

Aligning Performance Measurement and Strategy: Unpacking Complexity

By

Joanne Lye^{*}
Department of Accounting
La Trobe University
Melbourne, 3086
Australia
Email: j.lye@latrobe.edu.au

&

Professor Lee Parker
School of Commerce
University of Adelaide
Adelaide, Australia
Email: lee.parker@adelaide.edu.au

Paper to be presented at the 8th Interdisciplinary Perspectives on Accounting
Conference, 10-12 July 2006
Cardiff, Wales

^{*}Corresponding author

Abstract

This study seeks to explore how alignment is achieved between strategy and performance measures in a performance management system. The study is conducted in a strategic business unit within a government owned company. Drawing on qualitative data collected during semi-structured interviews, the study employed a field-based case study approach utilizing the grounded theory methodology for analysing the data.

The findings of our exploratory study are twofold. First, we complement the existing accounting and management literatures by providing a more in-depth analysis of the linkage between performance measures and strategy to facilitate understanding. Second, we reinterpret the concept of alignment using the metaphor of a spider's web. The metaphor of a spider's web illustrates the complexity and dynamism to which components of the alignment process capture the multiple sets of relationships that might otherwise appear to be linear, within a performance management system. Furthermore, such a metaphor shifts the focus on the issue of setting objective performance measures and linking these to strategy, to capturing more of the hidden, perhaps subjective dynamics that create linkages at all levels within an organisation.

Aligning Performance Measurement and Strategy: Unpacking Complexity

Introduction

The importance of achieving alignment between performance measures and strategy is well established in the literature (Kaplan and Norton, 1996, 2001a; Neely and Bourne 2000; Wilcox and Bourne, 2000). Different themes in the alignment literature include alignment of strategy at the corporate level with the types of performance measures adopted (McAdam and Baillie, 2002), linking current actions taken by managers with an organisations strategic goals and objectives (Kaplan and Norton, 1996), alignment at differing levels of an organisation such as organisation, team and individual levels (Kaplan and Norton (1996, 2001b). In all cases scholars have noted that successful alignment can lead to improved organisational performance (Kaplan & Norton, 2001b). However, what is also evident in the management and accounting literatures is that the concept of alignment has been defined, operationalised and examined in a variety of ways. More specifically, alignment can be a complex and potentially multi-dimensional concept even within one organisation.

The purpose of this study is to determine how alignment is achieved between strategy and performance measures in a performance management system that spans from the articulation of business priority areas at the senior management level through to the individual level. As an inductive qualitative empirical study, this paper's holistic orientation encompasses a variety of emergent manifestations of alignment and associated processes. These range from the strategic representativeness of performance measures employed, to alignment between business unit priorities, cost/profit centres and individuals, to sufficiency of indicators for strategic priorities representation. In this particular case, the study focuses upon the processes and shape of alignment in a government owned utility company. Furthermore, to focus this study to a reasonable domain, we position the study within one strategic business unit of the company.

This exploratory study is distinctive in two respects. First, we provide a more in-depth analysis within a strategic business unit that currently does not feature in the normative or empirical literature on the concept of alignment of performance measures to strategy. Second, alignment is reinterpreted using the metaphor of a spider's web. The spider's web metaphor is useful to emphasise the holistic nature of alignment thereby contributing to new theoretical insights. For example, the metaphor facilitates an examination of the degree to which components of the alignment concept capture multiple sets of relationships that occur simultaneously and radiate across organizational units, centres and individuals. This study has been conducted as a field based case study of a single organizational business unit. Its empirical data has been analysed and conceptualized using the grounded theory methodology.

The rest of the paper is organized as follows. In the next section, we review a sample of the current management and accounting research literatures on the

concept of alignment, followed by an outline of this study's research design. The paper then presents the grounded theory findings from an analysis of empirical data collected. The paper's findings are then evaluated in the light of the extant research literature to date and concluding research implications are presented.

Some Perspectives and Research on Alignment

Many differing performance measurement systems linked to strategy exist, but perhaps the most well known is that of the balanced scorecard by Kaplan and Norton (1996). They explain that the balanced scorecard is both a strategic measurement system and a strategic control system. Interestingly, Norreklit (2000, 2003) critiqued the balance scorecard and observed that the concepts and theories were open to interpretation by managers when applying it. On the one hand this would enable managers to develop their own scorecard. On the other hand, it could lead to "countless sources of errors" (Norreklit, 20003, p.610).

The significance of the concept of alignment of performance measures to strategy has existed in the management and accounting literatures for some time (see Kaplan & Norton, 1996, 2001b; Slagmulder 1997; Atkinson, 1998; Otley, 1999; Malina & Selto, 2001; Chenhall 2005). As asserted by Kaplan and Norton (2001a) the interest in alignment stems from the premise that if there is a tight connection between performance measures linked to strategy, this would contribute to the long term success of the company. Other scholars such as Fonvielle and Carr (2001) assert alignment is a key concept that is pivotal for achieving organisational effectiveness. Simons (1995) control framework, while not directly referring to alignment *per se*, nonetheless implicitly recognises its importance. His control levers such as belief, boundary, diagnostic and interactive control systems incorporate and attempt to exploit linkages with a view to facilitating various forms of alignment.

Aspects of alignment focused on by Kaplan and Norton (1996, 2001b) are alignment of strategic, departmental, team and individual objectives, alignment of compensation plans with strategic objectives and also alignment of management information processes and systems employed to strategy. These studies were normative based on case observations gathered by the authors over a number of years from a diversity of companies all with the aim of elaborating upon the means for improving organisational performance. Similarly, Otley (1999) provides a descriptive framework observing the need for alignment of business objectives, operational practices and performance measures with strategy.

Such discussions have also been prevalent across a wide range of management research journals. McAdam and Bailie (2002) acknowledge the array of models for business improvement that have sought to align performance measures and strategy, searching for actions that are consistent with decisions. In an interview study within a single organisation, they examined the effectiveness of performance measures in assisting the organisation's achievement of its

strategic objectives. Their findings confirmed Kaplan and Norton's (1996) recommendation that an eclectic mix of performance measures (including financial, non-financial, tangible, intangible, balanced, mechanistic and organic dimensions) best align with complex and rapidly changing strategies. Normative analysis and reflection on alignment has also been a feature in the general management research literature as for example reflected in Beer et al's (2005) development of a Strategic Fitness Process to facilitate the alignment between an organisation's strategy and its environment, and to produce an organisational learning process that can revitalize the organisation. In similar vein, Kathuria and Partovi (2000) propose a conceptual model for aligning people management processes with manufacturing process technology, a structural decision and associated competitive priorities.

What is also evident in the management and accounting research literatures on alignment is the multiple ways in which alignment can be defined, operationalised or examined. It can focus on the alignment between organisational environment and strategy, between organisation structure and strategy, between strategy and leadership, between organisational learning and reshaping, between strategic priorities and performance, between functional and business level strategies, and between individual, group and organisation-wide stocks of learning and business performance (Bontis et al, 2002; Joshi et al, 2003; Beer et al, 2005). So alignment can represent a complex and potentially multidimensional concept even within the one organisation. This can be further complicated by the types, pace and speed of learning that may be involved through the operation of performance measurement and management systems for individual managers through to business units and organisations overall. The need for and level of learning that may accompany any realignment, particularly of performance measurement systems with organisational environment, objectives or outcomes, has the capacity to involve significant changes in organisational structure, process and culture (Beer et al, 2005). As Bontis et al (2002) found in their survey covering 32 organisations, individual, group and organisational level learning can all be positively associated with business performance.

Further empirical studies in this area include those by Slagmulder (1997), Malina & Selto, (2001), Chenhall (2005), McAdam et al (2005), and Bourne et al (2005). Working within the functionalist paradigm Malina and Selto (2001) draw upon observable attributes of effective communication and management control theories to determine if there is a relationship (association or causal) with strategic alignment in the use of the balanced scorecard in an international manufacturing company. Surprisingly, the authors found in this organisation that there was no evidence to support the hypothesized relationship that the attributes of effective communication such as reliable, understandable and trustworthy messages, support of organisational culture and knowledge sharing, would lead to strategic alignment in how the balanced scorecard was used. Perhaps, other attributes of communication not considered by the authors would have changed this result. Nonetheless, this presents an opportunity for future research to

understand how the balanced scorecard is communicated effectively to members of an organisation. Allied to the role of communication in securing alignment, is the question of motivation. McAdam et al (2005) employed multiple methods (survey, interview and focus groups) to study the development and application of performance management in a UK public sector department. They found that performance management retreated from a continuous process to an annual event and that changes proceeded without corresponding changes to appraisal, recognition and reward systems. Their findings highlighted the problems caused by business objectives not being aligned with motivational factors, particularly the consequent divergence between organisational staff and ownership stakeholders. The importance to effective alignment between performance measures and performance outcomes of the regularity and intensity of management's engagement and interaction with performance measurement processes has been further confirmed by Bourne et al (2005). Their multiple case studies of business units within the one organisation, found that higher performing business units were characterized by a continual attention to and interaction with both organisation-wide and their own self-developed control data and performance indicators.

Also working within the functionalist paradigm, Chenhall (2005) predicted that the variable "alignment of manufacturing strategy" would act as a mediating variable between strategic performance measurement system variables (strategic & operational, supplier orientation, customer orientation) and strategic outcomes (low cost, flexibility and delivery), to enhance organisational competitiveness. Interestingly his results had only weak statistical significance for the paths strategic performance measurement systems (supplier orientation) and strategic outcome (delivery). The path model based upon the collection of cross-sectional data was exploratory and contributes to the literature on alignment being an intervening variable. However, only three dimensions of alignment were identified from the literature and this may explain why the variable had weak statistical significance for SPMS (strategic and operational and customer orientation) and also with strategic outcomes (low cost-price and flexibility). This suggests that alternative research approaches maybe appropriate to unearth more about the concept of alignment. Furthermore, because of the cross-sectional nature of the data collected this study did not consider the impact of contextual variables.

Although not in the performance measurement literature, Slagmulder (1997) investigated how management control systems (MCSs) were used to achieve alignment of strategic investment decisions (SIDs) in manufacturing plant and equipment with a firm's strategy. The grounded theory developed by Slagmulder from case evidence collected from ten research sites suggests that changes in environmental conditions, can lead to strategic misalignment with continuous adaptation of management control systems required to maintain better alignment between strategic investment decisions and strategy. The study contributes to the literature on alignment in a number of ways. First, the findings identify

sources and manifestations of strategic misalignment that can occur through changes in the environmental context of a firm. Second, the concept of alignment is a process that is complex and dynamic. To complement the work done in this study it would be fruitful to capture the nature of this concept within a single case study organisation to enable more of the complexity and dynamism to be elaborated upon.

Of relevance to this paper also is the emerging number of studies of alignment within the public sector. As already referred to above, McAdam et al (2005) have examined performance management approaches in a large UK public sector department in an environment of dramatic and wide-ranging public sector reform. They focus on the challenges of attempting to import private sector techniques into a more complex multi-stakeholder public sector environment. Radnor and McGuire (2004) also focus on this issue in their dual case studies of two UK public sector organisations to determine whether private sector based performance management systems can be successful in raising public sector organisation productivity and performance. They discovered a less than successful alignment between these performance management systems and productivity and performance, reporting that the public sector organisations studied, focused upon measurement and evaluation rather than upon management of performance, and that they restricted themselves to diagnosis of performance rather than its interactive improvement. Additionally, Llewellyn and Tappin (2003) observe the importation of private sector corporate strategic management processes into the public sector, arguing that in having to seek a wider range of strategy funders than simply corporate customers, public sector organisations face an alignment dilemma as to whether strategy drives funding or funding drives strategy. Townley et al (2003) report on a study of rationalizing of public sector operations and expenditures in Alberta, Canada through the introduction of formal business planning and performance measurement systems. They found that in contrast to initial manager enthusiasm for the anticipated consultation, dialogue and discussion of values, missions and goals, the process reduced to a technicist control tools focus that limited debate and promoted an instrumental rationalization. Any alignment between reasoned justification and practical operationalisation of performance measurement and business planning appeared lost, with consequent managerial resistance arising. Thus performance measurement and management related issues of alignment are particularly important in this ongoing era of major change in public sector management philosophy, focus and delivery.

In summary, the extant management and accounting literatures provide quite wide-ranging but often times partial analyses of the concept of alignment. On the one hand, the normative and anecdotal studies do not appear to be strongly driven by *a priori* theory. On the other hand, those studies that adopt *a priori* theories are partial in that they capture only specific attributes from relevant theory that are considered to contribute to the process of alignment of performance measures with strategy, or whichever alignment of factors they

choose to study. Slagmulder's (1997) study, although standing outside the performance measurement literature, provides the one of the more comprehensive studies of alignment that can usefully inform investigations of the alignment of performance measures with strategy.

What all of these studies suggest is that more research is required to investigate in more depth the concept of alignment to understand this phenomenon. Additionally, alternative research approaches are needed to complement the findings of normative, anecdotal and existing empirical studies in the performance measurement literature. One such alternative is presented by the grounded theory approach.

Research Site

The research site is a government owned trading utility located in Australia. This is a significant entity. In the financial year ended 30 June 2005 the entity managed approximately \$8 billion in assets and had operating revenue of approximately \$500 million. Additionally, the company outsources a significant proportion of both operating and capital expenditure to the private sector on performance based contracts. The entity is regarded as well-managed and a leader in the area of performance measurement by an Australian Auditor General's office. The entity introduced the existing performance measurement system in the mid nineties. During the last decade, the system has evolved, thus the entity has a long history and commitment to the management of performance measures. Therefore, the entity and its performance measurement system are ideal for a field-based research study on the fluid concept of alignment.

The strategic business unit of analysis for this study is the unit that has the responsibility in providing support to all areas of the business in relation to the development, implementation and maintenance of strategies, systems, and policies and procedures. The structure of the unit at the time the interviews were conducted was made up of seven units: six cost centres and one profit centre. The six cost centre units within the team were Finance, Supply, Information Technology, Pricing and Economic Regulation, Risk Management and Insurance, Corporate Secretariat and Legal Services.

Research Method and Design

The adoption of a single organisation field-based case study approach using the grounded theory methods of analysis of data collected, is considered to be the most appropriate method for this investigation for a number of reasons. First, because there is little empirical evidence on alignment of performance measures to strategy documented in the literature, it would be inappropriate to pre-commit to a particular theoretical lens (Glaser & Strauss, 1967). Second, prominent scholars such as Otley (1994), Otley and Berry (1994), Parker (1994), and Ahrens and Dent (1998), argue that the field-based case study method is a valuable means of capturing the complexity and richness of "accounting in action" within its organisational context. Thus, grounded theory is employed in

this study as a methodology that can analyse actors' behaviours and practices in their own organisational and social context and induce theory from those analysed practices (Parker and Roffey, 1997).

Given that it is now generally accepted that two different versions of grounded theory exist, particularly reflecting the now divergent approaches of Glaser and Strauss, it is important to explicate the grounded theory approach adopted (Goulding, 2002; Lye et al., 2006). In this study the emergent approach advocated by Glaser and Strauss (1967) and Glaser (1978, 1992) was adopted. However, some of the procedures were supplemented, where it was practicable and expedient to do so, by some of the techniques advocated by Strauss and Corbin (1990). For example, a literature review was conducted before analysis of the data on the concept of alignment. This approach was consistent with the Strauss and Corbin (1990) approach to framing the research question. By conducting a literature review before entering the field, it was discovered that existing theories failed to capture or explain holistically the multi-faceted nature of alignment and this provided the study with a broad, open research question that would capture alignment processes. The key strength of the grounded theory approach is that it is noted for its rigour and in providing a systematic means for constructing theories grounded in participants' everyday lives. This is achieved through theoretical elaboration of the concepts derived from the joint collection and analysis of data, and use of procedures such as the constant comparative method.

Thus methodologically, this particular study can best be characterised as a grounded theory case study positioned in Llewellyn's (2003) concept and theory level three category of qualitative empirical research and its associated level of theorization. It crosses over between both micro and meso levels of analysis, exploring the foundational concepts of how alignment is perceived and constructed by actors. It thereby sets out to begin the task of theorizing how alignment happens or doesn't happen in practice. However it should also be recognized that elements of Llewellyn's (2003) level one metaphor and level two differentiation theorization are also present in this study. The role of metaphor in opening up our understanding of alignment is pursued via the metaphor of the spider's web, while at the same time, differentiation is employed through a reflection on the dynamic versus static potential nature of the alignment phenomenon.

The primary evidence collected for this study is obtained from in-depth, tape recorded interviews with multiple individuals with differing perspectives on alignment. All interviews were transcribed. We met with the strategic business unit manager from the senior management team as well as with operational managers of units within the business services strategic business unit. Interviews were conducted with eight people over a period of three months with interviews ranging in length from one hour to just under three hours. Other data

collected and used in the analysis included annual reports, publicly available reports and internal company documents provided by interviewees.

Both semi-structured and unstructured interview methods were employed. That is, the interviews were open-ended, but a semi-structured interview questionnaire was used to guide the process. Additionally, the use of clarification and probing techniques seeking more elaborated responses or further explanations of responses were also employed during the interview process. For each interviewee, an open ended closing question was used to elicit relevant issues and related responses that may not have already been covered. Triangulation of data was facilitated by interviewing participants at different levels of the organisation, as well as the collection of documentary evidence.

Simultaneous data collection and analysis commenced from the first interview. Field notes were written after each interview. During the analysis of interview data memos were continually written up capturing the emerging theoretical dimensions. Initially interview data was coded on a paragraph by paragraph basis. After completion of open coding at the paragraph level, further analysis of the paragraph was undertaken on a line-by-line basis. The primary reason for undertaking this second level of coding was to capture dimensions and properties of the theory that were not captured at the paragraph level.

Furthermore, as suggested by Glaser (1978) some basic questions were used to guide the open coding process. These were:

1. What are these data a study of?
2. What category does this incident indicate?
3. What is actually happening in the data?
4. What else is happening in the data?

Some scholars, such as Locke (2001) have observed that the analytical techniques employed to analyse qualitative evidence collected in a case study are obscured. That is, the procedures by which the data collected is analysed and reduced to develop a story are not always clear. In this vein, Silverman (2000) strongly asserts that, in conducting a field research study, it is incumbent upon the researcher to reveal to the readers of the study that the analytical methods used were reliable and the conclusions derived valid. Thus, in this study a case study database is maintained that includes individual interview questions, a list of the site visits and length of interview times, interview data, documents collected during field visits, field notes and memos written up during analysis of the data, and general company information (e.g. annual reports).

The Theory

The insights gained from analysis of the interview data and documentary evidence are used to generate a grounded theory of alignment of performance measures to strategy. In the context of this study alignment is a conceptual

thread that either actively or passively is pursued to link performance measures with actions to strategic intent in a performance management system.

There are four key elements to the theory that recur empirically. The first element discusses performance management infrastructure components that passively influence the alignment process. The next three components of the alignment process all have an active role establishing alignment of strategy with the performance management system. The second element discusses the process of cultivating linkages. The third element elaborates upon what is meant by the term two-way cascading approach and the final element to complete this theory is steering the behaviours of people.

Performance Management Infrastructure

There are three major infrastructural components that contribute to the alignment of performance measures to strategy in a performance management system. They are planning documentation, organisational hierarchy and articulated values of the company. Each of these components provides part of the skeleton necessary as a driver of performance management because they provide a framework that links to the actions and interactions of individuals.

First, one of the properties of this category is planning documentation. On the one hand there is a strategic and corporate plan, KPI scorecard report, individual performance plans and individual development plans. All of these plans are aligned with the key business priority areas. So, at the most basic level the company's strategic intent is communicated throughout the organisation in all of the planning documentation. On the other hand, similarly, in monthly operational reports that go to the Board compiled along the lines of a balanced scorecard reporting system the same business priority areas are listed. These are also consistent with the corporate plan. As one interviewee explained:

So our plans do have these alignments with the key business drivers. You'll see them in individual plans, you'll see our KPI's scorecard reporting and the key headings and, then you'll be able to see exactly the same words in our corporate plan (G:182:275)¹.

In this company the annual planning cycle for individuals comprises the completion of both an individual performance plan and development plan. The performance planning guidelines outline the focus on "key achievements and measures" that are appropriate for the relevant position to be achieved over the next twelve month period, add value to the company and contribute to the business priority areas. Subsequently, the completion of the performance plan template provides the links between business priority areas, specific actions and performance measures that are achievable. From a practical viewpoint the performance planning process will identify issues and expectations at each of the

¹ Numbers in brackets represent interview letter and lines of text referenced in the qualitative package NVivo. For example, (G 182:275) is interview G, paragraph 182, 275 characters.

levels. Upon mutual agreement, these measures subsequently become an accountability document for the actions of individuals to be assessed with over the next twelve months.

Similar to the performance plan template, in the development plan template there is a nexus between the company's expectations and an individual's expectations over a range of areas such as technical skills, career aspirations, behavioural and leadership competencies. This plan also serves the dual role of subsequently becoming an accountability document.

A second infrastructure component is the organisational hierarchy that provides the properties of action, interaction and influence in terms of driving the alignment of a common purpose. Firstly, the performance management infrastructure provides the basis for conducting one-on-one meetings. That is, what is included in an individual's performance and development plan is discussed between the manager and their direct reports at each level of the hierarchy. The frequency of these meetings ranged from monthly to six-monthly. Secondly, there is a monthly reporting regime whereby most team managers provide the strategic business unit manager an operational report on their team's performance. Subsequently, the strategic business unit manager reviews the reports received, edits them as they see fit and forwards a monthly report to the managing director. Similarly, the managing director reviews and edits reports from each of the senior leadership team deciding what should go through to the Board. What is happening at each of these levels is that edits are being made at differing levels based on current priorities. The hierarchal structure is providing the reporting regime information to people at various levels. Additionally, broader visibility of the performance of the organisation is increased as information is transferred up the hierarchy.

A third infrastructure component, perhaps less apparent, is the articulated values of the company, in the planning documentation, signaling and reinforcing the cultural values of the company. For example, the company's values are listed on the cover sheets of both the performance and development plan documentation.

This is a component that currently has not been derived directly from the interview data. However, in the context of this company, it has been derived from the planning documentation identified above as well as a review of publicly available information such as annual reports. For example, the values of the company are referred to in the performance planning guidelines. More specifically, one of the guidelines articulates amongst other things active contribution of actions to include demonstration of the company's values.

Drawing on the metaphor of the spider's web, the performance management infrastructure is a complex assemblage of interlocking and overlapping threads that provide the underlying framework for driving organizational performance. For example planning documentation facilitates meetings and reports within the

organizational hierarchy. In a sense then, planning documents provide a web of threads along which managers and staff travel as they exercise their reporting and accountability functions. In this way, the organizational hierarchy is rendered more visible and its functioning and interrelatedness is expressed through the web of performance plans and reports.

Cultivating Linkages

Cultivating linkages captures the variety of interconnected linkages that exist throughout the company at all levels including with external stakeholders in an interactive manner to improve overall performance. Given that so many discrete and overlapping linkages emerge from the performance measurement system we must restrict our attention to the most significant characteristics.

First, as noted earlier, the planning documentation provides the linkage to the business priority areas. Here we elaborate more upon the linkage of these plans that have the aim to improve the linkages from business priority areas to individual action and to create shared understandings. At the strategic level the strategy has been described as being “very broad, very principled” that is interpreted into quantifiable targets or outcomes and the dollars needed to achieve it in either the operational² plan or corporate plan. At the next level there is a flow from the business priority areas in the strategic plans to actions and measures agreed upon in individual plans. Furthermore, in some parts of the business there are team based performance plans. In other parts, such as the profit centre, there are no performance plans for non management staff but there are linkages to the company’s strategic environmental objectives.

Second, the performance measures in an individual’s performance plan can be described as either ambiguous or unambiguous. For instance, in an unambiguous target the meaning of what is to be accomplished is clear. For example, projects required to be undertaken by the team are identified in an individual’s performance plan whereby the performance measures are specific and can be linked to a business priority area.

In the contrasting scenario, whilst the performance measures are linked to the business priority areas, they are considered to be ambiguous. That is, the interpretation of what is to be achieved can be uncertain due to a range of applicable different meanings. Thus, the next quotation captures the ambiguity associated with achieving a particular target for one team when the target is stated ambiguously:

...and then we have a measure which – again I think this is one that SBU manager had that was general throughout the whole team, and measures

² This is a pseudonym term because the use of data for this study is regulated by a confidentiality agreement, which requires the researchers to protect the company’s identity and its proprietary information.

the action supposedly, and the measure is to be “operating expenditure for the team is below plan”. So I mean my direct contribution to that is, you know, difficult to measure, or it could occur through a number of means. (A: 53:662).

Another area where the linkages could be described as ambiguous and in this case potentially lead to misalignment is when the vision statement is changed leading to a “tinkering” with the goals and values. Concern was expressed that the change was communicated throughout the leadership team and to the team manager level but not to staff below.

Third, another aspect of linkages that emerged as significant was internal vertical and horizontal linkages within the organisation. The vertical linkages were usually discussed in the context of the business priority areas. Team unit managers determine which of the business priority areas their team will contribute to and this provides the basis for developing the key performance indicators to be included in their individual plan. At the same time during this process for team managers, there is an interaction with the strategic business unit manager where agreement is reached on the unit’s targets for the year, simultaneously creating an accountability relationship.

Our description of the horizontal linkages reveals that a key property of these is involvement. A primary reason for this involvement is to be aware of what is happening in the company. The tactics employed include working with people from other strategic units within the company, attending meetings across functional areas and establishing cross-functional working groups to determine relevant solutions to an issue, each of which are all examples of gaining and sharing knowledge. Another aspect of involvement includes the education, motivation and cooperation of people to be involved. Other aspects of involvement are the organisation and co-ordination of seminars with external stakeholders as well as having invited speakers from outside the team give a presentation from another strategic business unit. One team manager spelled out how involvement was done when they were speaking about managing a process for preparing a major document for the first time that would have funding implications for an independent regulator:

Well we did, we ran some lunchtime seminars to try and raise the level of awareness across the organisation, so what’s this beast called regulation, what is it all about, what’s the cherry at the end of the day, all that sort of stuff. And then we set up a whole range of working groups on a particular charging issue where we involved some planners and some operators and technical specialists to help us work through what we’re going to charge for, the parameters and all that sort of thing. And then we’ve had another working group involving people that are involved with the billing, how would we actually bill it out. That seems to work pretty well. What else have we done, finance within business services, that’s easier I think

because it's within our strategic business manager's empire (D: 181, 1236).

Fourth, a prime means of aligning performance plans that capture actions of individuals and performance measures for the year is the link to remuneration. More specifically for managerial staff the remuneration system complements the performance measurement system by way of a significant performance bonus. This bonus is aligned to both individual performance measures as well as corporate targets, which are the ones aligned at a high level that go through to the Board. One team manager makes this linkage clear.

...we obviously get remunerated by bonus as well. My bonus, twenty-five percent is attributable to the success of the corporate objectives as well.... which are defined at the start of the year by our human resources group subject to Board approval and they're more corporate key performance indicators, some of which I have a direct control over, some of which I don't (B: 13, 480).

In effect what happens with twenty-five percent of the bonus being aligned to corporate targets is that managers receive some percentage towards their bonus if the company does well. The contrast position is if the company does not do well then the portion of the bonus aligned to corporate objectives is reduced. The significance of the links between the bonus structure and assessment is the aligning of individual and organisational performance. That is,

...it is trying to build in this organisational performance and individual performance which we think is particularly strong. [That is], the right message and the right process for the management group in particular (G; 23, 211).

Fifth, as a company owned by the Government there is an alignment with the influence of external stakeholders such as regulators, service providers, customers and the community that shapes the strategic and operational direction of the company. Thus linkages exist with external stakeholders with varying degrees of influence. In one instance, the preparation of an operational plan for a three year period was necessary because of the introduction of a new regulatory framework that specified such a plan to determine funding requirements for that period. In the process of finalizing the plan a draft was distributed to all the key stakeholders for comments to be incorporated into the final plan. In another instance related to the operational plan there were a number of meetings conducted fortnightly for a period of eighteen months with retail service providers.

The main characteristic of these relationships is the alignment of the company's strategy and the reporting of high level operational performance indicators for management and regulatory purposes. Another characteristic is the

development of interactive relationships through regular meetings such as developed with key customers.

There is also the potential for misalignment of linkages with external stakeholders to occur in relation to the achievement of outcomes such as public health, environmental, and water resources because the company is “dependent” upon the regulators to have planned in advance for three to five years ahead.

In summary, it is clear that there are a variety of interconnected linkages that exist to support the performance management infrastructure as a basis for interaction throughout all levels of the company including with external stakeholders. Whether the linkages are internal or externally orientated they are often used interactively to cultivate a common purpose. Again drawing on the metaphor of the spider’s web is useful to illustrate the dynamic and interactive nature of the performance management system working in practice. This myriad of observed and potential linkages reflect a web of horizontal and vertical connections that criss-cross the organisation. Arguably the multiple forms that these linkages may take, reinforce the strength and durability of the web as a framework that holds organizational activities together and supports their various alignments.

Two-Way Cascading Approach

The analysis of two-way cascading approach reveals that communication as a way of cultivating linkages to a common purpose is a key component of this sub-category. The communication direction can occur either downwards or upwards and also interactively (both ways). One viewpoint captures succinctly the cascading approach as it works both ways in this company:

And I think there is a real, there is a reasonable alignment top to bottom and bottom to top, which again is around...we target I think getting the simple structures right, without overcooking some answer (G:182,227).

When the communication is downwards aspects of this type of communication are explanation, supporting and committing to the achievement of targets, reinforcing what is being aimed at and holding people accountable to their manager or co-ordinating other people for target achievement. The primary means by which this communication downwards occurs is through either one-on-one or team meetings. To illustrate how the measures are supported to achieve a target, co-ordinate actions and hold people accountable here is an exchange between interviewer and a participant:

Interviewer: So you have, what did we say, fourteen or fifteen performance measures for yourself, individually.

Participant: Yep, and then that cascades down to

Interviewer: Your staff.

Participant: Staff, that's right. More than likely those performance measures will be in identical areas to my plan because they're meant to reinforce what I'm trying to achieve, but would be more detailed, they'd actually be broken down. Say for example my fifteen areas, if you pick one, perhaps one of my senior managers, he might be covering say, I don't know, of the fifteen maybe four or five, and I'd take those four or five and break them down into more detailed sub-components and put those in his plan (D: 115-121, 663).

However, the use of meetings is not the only form of communication downwards. Other means of communication identified were email and demonstration of actions by the leadership team.

Some upwards communication also emerged in this study in relation to the monthly reporting regime in place for operations within the strategic business unit. In this process most team managers prepare a monthly report about their team's performance providing visibility and transparency to key issues and performance highlights over the last month. For example,

So what leaves me as a hundred percent to the strategic business unit manager, is probably ninety to ninety five percent to the managing director, is probably one percent to the Board (F: 195,458).

In terms of individual performance plans one team manager described the setting of their staffs' targets in terms of cascading upwards and the differing roles. They state:

So the language used in my individual team members performance plan as opposed to mine will be, they would be like undertaker and I'll be insurer, you know, like so I'm ensuring that something happens, they're actually doing it. So it's cascading up from team right through (B:77,447).

New emergent issues that need to be measured are sometimes cascaded upwards. This approach gives the emergent issue visibility up the line. For example, the issue of security was mentioned as an emerging issue. A proactive response to how this issue was emerging is reflected in the following quote:

Security for us is a big thing at the moment. We're looking at some metrics to incorporate; we've got some metrics on security. I want a few more in there so we're discussing with (supplier company) well we're looking at the issues we've got and we're putting in some works to sort those issues out, but what are the metrics we're gonna put in place to measure the outcomes ahead. They're the sort of things I would think

when we do this next year I would probably put up well maybe security. Board, MD, everyone's interested in that, maybe we need a metric in here around security (I:66,581).

However, the communication being only one directional is not reflective of reality. In many instances there is an interaction between people communicating in a two-way discussion process, often iteratively to seek agreement on targets for the forthcoming year. Here is an example of the interactive nature of setting the performance targets.

So I suppose I've come in with a bottom up in terms of what my team's gonna be doing, the SBU manager will then offer a top down approach saying yeah well you probably don't need that one in there but can you substitute that one with one from me. And then that's the performance plan that we then commit and both sign, so it gets signed by myself, my one up and then one removed, so my performance plan gets signed off then by the Managing Director (B: 77, 443).

This instance captures the cascading effect both upwards and downwards through the process of the one-on-one meeting. There is also agreement and commitment to the annual targets for the participant and the plan is finalised with both parties signing the performance plan. However, another participant pointed out that the timing of the completion of performance plans influenced how the process worked in practice. That is, agreement on performance measures was an iterative process and the timing of meetings and deadlines for completing the performance plans could be influential.

The two-way cascading approach provides the visibility and importance of the business priority areas. In terms of the spiders web metaphor, the space between the horizontal and vertical radials is where the communication and interaction often occurs.

Steering Behaviours of People

Steering the behaviours of people is complementary to the other subcategories discussed above of performance management infrastructure components, cultivating linkages and two-way cascading approach. The word steering captures the influence of the performance measurement system to guide the behaviours and actions of people towards improved organisational performance.

The sub-category "steering of behaviours" has the properties of steering the progress of behaviour, intended behaviour, responsive behaviours and actions. The property "steering the progress of behaviour" largely takes the form of being driven by the actions of the managing director and then linked to performance and development plans. In relation to intended behaviour, the performance management system clarifies the expectations for individuals giving them the chance to adjust their behaviour and or reassess their options. The final property

of steering behaviours is responsive behaviours. Here is an example that illuminates the range of responsive behaviours from being reactive to proactive:

Like unless, unless seeing crosses here and there's some sort of action from it, well why would you bother, you know what I mean? Like, especially for us because it's around services more than maybe a strict financial measure, but around services you've just gotta be thinking well how does this affect the behaviours. And you know it affects here, like they'll be a big stick, if you keep getting crosses you know people in the team will know at some point somebody's going to say what the hell's going on, sort it out. Like is that the only behaviour or is there a better behaviour to say well before anyone comes near me with a big stick, I'm taking note of this and I'm really ensuring that I'm not getting crosses so I'm being proactive rather than just waiting to this, you know, past measure, like this happened last month, this cross, this isn't what's happening next month (I: 230, 896).

The relevant dimensions of actions are assessment, managing and control. Assessment of performance relates to whether the target was achieved or not. The next action, managing, relates to the task of managing people to complete a task within the team and those who are outside the team, which is more difficult. This leads to the control dimension which spans from having control for the team members to having no control because the members come from other teams.

If we go back to the spiders web metaphor, when one looks up close at a spiders web it becomes obvious that, the web is not truly symmetrical in design with many fluctuations. This is not unlike the behaviours of people. In some respects, many behaviours of people can be routine and relatively predictable, but in other respects they may be extremely difficult to predict with any confidence.

In this section we have attempted to develop an integrated theory about alignment to gain a greater understanding as it pertains to linking performance measures to strategy in a performance management system. The four key elements all contribute to the theory. The element performance management infrastructure provides the framework for passive alignment to occur. The other three elements cultivating linkages, two-way cascading approach and steering behaviours of people are active processes employed to achieve alignment of performance measures to strategy.

The implications of these findings are that the concept of alignment is an integral component of linking performance measures to strategy in a performance management system. More specifically, this research shows that alignment takes many forms and is dependent upon the context in which the interactions occur. Not unlike a spiders web where the number of types of spiders web are numerous (Fernz, 2002).

An Emergent View of Alignment

From the above analysis, emerges a picture of alignment being constructed through a combination of cyclical planning documentation, the functioning of the organisational hierarchy, and the articulation of the organisation's values. These appear to work as dynamic processes of action, interaction, communication and influence, so that what at first sight may appear to be static documents, policies and rules, in fact present themselves as vibrant and complex interactive and iterative processes.

The focus of these alignment constructors is one of cultivating linkages throughout the organisation. At the macro level, these include linkages between planning documentation and business priorities, while at the micro level, they include linkages between individual performance measures targets and remuneration. Furthermore, the public sector ownership of the organisation also produces evidence of alignment with and linkages between the organisation and its external stakeholders. This is particularly relevant in terms of strategic performance and regulatory requirements

Such linkages have the directional characteristics of operating both vertically and horizontally within the organisation. In terms of both macro/micro focus and directional orientation, linkages are found to exhibit properties of varying degrees of ambiguity and of involvement.

In further investigating the dynamic characteristics of the intensive interaction that has emerged as a feature of the alignment process in this organisation, two way communication and deliberative steering of behaviour emerge as its manifestations. Two way communication takes place across the full spectrum of individual and group levels. Steering takes the forms of influencing intentions, responses and actions.

Thus alignment in this study reveals itself as an intensive and interactive process: complex, dynamic and iterative. This presents dimensions and characteristics not hitherto drawn out from an insider viewpoint and in such contextualised environment.

Discussion and Future Research Implications

Here, using the lens of the theory that has emerged from the analysis of data collected from the field, we can now position the findings from our study with the extant literature. The significance of a performance management infrastructure has been recognized in the literature. For example, Kaplan and Norton (2001a), state that "by translating their strategy into the logical architecture of a strategy map and Balanced Scorecard, organisations create a common and understandable point of reference for all organisational units and employees" (p. 90). This prescriptive approach is supported in our study by the embedded nature of the performance planning documentation, organisational hierarchy and

the espousal of the company's values. This research supports Kaplan and Norton's assertions that the performance management infrastructure of a system is necessary, but that by itself this is insufficient for a successful performance management system.

Franco-Santos and Bourne (2005) note the conflicting viewpoints in the literature about whether to link rewards to performance measurement systems. On the one hand scholars such as Kaplan and Norton (1996) advocate that rewards be linked to rewards to encourage better performance results. On the other hand, scholars such as Ittner et al., (2003a) argue against the link from achieved performance targets to rewards. This study contributes to the literature supporting the link to remuneration and the performance measurement system. In this study the reward system was complementary to the performance measurement system. Furthermore, the reward structure included a component for the achievement of both individual and corporate targets.

In terms of relationships with stakeholders, Franco-Santos and Bourne (2005) observed from their analysis of the literature that few scholars have investigated the linkage between performance management systems and external contextual factors. They identified that scholars have investigated industry characteristics and environmental characteristics. However, they were silent about the interactive relationships that were built and maintained with external stakeholders. This study reveals that cultivating linkages with external stakeholders was necessary and prudent for this Government owned entity.

Norreklit (2000, 2003) in her critique of Kaplan and Norton's balanced scorecard concluded that it did not achieve the aim of being a feed-forward control system for linking strategy during the building and implementation processes throughout the company. By contrast, the findings of this study reveal that interactive communication was linked to strategic business priority areas and performance measures at all levels of the company.

In conclusion, based on our field research we have contributed empirical evidence to provide insights into how performance measures can be aligned to strategy in a performance management system: an area about which little is known (Ittner et al., 2003b).

As already indicated at various points in this paper, the insights from this study lend themselves to being reconceptualised using the metaphor of a spider's web. This facilitates an examination of the complexity and dynamism to which components of the alignment concept capture multiple sets of relationships that might influence a manager's decisions which otherwise would appear to be linear, within a performance management system. Thus, with such a metaphor the nature of the performance management system shifts from a focus on the issues of setting objective performance measures and linking these to strategy,

to the hidden, perhaps subjective dynamics that create linkages at all levels within an organisation.

For instance, when a garden orb web spider³ builds a web, it uses silk to construct the bridge and anchor threads. They subsequently lay the radials and then lay the auxiliary spirals from the centre out to the frame. In a performance management system the framework is the entity's environment (both external and internal). The radii represent the essential elements that make up the concept of alignment. That is, from this study the radii would be the performance management infrastructure, cultivating linkages, two-way cascading approach and steering behaviours of people. The auxiliary spirals from the centre are represented as the thread of alignment linking the framework and the radii. The radii also symbolize that direction starts from the centre, in this case the Board, and links every individual at differing levels in the organisation. Conversely, being an interactive dynamic process, it should be noted that issues can emerge from any location in the company and be escalated upwards to the centre. These links can be either horizontal or vertical and reflect movement and interaction between any level either at the horizontal or vertical level as well as with the company's environment.

Two fruitful areas for future research can be identified. First, It is improbable that the alignment process that emerged from analysis of one strategic business unit within a company could be universally applied to all units within an entity or to other company's' with alignment problems without substantial modification being required. Thus, the first potential area for future research would be to expand the theory to other units within the business. Second, another future area of research would be to replicate the study in other business services units in a variety of both profit sector and non-profit sector organisations.

Conclusion

In this study we sought to contribute empirical insights into a performance management system where there is alignment of performance measures to strategy. The alignment literature includes both organisational-level and individual-level theories to explain the alignment of performance measures to strategy in organisations. These levels of analysis have focused on different phenomena, giving rise to complementary however, disconnected pictures of alignment. Understanding the processes by which alignment of performance measures with strategy occurs in an organisation and how this process can be better managed is of central importance to both accounting and management scholars and professionals alike.

Our findings suggest that there is much more to be learned about the processes involved in seeking and attempting to implement alignment, and that

³ This analogy draws heavily from "Garden Orb Web Spider" on the web. Web reference is http://www.geocities.com/brisbane_weavers/Garden_sp.htm

understanding these processual dimensions is a key to better grasping the multiple manifestations and patterns of alignment that can present in organisations. What is already evident from the evidence analysed here is that the process of pursuing alignment is highly complex, multi-directional, and operating at all levels: individual, through to strategic business unit, and then corporate- wide. It involves a combination of both formal and informal reporting, communication and influence mechanisms, drawing upon allied mechanisms that include control and remuneration systems.

The alignment of performance measures to strategy and ultimately outcomes represents an increasing focus of attention for researchers and practitioners. While management researchers and professionals appear to have led the way in this focus, accounting research, with its performance measurement and management orientation, has much to contribute. This study represents an exploratory step towards that contribution.

References

- Ahrens, T. and Dent, J. F. (1998) "Accounting and Organisations: Realizing the Richness of Field Research", *Journal of Management Accounting Research*, Vol. 10, 1998, pp1-39.
- Atkinson, A. (1998). Strategic performance measurement and incentive compensation, *16*(5), 552-561.
- Beer, M., Voelpel, S.C., Leibold, M. and Tekie, E.B. (2005) "Strategic Management as Organizational Learning", *Long Range Planning*, 38, pp.445-465.
- Bontis, N., Crossan, M.M., and Hulland, J. (2002) "Managing an Organizational Learning System by Aligning Stocks and Flows", *Journal of Management Studies*, 39:4, pp. 437-469.
- Bourne, M., Kennerley, M. and Franco-Santos, M. (2005) "Managing through measures: A study of Impact on Performance", *Journal of Manufacturing Technology Management*, 16:4, pp.373-395.
- Chenhall, R.H. (2005). Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study. *Accounting, Organizations and Society*, 30, 395-422.
- Fernz, H. (26th April, 2002). The web is a good place to learn about webs. *Business Times (Maylasia)*.
- Franco-Santos, M. and Bourne, M. (2005). An examination of the literature relating to issues affecting how companies manager through measures. *Production, Planning and Control*, 16(2), 114-124.
- Glaser, B. G. (1978). *Theoretical Sensitivity*. Mill Valley: The Sociology Press.
- Glaser, B. G. (1992). Basics of grounded theory analysis. Mill Place, California: Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory. Strategies for qualitative research*. New York: Aldine publishing Company.
- Goulding, C. (2002). *Grounded theory: A practical guide for management, business and market researchers*. London: SAGE Publications Ltd.
- Ittner, C.D., Larcker, D.F. and Meyer, M.W. (2003a). Subjectivity and the weighting of performance measures: evidence from a balanced scorecard. *Accounting Review*, 78(3), 725-758.
- Ittner, C.D., Larcker, D.F. and Randall, T. (2003b). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, 28, 715-741.
- Joshi, M.P., Kathuria, R. and Porth, S.J. (2003) "Alignment of Strategic Priorities and Performance: An Integration of Operations and Strategic Management Perspectives", *Journal of Operations Management*, 21, pp.353-369.
- Kaplan, R.S. and Norton, D.P. (1996). *Translating Strategy into Action. The Balanced Scorecard*. Harvard Business School Press, Boston, MA.
- Kaplan, R.S. and Norton, D.P. (2001a). Transforming the balanced scorecard from performance measurement to strategic management: Part 1. *Accounting Horizons*, 15(1), pp.87-104.

- Kaplan, R.S. and Norton, D.P. (2001b). Transforming the balanced scorecard from performance measurement to strategic management: Part 11. *Accounting Horizons*, 15(2), 147-160.
- Kathuria, R. and Partovi, F.Y. (2000) "Aligning Workforce Management Practices with Competitive Priorities and Process Technology: A Conceptual Examination", *The Journal of High Technology Management Research*, 11:2, pp. 215-234.
- Llewellyn, S. (2003). What counts as "theory" in qualitative management and accounting research? *Accounting, Auditing & Accountability Journal*, 16(4), 662-708.
- Llewellyn, S. and Tappin, E. (2003) "Strategy in the Public Sector: Management in the Wilderness", *Journal of Management Studies*, 40:4, pp.955-982.
- Locke, K. (2001). *Grounded theory in management research*. London: SAGE Publications.
- Lye, J. M., Perera, M. H. B., & Rahman, A., R. (2006). Grounded theory: A theory discovery method for accounting research in Z. Hoque (Ed), *Methodological Issues in Accounting Research: Theories, Methods and Issues*. Spiramus Press, London. (forthcoming).
- Marlina, M.A. and Selto, F.H. (2001). Communicating and controlling strategy: An empirical study of the effectiveness of the balance scorecard. *Journal of Management Accounting Research*, 13, 47-90.
- McAdam, R. and Bailie, B. (2002) "Business performance Measures and Alignment Impact on Strategy: The Role of Business Improvement Models", *International Journal of Operations and Production Management*, 22:9, pp. 972-996.
- McAdam, R., Hazlett, S., and Casey, C. (2005) "Performance Management in the UK Public Sector: Addressing Multiple Stakeholder Complexity", *International Journal of Public Sector Management*, 18:3, pp. 256-273.
- Neely, A. & Bourne, M. (2000). Why measurement initiatives fail. *Measuring Business Excellence*, 4(4), 3-6.
- Norreklit, H. (2000). The balanced scorecard: what is the score? A critical analysis of some of its assumptions. *Management Accounting Research*, 11, 65-88.
- Norreklit, H. (2003). The balanced scorecard: what is the score? A rhetorical analysis of the balanced scorecard. *Accounting, Organizations and Society*, 28, 591-619.
- Otley, D. (1994). Management control in contemporary organizations: Towards a wider framework. *Management Accounting Research*, 5, 289-299.
- Otley, D. (1999). Performance management: A framework for management control systems. *Management Accounting Research*, 10, 363-382.
- Otley, D.T. & A.J. Berry (1994). Case study research in management accounting and control. *Management Accounting Research*, pp.45-65.
- Parker, L. D. (1994). The case for field studies in management and accounting: Towards informed policy and practice in Asia. *Accounting and Business Review*, 1(2), 211-231.
- Parker, L. D., & Rothey, B. H. (1997). Back to the drawing board: Revisiting

- grounded theory and the everyday accountant's and manager's reality. *Accounting, Auditing & Accountability Journal*, 10(2), 212-247.
- Radnor, Z. and McGuire, M. (2004) "Performance Management in the Public Sector: Fact or Fiction?", *International Journal of Productivity and Performance Management*, 53:3, pp. 245-260.
- Silverman, D. (2000). *Doing Qualitative Research*. London: Sage Publications Ltd.
- Simons, R. (1995). *Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal*, Boston, Massachusetts: Harvard Business School Press.
- Slagmulder, R. (1997). Using management control systems to achieve alignment between strategic investment decisions and strategy. *Management Accounting Research*, 8, 103-139.
- Strauss, A., & Corbin, J. (1990). *Basics of Qualitative Research*. Newbury Park: Sage Publications, Inc.
- Townley, B., Cooper, D. and Oakes, L. (2003) "Performance Measures and the Rationalization of Organizations", *Organization Studies*, 24:7, pp. 1045-1071.
- Wilcox, M. & Bourne, M. (2003). Predicting performance. *Management Decision*, 41(8), 806-816.
- .

Acknowledgements

The authors would like to thank the interviewees who participated in this study. Without their contribution this study would not be possible.