

**Exploring the antecedents and process of management accounting change:
A case study of a company's budgeting system**

Abstract

This research examines why a computerised budgeting system, Cognos, is implemented a company. Drawing on Kasurinen's (2002) and Modell's (2007) models of management accounting change, this research finds that the facilitators, catalysts and leaders, particularly the Group Financial Controller, who is the "champion of change", are the driving forces behind the change in budgeting system. The change occurred readily because there is a lack of barriers to change, particularly confusers. While other studies have focused on only one or two forces, this research examines all of the forces in Kasurinen's (2002) and Modell's (2007) models.

Classification code: M41

Key words: Management Accounting Change; Budgeting; Case Study

Acknowledgements: Thanks to all of the interviewees at ABC Ltd and related parties for giving up their time to take part in this study.

1.0 Introduction

This study reports on the change within a budgeting process. Drawing on the model of management accounting change (Kasurinen, 2002; Modell, 2007), this research explains why certain forces are more influential than others. This study also considers the influence of an individual within the organisation in the adoption and implementation of a new budgeting system, i.e. champions of change (Kasurinen, 2002).

Several previous studies have considered the forces that influence the change within management accounting processes. A framework for analysing management accounting change was first developed by Innes and Mitchell (1990) by introducing three forces: "facilitators", "motivators", and "catalysts". This framework was subsequently further developed by Cobb et al. (1995) who introduced the following forces: "momentum for change", "leaders", and "barriers to change". Subsequent to that, Kasurinen (2002) further defined the barriers of change as consisting of three groups: "confusers", "frustrators" and "delayers". Previous studies, for example Howcroft (2006) have considered several barriers to change, and also the risk associated with using spreadsheets as a financial planning tool. Howcroft's (2006) barriers to change include the power distribution, the organisational culture and in particular resistance from the owners of the old process as the change was considered a threat to the status quo.

Modell's (2007) framework is important for the fact that it considers both advancing forces and barriers to change, not necessarily considering all changes to be successful within organisations. This resistance to change is also highlighted by Howcroft (2006) where the improvement of the spreadsheet-based budgeting was unsuccessful. Very few studies have aimed to apply all the forces, hence creating the opportunity for this research to be conducted.

With regards to budgeting, rolling forecasts forces managers to continuously look ahead to the future and review the long-term plans (Smith, 2007, p.140). Smith (2007, p.141) also suggests that a bottom-up approach should be followed when preparing the budget. This means that the responsibility of the formulation of the budget should lie with the lowest level managers, with the budget subsequently being refined and reviewed by the higher levels of management.

Regarding the reason why the new system was implemented, we also need to consider the theoretical perspectives and possibilities as proposed by Sturdy (2004), for example the rational view, political view, cultural view and/or institutional view. In this instance it can be a mix of any of these views and is not related to just anyone of them in particular. For example, the decision to implement change within an organisation might be based on previous experience, i.e. be a rational decision to make, but the reason why the change was made might be political, i.e. to enhance one's own power or authority in the organisation.

The interviewees in this study believed that the change in budgeting was necessary. After applying the framework (Modell, 2007), the findings suggest that some forces are more influential than others with some forces barely even observed. It would also suggest that the leaders played a significant role in introducing and implementing Cognos. The Group Financial Controller could be considered a "champion of change", as will be discussed later in the Literature Review section. Most of the interviewees also seemed to find the change having a positive effect on the budgeting process, making the information created by the system more effective and accurate. They also commented on the fact that the budget was now much less time consuming due to the change to a rolling forecast rather than a rigid annual budget. It has also resulted in more accountability and responsibility by all levels of the organisation for their budgets, rather than just the management accountants.

The remainder of this paper will be set out as follows. Section two reviews the literature in this area of research, including previous studies done on management accounting change, champions of change and budgeting. Section three will explain the methodology and the method used in the collection of data for this particular study. Section four will give a brief overview of the organisation, ABC Ltd and will also outline the main results of this study. Section five discusses the findings. Section six provides the conclusions and limitations to the study as well as suggesting some areas for future research to be conducted.

2.0 Literature Review

The literature, as applicable to this particular case study can be classified into three main areas: the management accounting change model as proposed by Modell (2007), the champions of change, which considers the forces that played a significant role in the implementation of the change and finally, budgeting and in particular participative budgeting. The link between barriers to change and the improvement of a spreadsheet-based financial planning process was considered in Howcroft (2006). Even though this study does not specifically refer to the management accounting change framework, it does consider the barriers of change, which is one of the forces in the model by Kasurinen (2002). Nadler and Nadler (1998, p. 7) refers to "champions of change" as being "truly outstanding leaders with records of phenomenal achievements". The book specifically refers to these leaders as chief executive officers (CEOs) and focuses on leadership and change (Nadler and Nadler, 1998, p.7).

Smith (2007, p. 140) presents an alternative to traditional budgeting as that of rolling or continuous budgets. This concept considers that budgets are updated and reviewed on a regular basis rather than just at the end of the year, with managers constantly planning and considering the future. She also suggests that budgets be a bottom-up and a top-down approach (Sizer, 1989) where the lowest level employee prepares his or her own budget. The budget is then reviewed by the superior, who then becomes the budgetee and so forth until the budget is approved or rejected by top management, which is the top-down approach. This bottom-up, top-down approach is also considered by (Wickramasinghe and Alawattage, 2007, p.92)

There are also several different views as to why management accounting change has occurred as is considered by Sturdy (2004) of which this study considers mainly two: rational and political. The rational view argues that change is usually implemented by an individual who has experience in that specific process. The political view is considered to be used to gain power within the organisation.

2.1 Management Accounting Change

Previous literature on management accounting change has attempted to build a model that incorporates

the forces that play a significant role in the management accounting change process. The model was initially developed by Innes and Mitchell (1990) and subsequently built on by various other researchers. Innes and Mitchell (1990) developed the top tier of the model by introducing and defining the terms "facilitators", "motivators", and "catalysts". "Facilitators" are the "factors which are necessary but not sufficient for a change to occur", for example a sufficient number of accounting staff to implement the change. "Motivators" are considered to be factors that influence change generally, for example the competitiveness within the market. Finally, "catalysts" are defined as the factors that can be directly traced back to the change and in particular the timing of the change, for example, a new member of staff.

Cobb et al (1995) expanded this model with the introduction of an additional three forces: barriers to change, leaders of change and momentum for change. Barriers to change are factors that "hinder, delay, and even prevent change" (Cobb et al., 1995, p. 172), for example the attitude of certain staff members who are opposed to change, any changes in the organisation's priorities, etc. The leaders often also have the dual role of being the catalysts. Without leaders, the change might be prevented by the barriers present in a particular situation. Thirdly, the momentum for change is the momentum that is required within the organisation to complete the change and keep the pace of the change (Cobb et al., 1995, p. 173). Kasurinen (2002, p.324) refers to these factors as "influencing forces of change".

Kasurinen (2002, p. 341) added to the accounting change model by dividing the types of barriers into three groups to ease the identification of each one's particular role in a particular change process. These three groups are: confusers, frustrators and delayers. The confusers are differing goals of individuals and the goals of the organisation. Frustrators are defined as seeming "to 'suppress' the change attempt in the organisation" (Kasurinen, 2002, p.337). Finally, delayers are often related to new technology, and are generally somewhat technical, but temporary in nature.

There is scant research that has used this model to identify the forces influencing a change. Helliart et al. (2002) used this model to explain the factors that had influenced the profitability reporting system within a bank. Other studies only commented briefly on certain factors that could influence change within that

particular case, for example barriers to change which might hinder the introduction of a new performance measurement system (Tuomela, 2005). Most of these studies seemed to be connected to the implementation of activity-based costing systems (Drennan and Kelly, 2002; Soin et al., 2002). One study, Howcroft (2006), did focus on the barriers of change and how that impacted on the intended improvement of the spreadsheet based financial planning system. Barriers of change are, however, only one force in the framework. Also, Howcroft (2006) did not refer to Kasurinen's model in the research done by him. Thus, there seems to be some scope within this area to consider the implementation of a new budgeting system to further enrich the literature and consider the effectiveness of the model with regards to providing an explanation of change.

Modell (2007, p.342) contrasts these forces, which focuses on the "role of individual actors", with that of contingency theory, which focuses on the environmental factors. He also argues that it is the senior managers in particular that play a significant role as the leaders influencing the implementation of changes in management accounting practices. He suggests that management accounting research should progress to considering the interrelationships between these factors, rather than just considering them as stand-alone factors, not influenced by the other factors that are present (see figure 1).

2.2 Champions of Management Accounting Change

The concept "champions of change" mainly implies that top management plays an important and even dominant role in the formulation of new strategy and also in the implementation of change (Kasurinen, 2002; Nadler and Nadler, 1998; Westphal and Fredrickson, 2001). The "champions of change" concept relates back to the management accounting change model with regard to the "leader" and/or "catalyst" factor. However, the literature seems to fail to consider changes driven by middle management.

Kasurinen (2002, p. 325) suggests that "internal commitment creation" is necessary to overcome resistance to change, i.e. motivating the employees to assist in the implementation of change. The division general manager, who was only appointed in 1995, was the one who introduced the balanced scorecard to the rest of the project team. He also constantly encouraged the implementation of the

balanced scorecard and participated actively in any discussions concerning the balanced scorecard. This seemed to influence the business unit manager as well to encourage the implementation of the balanced scorecard. Thus, he can be seen as a leader of change in this organisation.

Westphal and Frederickson (2001) found in their study that the board of directors often appoint new chief executive officers (CEOs) that have the same strategies at their previous employer than the strategies that the board of directors want in place for their organisation. As Westphal and Fredrickson (2001, p. 1116) state the "departure of the CEO may prompt boards to evaluate the current strategy and consider the need for change". They suggest that, "strategic choices are influenced by the personal background and prior experience of top managers" (Westphal and Fredrickson, 2001, p.1115). New managers find it easier to introduce change due to the fact that they lack certain political and psychological attachments to the status quo of the organisation and in that sense provide the organisation with alternatives for implementing change. Again, the leaders in this change seem to be the top management, not middle managers or lower level employees.

2.3 Budgeting

Howcroft (2006) considered the barriers to change in the improvement of the budgeting and financial planning which was spreadsheet-based. He also considered the barriers of change as a stand-alone factor without considering how the other forces impacted on the barriers as was suggested by Modell (2007). However, he did not refer to either Kasurinen (2002) or Cobb et al (1995) and the model developed by them.

Participative budgeting has been considered by several studies in the past, including developing and testing a dissonance model of participative budgeting (Tiller, 1983), considering possible antecedents of participative budgeting (Shields and Shields, 1998), linking participative budgeting to organisational performance (Clinton and Hunton, 2001), and considering different theoretical perspectives and criteria for selective integration of budgets (Covaleski et al., 2003).

3.0 Methodology

There is a lack of studies which consider how the forces of the model of management accounting change (Modell, 2007) impact on changes within organisations. Therefore, the aim of this study is to apply this model to an organisation to explain how and why the new system was implemented and what the consequences are. Some studies, including that of Westphal and Fredrickson (2001), would suggest that change is driven by the Board of Directors. They argue that the Board appointed a new chief executive officer (CEO) who is most likely to implement their strategy based on the particular CEOs previous experience. However, they do not consider that change may be driven by a lower-level employee, for example, the group financial controller, the financial controller, etc. Therefore, this study addresses this and aims to suggest that change can be initiated by employees in middle management.

3.1 The Case Study: ABC Ltd

The research design is in the form of a case study, with the focus on ABC Ltd. ABC Ltd is an organisation that provides their clients with a variety of services, from financial services to selling goods and services. On request of the organisation, the name of the company has been changed and some information disguised so as to not reveal the identity of the organisation or the interviewees. The case study method seems most appropriate in this study where the main issue is the change in the budgeting system of ABC Ltd. The study takes the form of an explanatory study, as the aim is to explain how the change was made and why (Ryan et al., 2002). This method seems to be the most effective as 'experiments' or 'survey' designs do not effectively describe changes or phenomena within their specific contents and does not aid in the understanding thereof (Adams et al., 2006, p.365).

The organisation, ABC Ltd, was selected on the basis that one of the researchers had previous knowledge of the change that occurred at the end of 2007 and beginning of 2008. As most of the employees involved in the implementation of the change were relatively new to ABC Ltd, the question arose as to why the change was made and also how. The main themes dealt with in the interviews included: who was involved in the change, when the change was made, how the change was made and what the impact of the change was. Some interviewees also went on to explain how the system worked

and compared it to the previous system, i.e. Excel spreadsheets. The study also considered whether there was any change in the efficiency of the system in terms of the quality of the information provided and also the time that it took to actually set the budget, i.e. a couple of months before year end, or continuously updated over time.

Initial access to ABC Ltd was gained through the contact that one of the researchers had with several of the employees within ABC Ltd, especially with the Group Financial Controller. Research was done by conducting interviews with employees at different levels within ABC Ltd. Interviewees were chosen after meeting with the Group Financial Controller, who advised one of the researchers as to who had been fundamentally involved in the implementation and change of the budgeting system.

3.2 Interviewees

The interviewees consisted of six employees of ABC Ltd and one third party interviewee involved in the documentation of the change in system and also in the identification of any risks that might have arisen from the change. The employees interviewed included the Chief Financial Officer (CFO), a General Manager (GM) of one of the business units, a Group Financial Controller (GFC), management accountants from two different business units, and an assistant accountant involved in the setting up of the new system and the training of the other employees within the organisation. One of the management accountants interviewed was also involved in travelling around New Zealand training up other users of the system with another management accountant (not interviewed for this case study). The interviewees also included a third party internal auditor. Most of the employees interviewed had knowledge of how the system was implemented and what the impact of it was. However, several of them had been employed with the organisation for less than two years and therefore did not have the necessary knowledge to comment on when and why the system changed or if or why there was a need for change. They also had very little knowledge of how the previous system had operated and therefore made comparison with the new system somewhat difficult.

The initial interviews were semi-structured and done over a period of two weeks during August 2008. All

interviews, except one, were digitally recorded and then transcribed for analysis. The interviews varied in length depending on how involved the particular employee was in the implementation of the change, and lasted for no more than one hour. Any issues identified in the previous interviews would be considered for questioning in the next interview, depending on the interviewee and the extent of their involvement in the implementation process. The main issues arising from the initial interviews were then identified and further interviews via email or telephone were conducted in October 2008 in order to gain the relevant information needed. One of the researchers had also spent some time within ABC Ltd in January 2008 when the new system was documented and thus had some prior knowledge as to how the change had happened, why it happened and who played an integral part in the initiation of the change. The final interview was with the internal auditor, who had also been involved in documentation of the system in January 2008. Therefore, the information from various parties was compared to each other to consider their responses and whether they were consistent with each other. As the interviews were semi-structured, the questions asked were relatively consistent and, depending on the interviewee's response, some additional questions were also asked to clarify certain comments made by the interviewee.

4.0 Findings

4.1 History and Organisational Structure of the Organisation

Approximately three years ago AB Ltd merged with C Ltd, two of the biggest and most well known suppliers of goods and services within their industry, to become ABC Ltd, which is publicly listed on the New Zealand Stock Exchange (NZX). Their main business areas include financial services, technological services and the providing of various other goods and services to their diverse range of clients within New Zealand and internationally. One of the organisation's main aims is to serve their clients as best they can and they continually develop their business processes in order to obtain this objective. They consider their relationship with their clients as a partnership, rather than just a series of business transactions. They also use this partnership approach with their clients to initiate positive changes within industry structures. Over the previous five to ten years, the company has become a global player in the market by expanding into several overseas markets in 2006. It is also facing increased competition from companies in China and India. In spite of this the organisation still achieved growth in revenues across all businesses. ABC Ltd is

subject to various influences and global trends, with several of their goods and services being very seasonal in nature. The organisation also spends a considerable amount of their resources in the research and development area, especially regarding science and technology in order for them to keep up with global trends.

During the 2008 financial year there have also been significant changes both in the structure of the organisation and the board of directors. One important change to the organisational structure has been the introduction of the district management level to ensure that the clients' needs for products and services are met. Overlooking all the operations of the company is the Board of Directors, consisting of nine members, including the Chief Executive Officer (CEO) and various other members who have considerable experience in these areas of business. As can be seen from the organisational/management structure (see figure 2), just under the CEO, there is the Group Leadership Team (GLT), which consists of the Chief Financial Officer (CFO) and the Group General Managers (GGM) for each of the types of services that ABC Ltd provides. This group meets every week to discuss, among several other issues, where the company is at in terms of meeting the targets set in the budgets and what they can do to improve their performance where needed. Each GGM is in charge of all the General Managers (GM) of the business units that fall within that line of service. The CFO oversees the Group Financial Controller, who is in charge of all statutory and management reporting. There were also several changes in senior management, with a new chief executive officer (CEO) appointed after his predecessor resigned and became the Group General Manager (GGM) of an overseas business unit. Hence, there was also a change on the Board of Directors. In conjunction with the change of CEOs, there were several board members who had served out their time with the company and created the need for new directors to join the board.

Initially, ABC Ltd used the spreadsheets developed and used previously by AB Ltd for their budgeting. However, with the rapid increase in the size of the organisation, these spreadsheets soon became unmanageable and the need for a new budgeting system arose. From the merger onwards there has also been a major turnover amongst the staff of the organisation, with most of the interviewees being with the

organisation less than eighteen months. Since that time there has also been a significant change in the role of the management accountants. Under the old budgeting system, the management accountants had to collate all their business units' budgets into one budget which was then reviewed by the general manager and either accepted to be presented to the GLT or rejected and had to be adjusted again by the management accountant until the figures matched up with those proposed by the board. Under the new system, however, the budgets have already moved through several managerial levels before it reaches the management accountants.

All the collation is now done within the system, which results in the management accountants being able to just get the information they need directly from the system and they then match this up to the board's figures which were communicated down to them through the general managers. They can then either accept or reject the budget in the system. If it is accepted, the budget proceeds to the general manager of that unit. If it is rejected, the budget goes back to the previous level for the necessary adjustments to be made. With Cognos, the budgets is accessible on the local company intranet and employees can only access the budgets that they have been granted control over.

4.2 The Old Budgeting System - Excel Spreadsheets

The old budgeting system was based around the use of Excel spreadsheets. Depending on which business unit the budget was for, each store or branch would set their own budgets on an Excel spreadsheet and then send the budget to the relevant management accountant who would collate the budgets for all the stores/branches into one spreadsheet. The Board of Directors decide on a profit figure (i.e. top-down approach) that they believe will be achievable and this figure gets communicated down to the management accountants who have to reconcile the figure given by the Board to the figures that the different business units have produced (Le. bottom-up approach). As stated by the Group Financial Controller,

“... they have to meet basically, ... and invariably if the bottom-up approach doesn't agree, isn't enough, which is always the case, to the top-down approach, then all the people at the bottom need to do more work and find more profit. ... Budgeting is a bit of a gaming theory.”

... So for example on capital then the business units put in twice as much as what they need on the basis that they will get half of what they submit. It's a similar thing on the profit side of things that people will put in as much as they think they can achieve reasonably the top-down approach will include some stretch. And so it's trying to get those to meet and it's always the business units that have to increase."

The final budget figures would then be used to do the forecasting, with the process taking several months to finalise figures and getting the two approaches to meet eventually.

Most of the interviewees indicated that there was a need for a change. The main weaknesses associated with the use of spreadsheets included, but is not limited to the following: size and complexity of the spreadsheets, new management structure, time consuming, error-prone, lack of security and inability to collaborate and the information provided was out-of-date. Firstly, we consider the size and complexity of the spreadsheets. During the last decade or so, the company had acquired and merged with several other organisations, resulting in the budgeting system becoming increasingly complex as time went on. With all these new acquisitions needing to be incorporated into the spreadsheet, it caused the spreadsheets to become extremely big in size and very complex in nature. The size of the spreadsheets also resulted in the calculations taking a long time to come into effect. Secondly, considering the new management structure introduced by the General Manager.

As the GM stated in the interview:

"... one of the other things I did in the business when I came in here is we split the business, (name of business unit), into regions and started driving what we believe is accountability and confidence at that regional basis. Therefore, we had to get information, not just get information available for them, but have information to get some ownership on to make them accountable."

This view was supported by the Assistant Accountant who stated:

“... it gets people involved, you know, like managers, store managers to take ownership of their own numbers, rather than the accountants doing everything and them just coming up with numbers that don't agree in the end...”

Therefore, there was a need to change the budgeting system to support and incorporate this change in the lower level management structure. The third weakness is that the budgeting process done in spreadsheets was extremely time-consuming. The management accountants would spend several months on budgeting alone, before the budget was due at the end of January. However, not much time was spent on keeping the budget updated during the course of the year, making the workload easier when it came to finalising the budgets. Fourthly, due to the size and the complexity of the spreadsheets, the formulas and linking of the various spreadsheets were prone to errors being included if not reviewed properly. The General Manager commented that:

“...everybody was quite clear about the fact that there was a two points difference on gross margin per month, thereabouts. When you're running a business about 12 percent gross margin, two points is an awful lot of difference.”

Another weakness was that there was a lack of security and version control. Spreadsheets were not stored on a secure drive and any employee could access budgets and make changes to it as they wanted. Changes could also be made after the budget had been finalised, as there were no security features that would, for example, lock-down the spreadsheet once it had been submitted to the management accountants for review. Also, when updates were made, these needed to be linked to previous versions, which again provided the opportunity for errors to be included in the spread sheets and subsequently the final budget. This made it very difficult to consolidate the various budgets into one spreadsheet. Finally, the information provided by the spread sheets was already out-of-date by the time it was eventually finalised. As the GM stated:

“I come from a previous industry... I could get in the morning, daily sales information, margin per country, cost of all exports, so I am used to some very accurate and timely information. Fortunately, some people started to realise around the place that the infrastructure that we

had in place weren't sufficient to provide appropriate management information on a timely basis."

Thus, from the interviews conducted it would seem that there was a definite need for change, due to, but not limited to the weaknesses mentioned previously.

4.3 The New Budgeting System: Cognos

The new budgeting system is an automated programme that can be customised according to the user's needs. In contrast to Excel spreadsheets which are only three dimensional, these cubes (similar to spreadsheets) can be multi-dimensional. In the case of ABC Ltd, the cubes are rarely more than five dimensions otherwise it gets too complex in nature. With Cognos, the Board still set the ultimate profit figure which has to be met by the business units. This is a top-down approach. Budgets are also set from the bottom-up to ultimately match the expectations of the Board of Directors. More often than not, the business units have to adjust their figures to meet the figures that the Board proposed. With Cognos, the store/branch managers at the lowest level of the organisation input their figures into Cognos. There is a deadline for them to do this by, after which the budgets are locked down and no changes can be made by these store/branch managers. The budgets are then reviewed by the respective district managers. If the figures seem reasonable, they are accepted and move up to the next level. If they are rejected, however, they are unlocked and the store/branch manager is notified of the rejection and the fact that they need to make changes to the figures and where these changes need to be made. The budget moves up through the system: from store/branch manager, to district manager, to regional manager and then to the relevant management accountant. The total figure for each business unit is then sent to the GM for that business unit, who reviews it and, if approved, sends it on to the GGM for that service line. These figures are then discussed at the GLT meetings to consolidate the bottom-up figure with the top-down figure. If the figure needs to be increased, the GLT determines which business units will be able to generate more profit to meet these increased targets and which business units will be unlikely to make any more profit than that which it has budgeted for. In Cognos, multiple people can be working on it at the same time due to the fact that the budgets are available on the company intranet. However, the information is much more secure

than that of the spreadsheets. Store managers can only access their store's budget, district managers can only access budgets for their regions, regional managers can only access their region's budgets, etc. Only a few people within the organisation have access to all the budgets. They however, do not input any figures into the budgets. At any point in time the budget can be seen for the following twelve months and an additional two months are included for the forecast. With Cognos, the focus is more on spreading the budgeting process over the year, rather than just spending two months on it just before it needs to be finished.

As the CFO stated in his interview:

"...so it doesn't come all in one bang and dominate a whole two month period... I think it's more about spreading the workload and the time requirements as opposed to reducing them. ... It's more about moving people away from thinking about it once a year and making sure it's a rolling process."

Thus, budgets are now updated monthly by inputting the actual figures into the system. At the end of each month that budget is locked down, with no further changes to that particular month possible. Eventually, budgets will be updated on a daily or weekly basis by inputting the actual figures and the system will then produce a twenty-four month rolling forecast as opposed to the annual budget. The CFO confirmed this view by stating *"... we'll move to a rolling forecast basis, I think, and so we create our budget in advance and we probably need to use it to develop into two and three year business plans rather than a short-term focus"*.

4.4 Forces of Change: Modell's (2007) Framework

Figure 3 shows the application of Modell's (2007) framework for the change in management accounting. Each of these forces will now be discussed in detail as observed in the case of ABC Ltd. Firstly, the motivators in the case study are discussed. In the five years before the study, the organisation had undergone some severe changes. These changes included several mergers and acquisitions and also changes to the organisational structure. Due to the mergers and acquisitions, the organisation had grown

rapidly in size and also in complexity. This growth would also mean more complex and extensive budgeting needed to be done. Spreadsheets would therefore become unmanageable due to their size. Thus, there was the need for a budgeting system that would be able to accommodate the sheer size and amount of information needing to be processed. During the past two years the organisation introduced district managers into the organisational structure. Therefore, there was also an extra level of managers to go through for the budget to be ultimately accepted. Due to the fact that there were now several additional employees with access to the budgets, the need was created for a budgeting system that had the necessary security to prevent any unauthorised changes and even changes occurring after the budget had been finalised.

Secondly, the facilitators, which represent the organisational factors which contribute to realising these change initiatives, are discussed. During the past two years, several new staff members have been appointed in ABC Ltd, including the Group Financial Controller, management accountants, the assistant accountant and various others. As will be seen later on, this facilitated the implementation of the new system as most of these new employees had no previous knowledge of the old system using the spreadsheets, therefore having nothing to compare Cognos to. Furthermore, most of these new employees played a fundamental part in the implementation process and received extensive training as to how the system worked and also had significant input in how the system was to be built and the sort of information that was crucial to be included. Also, not only did these employees receive extensive training, they were also used in the training of other staff within the organisation on the use of the new system.

Thirdly, there were also catalysts which were some of the more direct reasons that there was a change in the budgeting process of ABC Ltd. The main catalysts in this instance were the Group Financial Controller and the General Manager interviewed. When asked why the decision was made to change the budgeting system, the Group Financial Controller replied:

"Not long after I arrived last year I realised that all the different business units were spending a lot of time playing around on spreadsheets to do their budgets, and I'd had experience with a different software package in England and so I suggested to my boss that we use this

different software package.”

This view of the Group Financial Controller was supported by one of the management accountants, stating:

“It was well and truly overdue. ... it was starting to crack at the seams. And plus, with Excel and spreadsheeting tools, their open for errors. ... He's obviously used this tool before in the UK and so he decided it will be useful for us.”

In his first month in the role as General Manager, he identified the need for a more efficient reporting tool as the information that he was receiving was too much and did not necessarily include the information needed to make the relevant decisions. According to the General Manager the system only captured some of the data and therefore, some of the information received was inaccurate. This relates back to the increased size and complexity of the business, re-emphasising the need for a budgeting tool that would produce more accurate and efficient information to the users to make sound business decisions.

The fourth force that needs to be considered is that of the leaders of the change. There were mainly five leaders in the case of ABC Ltd: the Group Financial Controller, the Assistant Accountant, the External Consultant, and two of the Management Accountants. As has been discussed previously, the Group Financial Controller was also a catalyst in the implementation of the change. As he had extensive previous experience with this system at his previous employment, he knew the strengths and the weaknesses of the system. Therefore, it was a rational decision to make when it became apparent that there was a need for a more effective and accurate budgeting system. The Assistant Accountant played an integral role in the implementation of the new budgeting system. Before the system was rolled out to the individual business units, he consulted with each unit's management accountant in order to determine what kind of information was needed from the system. He then proceeded to build the cubes for each business unit according to their specifications. He still plays a significant role as the system is being rolled out to all levels of the organisation currently. He, together with the External Consultant also played a major role in the presentation of the system to the small group of employees that would form the foundation of

this new system's implementation. They also trained up two management accountants who would subsequently travel around the country training the other employees in the use of the system. Finally, the two management accountants (only one of them interviewed), after receiving extensive training, then proceeded to construct a manual into the use of the system and travelled (and are still travelling) to all stores and/or branches to introduce the system and train the employees in the use thereof. Thus, all these individuals played a significant role as leaders, and some also as catalysts, in the introduction and implementation of the new automated budgeting system.

Along with the leaders, there were also a few reasons for the maintained momentum in the decision to introduce and implement a new budgeting system. These include the external and internal business environment and also the continuous growth of the organisation. The external environment of ABC Ltd is highly volatile due to its seasonality. Therefore, the information available to them for decision making needs to be as accurate as possible. As was mentioned by the General Manager, when you are operating a business with approximately 12% gross margin, a two point difference is quite significant. With the new budgeting system that two point difference on gross margin between actual figures and budgeted figures was reduced quite severely. Furthermore, the recent mergers and acquisitions have resulted in a rapid growth of the organisation, which means that systems used within the organisation needs to facilitate growth - something that the spreadsheets was not capable of doing. These factors create the momentum for change to happen, and continue to happen, but momentum can not bring the change by itself. It needs leaders to implement these changes and also keep the momentum going.

According to Kasurinen (2002), the barriers of change can be divided into three groups: confusers, frustrators and delayers. As with most other changes, there are also barriers to change evident in this case study. From the interviews conducted, there seems to be a lack of confusers in this study. The potential confusers in this study could be the store managers who are now more accountable and responsible for their own figures. They might have conflicting ideas, or know that their store/branch would not be able to reach that target. This could potentially be another area for future research as the system had not been rolled out to this level at the time the research was conducted. Secondly, the frustrators in

this case seem to be some of the new employees within the organisation who have come into ABC Ltd from other organisations through either a merger or an acquisition and are still intent on doing things the way that things were done at their previous place of employment. This is where both the facilitators and they catalysts play a very important role in motivating these employees and convincing them of the increased effectiveness and accuracy of the new system. As the Management Accountant stated in her interview, as soon as employees saw the advantages and increased performance of the new system compared to that of the old one, they were much more accepting of the change. Finally, in the case of the delayers, there were several issues that slowed down the change, primarily issues dealing with the technical aspects of the change and mainly temporary in nature. These included: building the cubes for the initial use of the system for the 2009 budget; adapting the cubes to suit the needs of each individual business unit; and, rolling out the system to all levels of the organisation. As mentioned previously, the cubes were built by the Assistant Accountant, with input from the various management accountants as to what information needed to be included in the budgets. Due to the fact that the Group Financial Controller wanted to implement the change before starting on the 2009 budget, the system was initially implemented at a very high level, with the lower levels still doing their budgets and spreadsheets and these then being collated by the relevant management accountants and inputted into the system manually. Hence, when the 2009 budget was set, the system had not been fully implemented and thus, its effectiveness could not be measured completely. In relation to the building of the cubes by the Assistant Accountant, the adapting of the cubes to suit the individual needs of the business units made this a very time-consuming exercise and led to the system not being complete before the time came to set the 2009 budget. Also, due to the fact that the system had not been introduced and used at all levels of the organisation, all employees did not have a chance to use the system and identify any weaknesses or problems with it.

In conclusion, it would seem that the most influential forces in the implementation of the new budgeting system are the facilitators, the catalysts, and the leaders. However, the three groups of barriers seem to not have had much of an impact on the implementation. Even though there were some delayers and frustrators, these seem to have been dealt with through communication between the various parties involved in the implementation process. As discussed previously, there also seems to be a lack of

confusers in this instance. A potential confuser might be employees who have worked in either organisation for several years and do not see the need for change. Their own personal goals and objectives might be in contrast to that of the board's or what is expected of them might be too optimistic. This needs to be researched in further detail by interviewing store managers, district managers and/or regional managers to get an overall picture of all levels of the organisation. Through the rolling forecasts, Cognos also makes continuous updates to the budget possible, thus eliminating the entire budget being done at the end of the year. This results in reducing the burden on the management accountants for what is essentially a very stressful part of their job, giving them more time to review the budgets in detail when they come through and identify any areas for improvement, thus increasing the participation by all parties in the budget.

5.0 Discussion

The forces from Modell's (2007) framework that were most influential in implementing the change in the budgeting system were the catalysts, the leaders and the facilitators. In some instances, one individual was classified into more than one of these categories, for example the Group Financial Controller and the management accountants. The Group Financial Controller drew on his previous experience in the United Kingdom and the system that he had used over there to suggest and implement Cognos in ABC Ltd (Westphal and Fredrickson, 2001, p.1115). Therefore, he was a very influential force in the implementation of Cognos and also fundamental to the successful implementation thereof, even though not a member of the top management structure. He was not the only one to assist in the implementation of Cognos. In this regard, the management accountants and the assistant accountant also played an important role as they spent a considerable amount of time and effort on building the system to fit the organisation and also training other employees in the workings of the system. Thus, the Group Financial Controller can be seen as a "champion of change" or a leader according to Kasurinen (2002). This was also the case in Kasurinen (2002) with the introduction and implementation of the Balanced Scorecard by the divisional general manager.

Kasurinen (2002, p.325) considered the "internal commitment creation" as necessary to overcome the

resistance that might arise when change is introduced. These few individuals seem to have created this "internal commitment" through constant communication with the relevant people involved in the creation of the budgets. They also spent a lot of time and effort in presenting and explaining the system to all levels of the organisation to address any concerns that anyone might have had about the change. Also the fact that most of these staff involved in the implementation would have also been a contributing factor as to why the change occurred without much resistance. If the staff implementing the change had been from either AB Ltd or C Ltd, the findings could have been significantly different as employees might have considered the change to be driven by either AB Ltd or C Ltd, and resisted if they were not previously from that organisation.

Even though the board has the ultimate say in the profit figure, there is a top-down and a bottom-up approach, which makes this a highly participative budget. This can be explained using the psychology perspective on budgeting (Covaleski, 2003, p.24) where all levels of the organisation has some input into the budgets, creating a sense of ownership as is also argued by Smith (2007). In the case of ABC Ltd, the store/branch managers are highly involved in setting the budgets for their own store or branch and they therefore have more accountability and responsibility which leads to a sense of ownership by that particular manager. This also relates back to the arguments made by Smith (2007) for the top-down and bottom-up approach to budgeting. With the introduction of the district management level into the organisation and the move towards rolling forecasts, there is continuous communication between levels regarding the budget and how they are performing, compared to communication for only two months of the year using the spreadsheet-based model (Smith, 2007). Therefore, the role of the management accountants have changed from doing the budgets once a year, to continuously having to review and plan for the future, based on the information provided by Cognos.

When comparing the findings to the study done by Sturdy (2004), it would seem that the rational view is most relevant in this instance. The rational view refers to change in systems and new ideas being incorporated into an organisation "because they work or promise to do so" (Sturdy, 2004, p.157). Therefore this perspective seems to fit in with what happened at ABC Ltd. The Group Financial Controller

had used Cognos in his previous job for several years and it worked in that situation, so it was only rational to consider that Cognos might also work in the situation of ABC Ltd. However, in his interview he did refer to there being some "gaming" going on with regards to how the budgets were set. Therefore, there is also somewhat of a political perspective (Sturdy, 2004, p.161) coming through as middle managers use their knowledge of their business activities to set the budgets in such a way that they ultimately get the budget that they sought after.

One interesting finding that was not anticipated was whether the new system needed the approval of the board or not. When change is initiated and it would cost more than a certain amount to implement, the change needs board approval before it can be implemented. In this instance, we do not know what it cost to implement the new system, but Cognos had only been proposed to the CFO who accepted it without considering any alternatives. In his interview the CFO stated:

"I don't really care if it's Cognos or something else. What we needed was a tool that was easily accessible by people because we were so distributed geographically."

However, in the case of one of the other business units, they had to make a formal presentation to the board, with several alternatives to the system that they were proposing for implementation in order to justify their choice.

6.0 Conclusion

It would seem that the implementation of Cognos into ABC Ltd has been relatively successful, even though the system had not been fully implemented to all levels of the organisation by the time that the research had been conducted. Most staff seemed to have received the change as a positive occurrence, especially after it was presented to them. The extensive training given would have also assisted in this acceptance of Cognos. Another factor that could have led to the change occurring without much resistance is that most of the employees involved in the budgeting process had been relatively new to ABC Ltd and therefore had no knowledge of how the spreadsheets had operated. Also, even though the change seemed to be driven by only a few individuals, the change was presented in such a way that

would make the budgeting process more participative and each employee more accountable.

It is important to consider both the forces that assist in the change and also the barriers that might arise. Some of the barriers had been mitigated or prevented before the implementation even took place, for example the training given to employees, the increased accountability of all employees, etc. ABC Ltd is also moving away from the annual budgeting process, instead focusing on two-year rolling forecasts and updating these on a regular basis. This is a significant change from the traditional budgeting process as managers can at any point in time determine whether the targets are being met or not. This also forces the managers to constantly be forward thinking (Smith, 2007, p.140). This idea of rolling forecasts might be something to consider in future by both academics and practitioners alike. Another issue that could be considered by these two parties is the identification of barriers of change and how they can be mitigated or prevented during a time of change to make the change as smooth as possible.

However, the case study also has some limitations. Firstly, due to the time available for the research to be conducted, very few interviews were held with employees within the organisation. Interviews were only conducted with employees in key positions who had played an integral role in the introduction and the implementation of the new automated budgeting system. Secondly, at the time that the research was conducted, the system had not been fully implemented. At the lowest level, some business units still did the budgets on spreadsheets, which would then be collaborated and entered into the system by the management accountant, i.e. still high level input, rather than each individual store/branch manager inputting their own numbers and taking ownership. Thirdly, only a few employees had received extensive training on the system at the time that the interviews were held, and various staff members only knew the very basics of the system, i.e. how to input their figures into the system and get the reports out of it when they needed it. Finally, most of the interviewees were relatively new to the organisation, i.e. had only joined ABC Ltd within the eighteen months preceding the research, and therefore had little or no knowledge of what the old system was like apart from what they had gathered from employees who had used the spreadsheets. This made the comparison between the new and the old system very difficult as only one of the interviewees had actual experience in doing the budgets on spreadsheets.

There are certain areas that have the potential for future research within ABC Ltd. It is estimated that the system implementation will be completed when the 2010 budget will be set in early 2009. This creates the opportunity to interview employees who have used the system for the first time, to get their impressions on how the system performs, whether they find it easier to use than the spreadsheets, etc. Further, if more interviews are conducted with the store managers and other lower level employees involved in the budgeting process, it increases the possibility of there being employees who have used the spreadsheets to do the budgeting, which would make a comparison between the systems much easier. Another possible future research area is with regards to one of the business units that still have to implement the system in its entirety. Due to the complexity of this business unit, they had not implemented the system when the budget was set for 2009. Instead, they did the budget on their old system (a budgeting package, not spreadsheets), and waited to see how the implementation went in the other business units (solve any initial problems) before they changed over to the new system. Finally, store managers, district managers and regional managers could be interviewed to see how the increased accountability and responsibility fits in with their goals and objectives.

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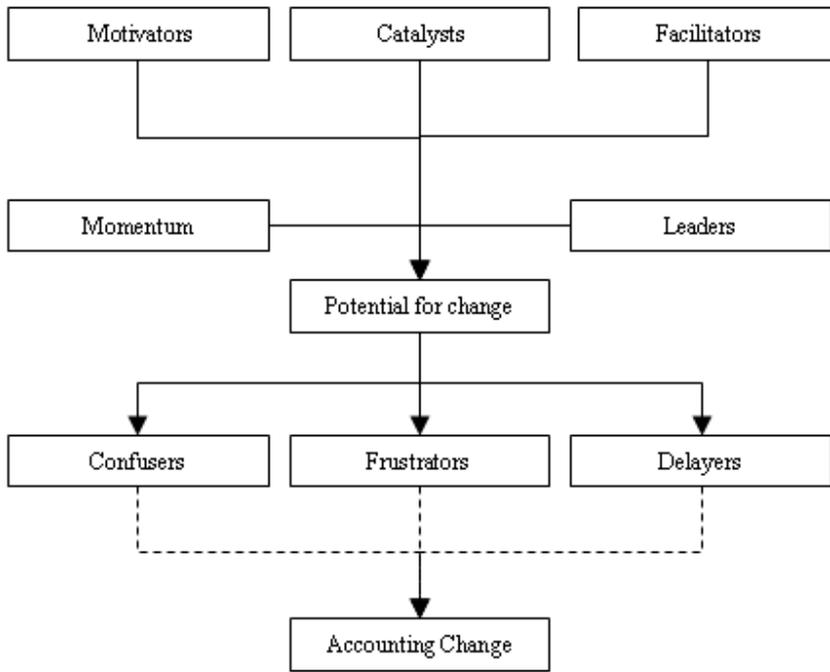
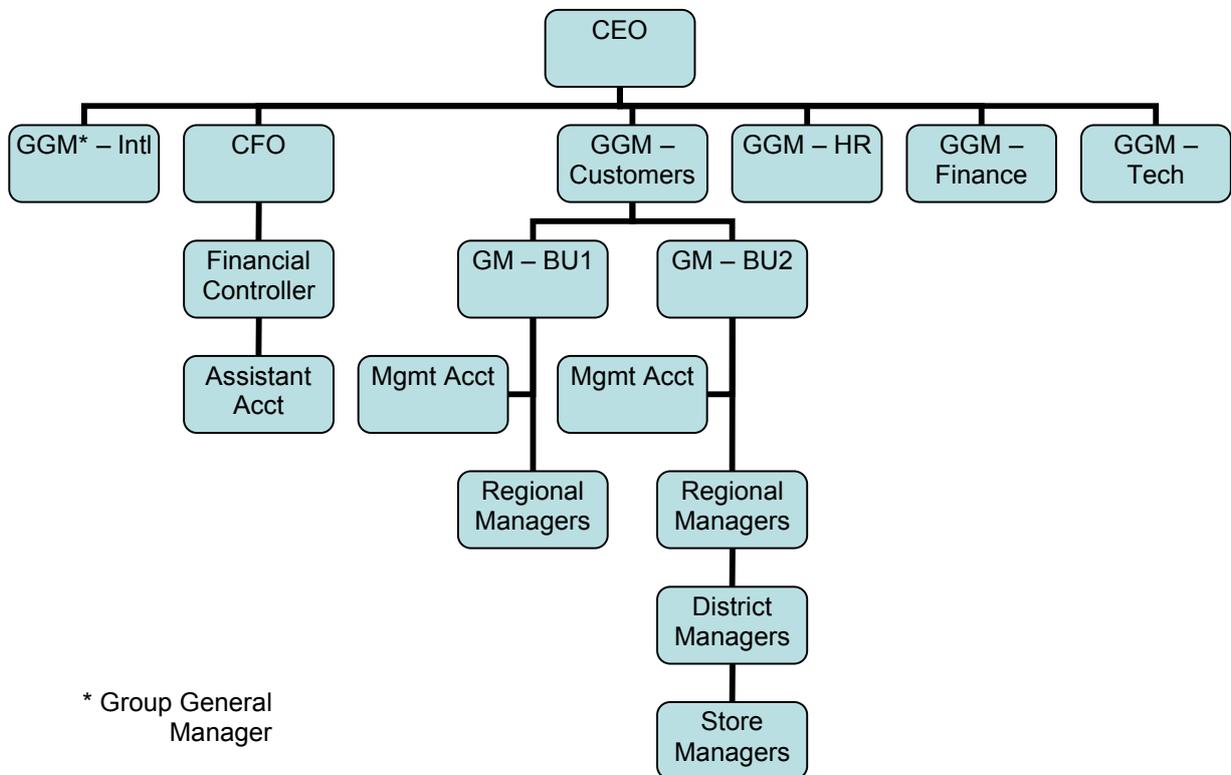


Figure 1: Framework for studying management accounting change (Modell, 2007, p.342)



* Group General Manager

Figure 2: Organisational Structure

Motivators	Facilitators	Catalysts
<ul style="list-style-type: none"> - Increased complexity of the organisation - Rapid growth of the organisation during last five yeas - Change in organisational structure, i.e. district managers 	<ul style="list-style-type: none"> - New staff - Extensive training to employees fundamental in implementation 	<ul style="list-style-type: none"> - Group Financial Controller - General Manager - The rapid growth of the organisation
Momentum		Leader
<ul style="list-style-type: none"> - Internal and external environment of the organisation - Mergers and acquisitions 		<ul style="list-style-type: none"> - Group Financial Controller - Assistant Accountant - External Consultant
Confusers	Frustrators	Delayers
<ul style="list-style-type: none"> - Potentially store managers' goal in conflict with that of the board 	<ul style="list-style-type: none"> - Mix of employees from various organisation 	<ul style="list-style-type: none"> - Building the software to suit the organisation - Adapting the software for each business units - Rolling the system out to all levels of the organisation

Figure 3: Summary of the advancing forces in the case of ABC Ltd