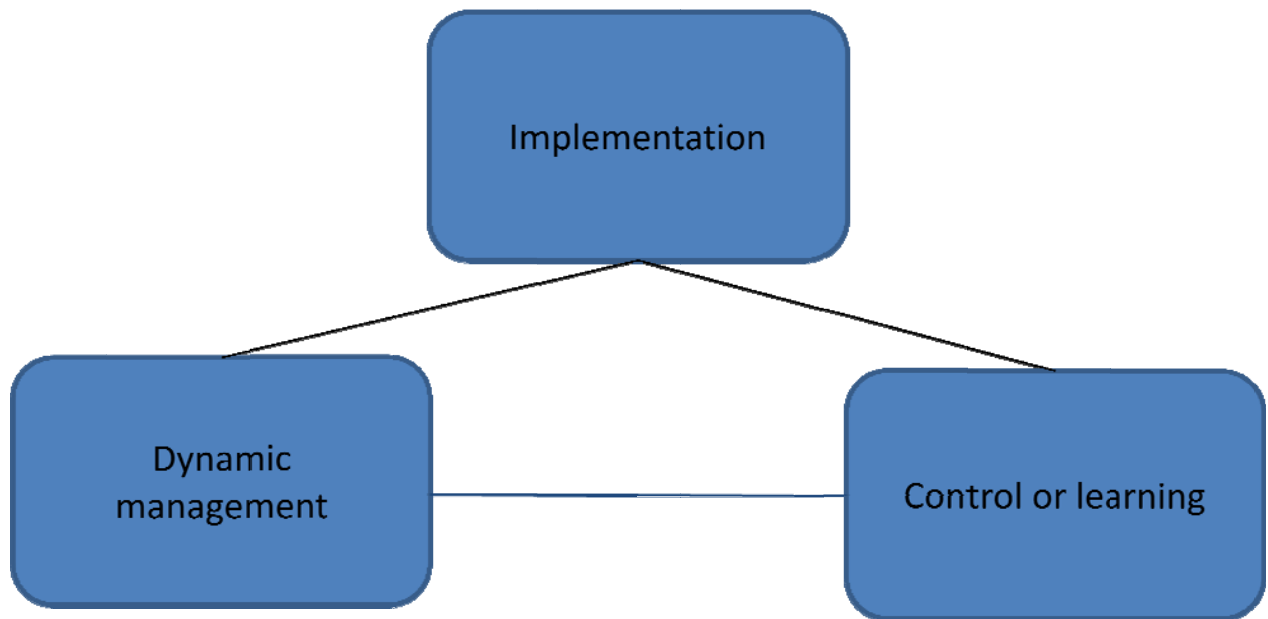
- Increase the focus on the empirical phenomena Beyond Budgeting (BB) and its links to theoretical areas such as leadership, management and management accounting.
- Increase the focus of Master and PhD-students on oil and energy industry through courses, and projects.

Beyond budgeting – sketch of a research field

Traditional budgets has been widely criticized because they are too time consuming, impose a vertical command-and-control structure, create centralized decision-making, stifle initiative, and focus on cost reduction instead of value creation. To avoid the shortcomings with budgets, some companies have chosen to implement beyond budgeting (BB) principles.

Studies have shown that the critique on budgets is more relevant for organizations in a rapidly changing environment. A high level of autonomy for the company and low degree of predictability in forecasting increase the need for a more dynamic form of planning such as rolling forecasts or BB. Therefore, it is especially interesting to study StatoilHydro's approach to "Beyond Budgeting" since the oil and energy industry must be classified as a rapidly changing environment.

Our previous study has also shown some specific areas where it is important to increase our knowledge. First, it is important to increase our understanding of how BB is used. We have chosen to focus on transferring of business procedures to different countries and on the use of different targets (management control targets and human resource targets) when evaluating work. The second project is about dynamic management and we want to explore the possibilities in a more dynamic design and use of management accounting. This includes how to combine continuous global systems with both local and temporary systems. The third project is about learning and control. This involves how budgets are not only replaced by new forms of formal control systems but also how it interacts with cultural, personal control and procedural systems.



Project 1; Implementation

- (a) Implementation of BB in other cultures
- (b) Implementation of both HR measurement and performance measures systems

Project 2; Dynamic cost and performance Management

Project 3; Control or learning?

Three areas of research;

Implementation studies, Katarina Østergren, SNF/NHH

It is important to increase our understanding of how BB is used. We will focus on two areas; (a) transferring BB to other cultures and (b) how an increased number of measurements is interpreted and used.

(a) Implementation of BB in other cultures

Research on change management has identified a number of difficulties when implementing new business procedures (such as Beyond Budgeting) in different countries. Theories assume that business procedures may easily be transferred to other countries, i.e., they apply an ethnocentric approach which assumes that the ideological assumptions embedded in the control models developed in the society in which the headquarters is located are universally applicable. Alternative models advocate a higher degree of autonomy for the

subsidiaries, i.e., they suggest the application of a polycentric approach which assumes that aligning the local modes of control and ideology is conducive to optimal performance. This obviously creates the potential problem of having incoherent ideological beliefs in the overall organization. Finally, other theories apply the principle of geocentricism which involves the belief that the synergies among ideas from different countries of operation should prevail. This, in turn, requires a common framework with enough freedom for individual locations so that operations meet employees' needs everywhere. It may also imply, however, that ideological beliefs eventually will converge and be reconciled.

All these approaches optimistically assume applicable solutions, but they do not fully consider the inherent conflict involved. Consequently, there is a need for more research into the most feasible ways of bridging management control systems across ideologies. By ideology, we understand the different types of ideas, knowledge and beliefs employed in order to integrate a social order into a society or an organization and to keep or change that order. This is an important issue when implementing beyond budgeting ideology in other countries and subsidiaries in StatoilHydro. The implementation can be successful in some places but not in others and then it is important to understand the mechanisms behind the success.

Practical questions:

Implementation

Which change management principles are key areas in achieving change at the scale Beyond Budgeting represents? How are steps, like above, or those already decided in the company perceived in the different cultures where StatoilHydro is operating?

Research questions on transferring of business procedures such as BB

How are actors and organizations influenced by management technologies which involve ideological assumptions inconsistent with the local ideology?

Which approaches to change management and corporate learning are used in implementation and how effective are they?

(b) Implementation of both HR measurement and performance measurement systems

Strategy has been emphasized as the ultimate reference for management controls (MCSs), and the scope of management accounting has significantly broadened, including both financial and non-financial measures. This all-embracing conception of management control goes along with the reaffirmation of the behavioral aspects of MCSs and of their

contribution to organizational change and learning. Thus, professor Modell has shown that close integration between certain MC and human resource management (HRM) mechanisms (namely, performance-based rewards, training and cross-functional co-operation) could fruitfully contribute to organizational change.

Most studies investigating the links between MCSs and human resource management systems focus only on rewards (financial rewards). However, these studies have neglected the interpretation of the studied individuals. Not everyone values rewards in the same way. While this is explicit in motivation expectancy theories, it has been largely disregarded by accounting researchers. In addition we have to consider other rewards than the purely financial to fully understand the incentive system.

However, recent literature on performance management shows that behavioral influence of management control systems depend on how they are perceived by actors. ¹Bourguignon's study has shown that under highly comparable conditions (same company and position), managers perceive performance evaluation criteria quite differently. The managers do not identify the same evaluation criteria as important, they do not agree on the relative importance of quantitative and qualitative criteria and they differ on the weight placed on self-presentational criteria.

When performance evaluation systems offer numerous performance evaluation criteria, the number of different interpretations is likely to increase and so are divergent behaviors. Implications from previous studies indicate that one should be cautious about the number of evaluation criteria. Therefore, management control systems and human resource measurement systems should not be separated, but held together. Otherwise, the legibility of the signals and thus their ability to communicate effectively can be reduced.

When using BB, the performance language has changed from a mechanical and one-dimensional perspective to a holistic assessment that includes several delivery targets (strategic objectives, KPI and actions) as well as behavioral targets (day to day observation, 360% etc). We still have too little research on how MCS and HRMS work together.

With this as a background we will describe how managers interpret the variation of performance measures and analyze what the differences mean for performance measurement systems and its construction. We need more knowledge about how comprehensive systems such as BB are used by middle managers.

Practical questions:

Individual bonus – research vs business beliefs

¹ Bourguignon A (2004) Performance Management and Management Control: Evaluated Managers' Point of View. European Accounting Review, Vol. 13, No 4, 659-687.

The use of individual bonus is increasing. What is the reason, and what is the research saying? Are there unintended negative consequences? What are the alternatives?

Research questions on management control systems and human resource measurement systems:

How do evaluated persons perceive control and how does this impact on the effectiveness of controls?

Towards a more dynamic perspective on performance measures, Trond Bjørnenak, SNF/NHH

Budgets are often seen as static and uniform processes that do not encourage change and improvements. The logic of budget systems is based on a continuous view of control systems. This view has been challenged by modern alternatives including local economy and temporary system thinking. Today the use of modern database technology makes it possible to link many data sources together, including external and non-financial data. This development has diluted the one system thinking of management accounting and opened a number of new possibilities for the design and use of control systems.

A number of new management accounting models, like ABC, Target Costing, Strategic Management Accounting and Balanced Scorecards are introduced as alternatives and supplements for traditional budgets. However, these innovations have only implicitly included the dynamic possibilities underlying the new system thinking.

In the “Towards a dynamic perspective on Management Performance systems (or Management Accounting)” project we want to explore the possibilities of a more dynamic design and use of management accounting. This includes how to combine continues global systems with both local and temporary systems. It also involves a more dynamic view of the controllers work and how to develop a more interactive controller function. Thus, the focus is on how controllers can use different systems for different purposes to enhance change and improvements.

StatoilHydro has already started their liberation from calendar periods, but in order to go even further along this line we need more knowledge about the mechanisms behind the dynamic management accounting systems.

Practical questions:

Q1. Business vs calendar rhythm

The calendar year is often a barrier for a more continuous and dynamic performance management, because it seldom matches individual business rhythms. In which part of the process could we leave this constraint, and what are the implementation issues?

Q2. "Ambition to action" and individual goals

People@StatoilHydro includes relatively detailed annual individual goals. How do StatoilHydro align to the individual level without individual goals becoming "the new budgets"; a pre-defined straight jacket in an uncertain world? How can the controller involve in actions and support rather than constrain change.

Research questions on towards a dynamic perspective:

How are the different systems dynamics used in different control system settings (and different companies) and can it be used to offset some of the shortcomings of traditional control systems?

What are the effects on the controller function of introducing more dynamic control systems? How can controller interrelate more with operations and ensure strategic alignment through using the dynamic opportunities?

Control or Learning?, Paul Gooderham, SNF/NHH

The third project concerns what motivates managers. Why do they act as they do? Today all KPIs on StatoilHydro's Ambition to action have a target. Could they foresee other ways of describing desired outcomes, where the KPIs main role would be about learning and better understanding own situation and progress?

Beyond Budgeting ideology has helped StatoilHydro to reduce control of detailed budgets, tight mandates etc and instead other elements is strengthened such as personal control, procedures and culture. This creates new forms of interaction and communication in the organization. Do the different forms of controls (result control, culture, procedures, and other norms) contribute or hinder each other? We need more knowledge about how these elements work together with more formal control dimensions. Do formal control dimensions create barriers for learning?

Practical questions:

Target setting - ambition level vs ownership

Targets are sometimes set top-down to secure sufficient stretch. The price paid is ownership. What kind of targets or target setting process can reduce or eliminate this conflict?

KPIs – from control mechanisms to learning

Today all KPIs on StatoilHydro's Ambition to action have a target. Could they foresee other ways of describing desired outcomes, where the KPI's main role would be about learning and better understanding own situation and progress?

Research questions on control or learning theme:

How does results control interact with other forms of control such as personal control, culture or procedures?

What are the implications for learning and knowledge sharing of implementing BB principles?

Collaboration: Industry – research

This field of research may have different outputs in addition to publications in scientific journals, which may be operationalized to enhance collaboration between industry and research. Depending on the resources provided this can be devoted to:

- 1) Provide an overview as to the state of the art of the theories of management control and management accounting, bringing forward the latest developments;
- 2) Present studies that describe and analyze the implementation of Beyond budgeting in StatoilHydro

It will further provide a basis for collaboration with regard to education. The proposed program will include Master and Doctoral students. In connection with these educational programs it is also possible to consider student scholarships. The program should also open up for guest lectures as well as professor II-positions from the StatoilHydro Staff.

Resources and time horizon

In order to build a competence center with regard to beyond budgeting within StatoilHydro, the program should have a long time span. A time horizon of 5-7 years is needed as e.g. PhD students need at least four years to complete their degree.

Activities will be defined within the scope of the resource field that is sketched out:

- (a) Focused on research projects, where the staff from StatoilHydro work in close cooperation with SNF/NHH/AFF staff.
- (b) Research projects
- (c) PhD-projects
- (d) Master-thesis
- (e) Guest Lectures and professor II positions
- (f) Other collaborative arrangements with StatoilHydro

- (g) Project cooperation and collaborative arrangements with the wider research community internationally.

The research team

The research team consists of researchers from NHH/SNF and AFF whose academic interest and competence is on leadership, management and management accounting. Associate Professor Katarina Østergren is directing this research program.

The NHH team will consist of one PhD students within each research theme. In addition we will have 1-2 post doc positions related to the program, and finally 1-2 associate professors and professors to each theme. The AFF team will consist of 1-2 senior manager working part time at the project.

Finally we will add that the research team is part of a wider academic community. We take active part in networking and collaboration with the international research community. These efforts include presentation of papers at guest lectures and conferences, and research exchange with highly regarded universities and business schools across the world. Our resource group includes distinguished international professors, such as Professor Sven Modell, Professor Hanne Nørreklit, Professor Frode Mellempvik, and Professor Teemu Malmi. The resource group can also consist of other professors depending on the needs of the project.

The program also has a program board at StatoilHydro. The contact person is Bjarte Boggsnes, Project Leader Beyond Budgeting and the board consist of Leif Lømo, Program Leader, Academia, Torgrim Reitan, CFO Performance Management and Analysis, Karin Våland Sandvold, CSO CHR Leadership Development, Signy Midtbø Riisnes, Project Manager Mongstad, Per Heum, CEO SNF, Bjørn Helge Gundersen, CEO AFF, Jan I Haaland, professor and rector, NHH. They are the receiver of the results and will meet each year.

Resource group

Frode Mellempvik, Business School in Bodø, Norway

Teemu Malmi, Helsinki school of economics, Finland

Hanne Nørreklit, Aarhus School of Business, Denmark

Sven Modell, Manchester Business School, UK