# Strategic Conversation: Defining, measuring and applying the construct in organisations.

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# Statement of originality

This thesis is an original work. To the best of my knowledge and belief it contains no material previously published or written by another person except where acknowledged in the text. The material has not been submitted, in whole or in part, for a degree or diploma at another university.

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#### Abstract

'Strategic Conversation' is a term that has been mentioned with increasing frequency in literature over the last decade. Having the ability to engage in 'conversation that is strategic' has been promoted as a new core skill that is needed within organisations to help improve overall performance. The value of strategic conversation has been demonstrated by research that compared organisational performance before and after a program that used conversation to improve goal alignment. However, researchers have had to make broad assumptions about the nature of strategic conversation, and about how to manipulate it for research purposes. There has been no definition, construct, or instrument to help researchers use, or assess, strategic conversation. This research used three studies to define strategic conversation, develop a construct and measurement instrument, and test the impact of strategic conversation on organisation performance.

Study 1 set out to define strategic conversation, generate a construct, and assemble and test an instrument. Independent panels of strategy experts helped create potential constructs that were subsequently converged by the researcher with a construct created from literature. The resultant construct comprised two components that were labelled 'Purpose' and 'Topic'. The construct suggests that for a conversation to be strategic, its purpose must be to create or support organisational goals, and the topic must belong within one or more of the components of a strategic life-cycle (viz. scanning, planning, implementing, measuring, assessing.).

An instrument was assembled to test for evidence of strategic conversation in organisations. The instrument was checked by panel members for face and content validity, underwent a pilot study for ambiguity, and was tested using a cross-sectional study of 380 members from a wide variety of manufacturing, service, and government organisations. The two-factor instrument demonstrated validity and reliability.

Study 2 examined relationships of Strategic Conversation with selected organisational variables. Literature suggests that more instances of strategic conversation, or the extent to which conversation is more 'strategic', will correlate with organisational variables such as Strategic Planning, Strategic Behaviour, and Organisational Performance. The results of Study 2 supported most of the hypotheses, finding that Strategic Conversation was correlated with Strategic Planning (r = .59), Strategic Behaviour (r = .65), and Organisational Performance (r = .47) all with p < .001. Also supported, using Baron and Kenny's four-step regression process and the Sobel test, was an expectation that the relationship between Strategic Planning and Strategic Behaviour (r = .6) would be mediated by Strategic Conversation. This finding helps explain some of the variability reported in studies on strategic planning. Significantly, the strength of the relationship between Strategic Conversation and Performance (r = .47) was similar to that between Strategic Behaviour and Performance (r = .46). This parallel pathway to performance suggests that additional options exist for change agents to influence organisational development.

The final study tested if strategic conversation could be learned by organisational members, and whether the learning made any difference (wanted or unwanted) to the organisation. To test the extent of learning of strategic conversation, and its subsequent impact, Study 3 facilitated a 6-month skills-development program that was completed by 11 organisations, whose representatives met for an hour each week. Three time-interval measurements (start, mid-point, finish) were made of the four variables. The average scores over the three measurement times for Strategic Conversation were 2.59, 2.99, and 3.69. Simultaneous performance scores were 2.82, 3.27, and 3.46. The increased scores over the period were 42% for Strategic Conversation, and 23% for performance, demonstrating that strategic conversation could be learned and that the elevated skills

made a difference to organisational performance. There were also increased scores for Strategic Planning (51%) and Strategic Behaviour (62%). By comparison, scores of non-participating groups of organisations taken over the same period remained constant, thus excluding external common causes as an explanation for the performance improvement reported by participants.

In an effort to capture unintended outcomes, especially negative ones, of either strategic conversation or the learning program, a technique called 'Most Significant Change' was employed to detect, identify, and quantify such outcomes. Participants reported thirteen unexpected outcomes, and decided on a way to quantify them. All unintended outcomes were beneficial, and the magnitude of changes, averaging 45% for all 11 organisations and all 13 unexpected outcomes, were similar to the change-scores for behaviour and performance derived by the instruments.

Future academic and practitioner research posibilities, and potential applications for strategic conversation within organisations, are suggested.

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#### **CHAPTER 1 - INTRODUCTION**

This chapter provides an introductory overview of this study into the notion of 'strategic conversation' in organisations. The overview describes the emergence of strategic conversation in literature, the difficulties associated with researching it, and the purposes and expectations of this research. This research has both academic and practical value, and findings for both are outlined.

Ongoing efforts at understanding the processes of improving organisational performance have increasingly focused on approaches with 'strategic' as a prefix. Such approaches have included strategic planning, strategic intent, strategic thinking, strategic management (Chesley & Wenger, 1999), and strategic capabilities alignment and strategic adaptability (Tvorik & McGivern, 1997; Haas & Algera, 2002)

Recently, interest in things strategic has embraced strategic dialogue and strategic conversation (Haas & Algera, 2002; Rolland, 1992) and the contribution of strategic conversation to organisational change (Ford & Ford, 1995) and organisational performance (Norreklit, 2000). Strategic conversation can be regarded as conversation that has a strategic purpose and topic, and looks outwards to advance the organisation in its environment, while other forms of conversation such as operational or administrative tend to have an internal focus and do not set out to advance the marketplace effectiveness of the organisation.

In spite of the increasing interest shown in strategic conversation in organisational and practitioner literature, very little mention has yet been made within psychology related fields. A literature search was conducted for direct mention of strategic conversation, or of similar notions such as strategic dialogue, strategic

discourse and strategic dialogue. Of 125 mentions, 3 were from HR related journals (e.g. Training & Development and Personnel Review), 6 were from psychology related (e.g. Annual Review of Psychology and Journal of Applied Behavioural Science), while the predominant count was 116 from management and strategy focused publications (e.g. Organizational Dynamics and Strategy & Leadership). Understandably, literature with a managerial focus is more concerned with *using* strategic conversation (van der Heijden, 1992; Chesley & Wenger, 1999) than with measuring it or understanding it (Von Krogh & Ros, 1995).

The attraction of strategic conversation to practitioners, advisors and organisational leaders seems to be more than just its logical good sense. Evidence to support the idea of a strong link between strategic conversation and desirable outcomes, such as profit, comes from case examples and experiments (Stout, 1998). Even without empirical support, strategic conversation is appealing enough that practitioners, managers and academics recommend and design programs to train organisational members (Liedtka, 1998; Bonn, 2001; Bates & Dillard, 1993; Calori, 1989; Mason, 1986), and in some cases even promote it as a core competency (Benson & Cheney, 1996; Bonn, 2001; Linkow, 1999; Macdonald, 1994).

A particular attraction of strategic conversation is its potential to help explain varied and poor relationships between strategic planning and organisational outcomes (Miller, Wilson & Hickson, 2004). Strategic conversation may also help understand the relationship between strategic behaviour and performance. The importance of better understanding these links has sometimes been argued (Burgelman, 1983), described (Grundy & Wensley, 1999) and demonstrated (Kogut, 1988). Literature tends to ignore the links or take them for granted (Thomas, Pollock & Gorman, 1999). Strategic conversation may perhaps have a role in these links and thereby influence

the effectiveness of strategic behaviour to align with strategic intention (Fawcett, Smith & Cooper, 1997). Further research necessitates better methods of assessing strategic conversation. This research program investigates strategic conversation as a construct, and seeks to develop a measurement instrument.

#### Problem and opportunity

## Strategic conversation - a measurement problem

Researchers have approached the problem of lack of a measure of strategic conversation in a number of ways. Strategic conversation has been mentioned explicitly (Ford & Ford, 1995; Haas & Algera, 2002; Von Krogh & Ros, 1995) and implicitly (Ajimal, 1985; Chesley & Wenger, 1999) as being a conduit between an independent variable (e.g. something that causes conversation to happen) and the dependent variable (e.g. performance). However, such an assumption requires that any given conversation will work with equal efficacy in all contexts, because describing strategic conversation as a conduit does not recognise its potential as a mediating or moderating variable. Making such an assumption, that conversation is a direct link between IV and DV, without any involvement of its attributes, is flawed.

Strategic conversation has also been described as the core ingredient of an intervention. In this case, support for the existence and impact of strategic conversation is observed as the difference between before and after measures of performance (Chesley & Wenger, 1999). Other research efforts where strategic conversation was ignored, but could arguably have a major role, include the transfer of strategic knowledge from tacit to organisational levels (Matusik, 2002), and the organisation's response to environmental changes (Kim & McIntosh, 1999).

Even without resorting to theoretical argument, logic suggests that if strategic conversation is a valid construct, then some of its attributes will play a role in those

changing relationships. After all, someone has to say something in order for effective action to be taken, and it is well accepted that 'how' someone asks us to do something is likely to influence what we choose to do, and how well we do it (Mixon et al., 1977; Hill & Nakayama, 2000). Attributes of conversation must therefore be seen as variable, suggesting that strategic conversation, if it exists, can be regarded as a variable. As a consequence, strategic conversation may impact certain organisational relationships, and so hypotheses will be advanced which this research will test.

#### Research purpose and expectation

This project has 3 objectives. 1) Develop a model and construct of strategic conversation. 2) Develop an instrument to measure relevant aspects of strategic conversation, and test the expectation that elevated strategic conversation skills will be associated with higher performing organisations (Mumby-Croft & Williams, 2002).

3) Create a program to promote organisational development of strategic conversation skills, and monitor associated changes in measured scores for strategic conversation, organisational behaviours, and organisation performance. The expectation is that strategic conversation can be learned, and that manipulation of strategic conversation will impact strategic behaviours and performance of an organisation.

The research argues for the decision to narrow the research lens to focus on those four organisational variables - Strategic Conversation, Strategic Planning, Strategic behaviour, and Organisational Performance. Contextual variables such as those that reflect environmental, economic, political, competitive and industry influences, were intentionally excluded.

#### Justification

## <u>Justify value - academic</u>

The theoretical value of the present research lies in its potential to resolve whether strategic conversation exists as a construct, and if so, determine if it is a key variable, or mainly acts as a moderator or a mediator to other more important organisational relationships. Two relationships studied in this research are between strategic behaviour and performance, and between strategic planning and performance. As mentioned previously, current research into these relationships tends to regard strategic conversation as a conduit, and ignores any varying impact on other relationships of interest. If this research finds that strategic conversation is a measurable variable, then inclusion of the variable could improve the scientific rigour of future research into these relationships. As a variable, strategic conversation is expected to offer partial explanation for some of the reported variability in studies on organisational performance (Mumby-Croft & Williams, 2002) and strategic planning (Miller et al., 2004).

#### Justify value - practical

The practical value of this research will initially rest in the availability of an additional management tool with potential to assess, diagnose, and help manage strategic performance. Since organisational change is typically triggered by a need to improve performance, the measure of strategic conversation, based on evidence of use of strategic conversation, could become a useful metric to monitor the progress of the effectiveness of change programs. Currently, strategic performance assessment is an involved process of testing the match or 'fit' of the organisation (Jennings & Lumpkin, 1992; Kim & McIntosh, 1999) and its members (Cabrera & Bonache, 1999) to the organisation's environment, and 'change' programs attempt to improve that fit

(Kakabadse & Kakabadse, 2000), typically by aiming at improving effectiveness and/or efficiency. In this sense, effectiveness refers to competitiveness, and efficiency refers to the ratio of outputs to inputs. A strategic conversation instrument could perhaps provide a comparatively quick assessment of ongoing and strategic aspects of performance, long before outcomes of effectiveness or efficiency could be reported.

Secondly, if strategic conversation is found to have a strong relationship with strategic behaviours and organisational performance, then executives have a new management choice. Such a relationship would provide an additional and direct way to influence strategic behaviour and performance (viz. elevation of strategic conversation scores would improve performance). If strategic conversation can be learned, and has a positive impact on performance, then managers may come to regard the developing and assessing of strategic conversation to be a useful strategic performance choice, independently of the activities of other programs of change.

# Approach of thesis

In the two decades since it was first mentioned, the idea of strategic conversation has appeared in research articles, reviews and general articles that acclaim its usefulness, in spite of a lack of an instrument to measure it. This growing interest is explored in Chapter 2 to find the current base line of knowledge to which this research and instrument will contribute. It is argued that meaningful progress in understanding, learning, or using strategic conversation will be limited until such an instrument is available.

The current research program is guided by two contrasting natures of strategic conversation: specificity and ubiquity. The specific, and perhaps traditional view, confines the application for strategic conversation to strategic planning conducted by executive members. When involved in such planning, executive members use

dialogue to devise a program to manage behaviours of organisational members (Mintzberg, 1994a) and position the organisation in the competitive marketplace (Anthony & Dearden, 1976). In contrast, the ubiquitous view is presented by those who argue that strategic conversation will be present before, during and after strategic planning (Cairns, Burt & Beech, 2001; Boyle, 2001; Copacino, 1999).

For the 'specific' view to reflect reality there should be a strong link between strategic planning and organisational performance, since strategic planning is supposed to guide organisational activities. However, research on the link has had mixed results (Miller et al., 2004), thus weakening the specific view.

For the ubiquitous view to represent reality, strategic conversation will be found to influence the relationship between strategic planning and organisational performance. If the relationship between strategic conversation and either of the other variables is strong, then strategic conversation becomes an important variable in its own right.

This research plan will acknowledge both views, each of which expects that the mechanism through which conversation or planning influences performance is through the strategic behaviour of the organisation (Anderson & Paine, 1975; Fawcett et al., 1997). Internal strategic behaviour is regarded as any activity that, directly or indirectly, controls or guides operational behaviour to intentionally impact the firm's external strategic behaviour (Ansoff, 1987), and thence organisational rents (Mintzberg, 1994a).

The research plan will therefore include studying the inter-related nature of strategic conversation, strategic planning, strategic behaviour, and organisational performance. Because of the potentially high level of interest of these findings to both

academics and organisational practitioners, the plan will attend to both academic rigour and practical reality.

# Research plan

The plan used three studies, where each study addressed one of the three research purposes (described previously). Study 1 developed the model and construct (Purpose 1), and developed the necessary measurement instruments (strategic conversation, strategic planning, strategic behaviour, and organisational performance) (Part of Purpose 2). The approach taken to develop the construct involved the triangulation of opinions of expert panels against relevant empirical findings and published arguments. An instrument was developed from the derived conceptual model.

Study 2 tested the psychometric and predictive testing of instruments in a one-shot study (completing Purpose 2). Study 3 examined the impact upon organisations of intentionally manipulating Strategic Conversation during a longitudinal study (Purpose 3). The longitudinal study applied adult learning theory to develop a program for the acquisition (manipulation) of strategic conversation skills within participant organisations.

#### CHAPTER 2 - EMERGING INTEREST IN STRATEGIC CONVERSATION

This chapter identifies the origins of the notion of 'strategic conversation', builds a definition of the construct, and differentiates it from the related constructs of strategic thinking, strategic planning, and strategic behaviour.

Conversation that is important strategically rather than operationally, administratively, socially, or other, has been attracting increased interest in practitioner and managerial journals, and to a lesser extent in academic ones, for about 20 years. However, it was not until the early 90's that interest in the topic gathered momentum (Senge, 1991; Schein, 1993; Rolland, 1992). Strategic conversation is promoted as an appropriate skill for members of any multi-level team (Bates & Dillard, 1993), and as a core skill for the entire organisation (Manning, 2002), with a key role in the process of strategic renewal. Floyd & Lane (2000) describe the development of such conversation as an evolutionary process associated with promoting, accommodating, and utilizing new knowledge to bring about improvement in an organisation's core competencies. It appears that higher levels of strategic conversation will be practiced within an organisations that is functioning at a higher strategic level.

The pressing need for such improved strategic thinking and behaviour within and between Australian organisations large and small was highlighted in a report commissioned by the Australian Federal Government (Karpin, 1995). The report sought answers to Australia's slipping competitive position and placed the blame squarely on poor strategic practices by executives and managers, and on educational institutions for failure to promote the appropriate skills. The timing and sentiments of

the Karpin Report coincided with opinions of management thinkers (Quinlan, 1997; James, 1999), business philosophers (Handy, 1989; Drucker, 1995), and researchers into improved performance from human resources (Ulrich, 1997).

The importance of purposeful dialogue in strategic business development has been demonstrated in customer relationship management, where business activity (and hopefully profit) increases with gains in the effectiveness of customer interaction (Zahay & Griffin, 2004). Increasingly, management authors now imply (Oktemgil & Greenley, 1997) or mention (Gnyawali, 1998) the need for elevated purposeful conversation skills. For instance, in their research on strategy style and organisational adaptability, Oktemgil and Greenley (1997) implied the importance of dialogue in their discussion of information processing and decision making. Similarly, Gnyawali (1988) promoted the role of dialogue in effective strategic decision making. Manning (2002) argues that many organisations are increasingly engaging in strategic conversation implicitly, if not explicitly. This implicit rather than explicit use of the construct may be a function of lack of clarity in definition and delineation of strategic conversation from other constructs.

#### **Organisational Conversation**

Strategic conversation is a particular form of organisational conversation.

Accordingly, this section will begin by clarifying the general term 'organisational conversation' and distinguish conversation from the related ideas of debate, discussion, discourse. The intention in doing so is to explain the present focus on 'strategic conversation' rather than similar sounding terms such as 'strategic dialogue' or 'strategic discourse' that also appear in literature.

The value to an organisation of high quality and quantity of organisational conversation has not only been proposed (Harsham & Harshman, 1999), but also

shown to have links with performance and outcomes (Tvorik & McGivern, 1997; Haas & Algera, 2002). Furthermore, the absence of conversation has been shown to incur costs for an organisation (Morrison & Milliken, 2000). Rich, as opposed to lean, organisational communication (Daft & Lengel, 1984), has been described as promoting the thoughtful use of multiple conversation channels (Schwartz, 1999). In this sense, 'rich communication' requires more than just overcoming organisational ignorance (Harvey, Novicevic, Buckley & Ferris, 2001). Instead, it is argued, organisations must benefit by purposefully developing optional communication tools to match the communication style that suits the various communication purposes as they undertake strategic tasks - such as setting organisational direction (Gnyawali, 1998), aligning organisational members (Clifford, 2001; Haas & Algera, 2002), making and justifying decisions (Elsbach & Elofson, 2000), and purposefully managing implementation (Osborne, 1998). These applications all necessarily involve the strategic uses of conversation.

Authors use various words to describe optional organisation communicative actions. "Conversation" was the most frequently found word in literature reviewed for links between communication and other organisational variables (Rolland, 1992). Other words are dialogue and discuss (Senge, 1991), debate (Bazerman, Curhan, Moore & Valley, 2000), and discourse (Heracleous & Barrett, 2001). The popularity of the word 'conversation' in this context is evident by the number of times 'strategic conversation' is referred to in the literature, compared to 'strategic dialogue' or 'strategic debate'. The appropriateness of choosing 'conversation' becomes evident from a comparison of the meaning of the alternate terms.

#### Dialogue

Senge, Roberts, Ross, Smith, and Kleiner (1995) argue that dialogue is a form of conversation to surface the 'tacit' infrastructure of thought. In dialogue, there is an action focus where participants suspend assumptions and enter into 'think together'. In dialogue, we don't think about what we're doing, we do something about what we're thinking (Senge et al., 1995, p. 375). The word itself comes from the Greek "dia logue": - meaning free flowing meaning in a group - allowing insights not attainable by individuals (Senge et al., 1995). Dialogue is thus concerned with deeper understanding rather than decisions (Senge, 1991). Its function is to understand rather than advocate for agreement (Von Krogh & Ros, 1995), reveal incoherencies in our thoughts, and explore the participatory nature of thought. Dialogue thus aims to go beyond one's current understanding (Senge, 1991), and to support the processes of creating, sharing, integrating, and evaluating knowledge (Harvey et al., 2001). At an operational level, it implies a process of taking turns to speak and listen (Bentley, 1994). While dialogue is intended to be open and power-neutral communication, it is also open to abuse. Managers with a personal interest in preserving current hierarchical structures may use dialogue to distort communication to legitimate and advance their own situation (Nord & Jermier, 1992). The impact of this unfortunate side effect can be limited by using 'dialogue quality systems' such as Total Quality Management and Balanced Score Card ©, where the topic and outcome focus of dialogue is confined to specified strategic matters (Fournier & Grey, 2000).

#### Debate

Debate differs from dialogue in that it is a "dialectic process between two or more interlocutors, during which both parties pose questions and receive answers, the aim of which is to increase either party's awareness and understanding" (Norreklit, 2000, p 83). It is associated with argument (Bazerman et al., 2000). Debate can be verbal, or textual where the text is written as conversation (Gnyawali, 1998). The focus is on being cooperative and goal-directed (Cruise O'Brien, 1995), with reciprocal exchanges of messages embedded in each specific normative context (Harvey et al., 2001 citing Harrah 1971). Pure debate is a formal process where turn taking allows equal arguments for and against some proposition. While debate is a treatment to reduce polarisation and fragmentation (viz. 'us and them'), it may also become competitive and provide sanctioned opportunities for attack by one party upon another (Lincoln, 2001).

#### Discussion

In discussion, ideas go back and forth in a winner-takes-all manner (Senge, 1991). Discussion is appropriate once all relevant information has been gathered, and provides opportunities for personal preferences to be presented and compared. Each person's argued strategic preferences are shaped by needs and desires of that person, the team the individual belongs to, and the organisation as a whole (Bagozzi, Dholakia & Basuroy, 2003). It has been noted that in organisational planning sessions, discussions typically veer from strategic topics that expose those conflicting individual views, towards more peaceful common operational topics (Bonn, 2001). A downside of ignoring the development of skills in strategic conversation and conflict management is risk paralysis, just when strategic discussion is most vital - in conditions of uncertainty (Courtney, Kirkland & Viguerie, 1997). In other words, a strategic focus of conversation will be most at risk during a discussion style of strategic conversation.

#### Discourse

Discourse, according to Heracleous (2002), is any form of communication or combination of communication options, providing it concerns a single topic that is explored in depth. It is a collection of communicative actions that explores a topic to the extent that it can change the understanding of social and organisational reality. Discourse not only reports on, but can shape perceptive reality and ways of thinking (Heracleous & Barrett, 2001). Persuasion is an example of discourse.

#### Conversation

Conversation is like discourse in that it embraces dialogue, debate, discussion, and any other style. Conversation differs from discourse in that conversation can occur on several topics, perhaps simultaneously, and addresses broader issues (Pitt, McAulay & Sims, 2002). It is less formal than other communication styles because there is no structure or need to respond to what someone else has said, or even to talk about the same topic, although conversation topics are usually linked (Bentley, 1994). Conversation seems to be the most appropriate term to pair with 'strategic' in examining organisational strategic level communications because the term is inclusive of all communication styles likely to be used in concert during such communications. The prefix 'strategic' then narrows the purpose of having the conversation, and the range of appropriate topics, to those with a strategic focus.

## Defining 'Strategic'

In this section, the term 'strategic' will be clarified to help develop the definition for the construct 'strategic conversation'. The aim is to differentiate it from other conversation forms that may seem strategic, but might in fact be communication with some other purpose such as administrative, operational, compliance or social.

The English word "strategy" is derived from the Greek word "strategia," which means generalship. In 1948 Von Neumann and Morgenstern, (cited in Zinkhan & Pereira, 1994) in their work on the theory of games, formally introduced the idea of "strategy" to the business literature. Until recently, a well-developed strategy was considered to comprise five components: scope, goals and objectives, resource deployments, identification of sustainable competitive advantage, and synergy. This original 'ends' focused understanding of the construct did not acknowledge the impact that humans have on the strategy process (Oliver, 2002). The plan is designed by humans, implemented by humans, in an environment full of other interacting humans.

An emerging understanding of strategy is that it describes the organisation's competitive plans that are based on inwards views of resources and capabilities and outwards views of a potential future environment, with acknowledgement that it is dealing with human beings. Inwards, the purpose of strategy is to align and integrate the daily work of all employees around a common and focused direction determined by the outwards view (Linkow, 1999). Outwards, strategy involves identifying and developing strategies from the competitive intelligence collected from market and environmental data (Osborne, 1998), and from organisational memory (Weick & Quinn, 1999; Sabherwal & Becerra-Fernandez, 2003) to position the organisation in a favourable market position. Non-marketplace (non-competitive) organisations have outwards views specific to their purpose for existence, an example being service delivery for a Government department. Acknowledgement of the need to cater to human beings is evident in efforts to 'sell' strategic plans to those who will implement them, and also in efforts to align individual with organisational goals (Bartlett & Ghoshal, 2002; Pitt et al., 2002; Haas & Algera, 2002)

Therefore, 'being strategic' involves any action, in any part of the life cycle of a strategy, namely - creating, modifying, implementing, assessing, or terminating a strategy. Being strategic will have actions that focus inwards and others outwards. Conversation is one such action, meaning that 'strategic conversation' is conversation that is part of any process that creates, modifies, implements, assesses or terminates a strategy. Hendry (2000) argues that being strategic *necessitates* conversation - implying that it is possible to have conversation without being strategic, and that it's not possible to be strategic without having conversation. It is the conversation associated with being strategic that is of interest here,

## **Defining Strategic Conversation**

In this section, strategic conversation will be defined in a way to satisfy the current understanding of the topic from three points of view: a practitioner-orientated substitutive view, academic-orientated theoretical view, and management-orientated operational view. O'Gorman, J (personal communication) proposed that strategic conversation could be defined substitutively, theoretically, and operationally. This has been adapted as follows:

#### **Substitutive Definition**

Strategic conversation involves intentionally constructive verbalisations by its staff members about the organisations resources, systems, procedures or plans, to affirm the value of those attributes, or clarify how they are to be modified or used in any particular respect, or how barriers to desired outcomes are to be overcome. Strategic conversation is separable from the related construct of strategic thinking in that (a) it occurs at all levels of the organisation and not just at the senior management level, (b) it involves overt oral communication between two or more staff members,

and (c) occurs formally and informally. Strategic conversation is separable from strategic planning in that it occurs before, during, and after strategic planning.

#### **Theoretical Definition**

Strategic conversation mediates the relationship between strategic planning and the successful implementation and outcomes of that planning. Strategic conversation is a facilitative condition for behaviour change, which in turn is a necessary condition for performance improvement.

## **Operational Definition**

Strategic conversation is the frequency with which intentional reference is made to the organisations resources, strategic plans and goals, to guide formal and informal strategy-related decision-making communication among staff members.

#### Overall summary definition

Strategic conversation is identified by both its purpose (why are we having this conversation – the potential strategic impact) and its topic (what are we talking about – that is strategic in nature). The concept does not include matters such as individual and group conversation styles or etiquette, as these would not impact the strategic nature of the conversation even though they may impact the effectiveness of such conversations. Strategic conversation is the overarching concept that systematically and purposefully embraces strategic thinking, strategic dialogue, strategic debate, strategic discussion and strategic decision-making (where 'strategic' is as defined above).

#### The role of strategic thinking

The notion of strategic thinking is described at this point because it will be argued that strategic thinking both precedes and accompanies strategic conversation.

Already strategic thinking is considered a necessary and related activity to strategic planning (Graetz, 2002), and it has even been suggested that strategic thinking should replace strategic planning (Wilson. I., 1994).

Heracleous (1998) argues that strategic planning and thinking involve two distinct but related thought processes: strategic planning concerns analysis - described as establishing and formalising systems and procedures, while strategic thinking involves synthesis - encouraging intuitive, innovative and creative thinking at all levels of the organisation. In simpler terms, 'planning' means *using* data, while 'thinking' is about *gathering* and *creating* data. In counterpoint, it could be argued that analysis also involves thinking, and thinking probably includes analysis, yet the emphasis probably remains as Heracleous (1998) suggests.

Strategic thinking processes are described as comprising reframing, scanning, abstracting, multivariate thinking, envisioning, inducting, and valuating (Linkow, 1999). Strategic thinking is distinctive from planning in that strategic thinking seeks to explore and exploit any "misfit" between existing organisational capabilities and emerging opportunities, while planning seeks an optimal "fit" between capabilities and opportunities (Graetz, 2002). In this sense, the thinking can initiate a plan for an adjustment in capabilities that, in turn, provides new capabilities for the planning to fit to the opportunities.

In summary, strategic thinking is a cognitive processes that both precedes and accompanies strategic conversation, and therefore also strategic planning.

Strategic planning and strategic behaviour

Strategic planning and strategic behaviour will be discussed more fully in Chapter 5, but for present purposes strategic planning can be regarded as the 'process' of designing the program (Mintzberg, 1994b) that sets the strategic direction of the

organisation, and ensures the means by which it will happen (Anthony & Dearden, 1976). By contrast, 'strategic behaviour' is used to describe behaviours at two levels external and internal. External strategic behaviours are seen by those who are outside the organisation, and view the organisation's actions in the marketplace while it pursues the 'ends' focus of its strategic plan (Moran & Ghoshal, 1999). The internal strategic behaviours are those associated with designing, executing, expanding or modifying, aligning with, or monitoring the 'means' focus of a strategic plan (Drago, 1997). The internal strategic behaviour is of interest in this research because of its proposed relationship with strategic conversation.

Debate on relationships between strategic planning, strategic conversation, and strategic behaviour

Strategic Planning has traditionally been regarded as a stepped process conducted by the planning team. However, planning by itself is insufficient to impact an organisations fortunes - being merely one part of the strategic loop (Miller et al., 2004). Strategy researchers now promote strategic thinking and strategic conversation as essential activities to be commenced well before any planning (Sheehan, 1999; Hamel & Prahalad, 1989), continue during planning (Graetz, 2002), and continue after the plan is formed and requires implementation (Osborne, 1998; Miller et al., 2004). A strong relationship is therefore expected between measures of strategic planing and strategic conversation.

The relationship between strategic conversation and strategic behaviour is evident in such activities as 'selling upwards', where members of lower hierarchy levels use communication channels to prompt managerial action (Dutton & Ashford, 1993) and goal alignment where conversation is used to motivate different parts of an

organisation to a common effort (Haas & Algera, 2002). However, until strategic conversation can be measured, all such relationships remain speculative.

#### Practitioner led interest in Strategic Conversation

Recent literature investigating or describing strategic conversation to a practitioner readership (Parnell & Lester, 2003; Chesley & Wenger, 1999; Ford & Ford, 1995; Francis, 2002; Haas & Kleingeld, 1999) tends to focus on the organisational benefits of strategic conversation rather than its nature. Researchers interested in assessing the outcome of manipulating strategic conversation have used organisational change tools such as Balanced Score Card © (den Hertog & Huzzard, 2002; Chesley & Wenger, 1999), SWOT (Duncan, Ginter & Swayne, 1998), or strategic planning (Bartlett & Ghoshal, 2002) to stimulate conversation. The tools provide a framework of discussion topics that aim to change strategic behaviours and/or organisation performance. Very little attention is given to the nature of strategic conversation, or to how to improve it without the use of tools for a conversation framework (Von Krogh & Ros, 1995).

An unspoken assumption underlies literature that uses organisational change frameworks to stimulate conversation - the assumption being that providing a framework for conversation results in conversation happening at an appropriate level of competency and potency. However, when conversation frameworks are employed to provide discussion topics to propel change programs, there are at least two possible ways for the framework to impact performance. Firstly, the framework itself (e.g. Total Quality Management) probably contributes directly to a change in organisational performance, and secondly, the conversation that is prompted and guided by the framework may also make some direct contribution. It is even possible that the two paths interact, and the combination of conversation and framework either reinforce or

weaken each other. There is separate evidence for the argument that conversation is the more active of the two pathways (Chesley & Wenger, 1999), further supported by a UK study describing three separate cases of failed attempts to change (Burnes, 2004). Burnes found that the executives did not have the skills, competencies or aptitude to implement even a step-by-step packaged formula for change. Using a program of procedural steps from a popularly endorsed conversation frame, commonly referred to as 'fad', was not enough to deliver the desired change.

The term 'fad' is not used here in a derogatory way. Fad is a term that is recognised and used in both practitioner (Repenning & Sterman, 2001; Francis, 2002) and academic (Carson, Lanier, Carson & Guidry, 2000; Abrahamson, 1991) journals to describe popular plans or programs that have little demonstrated validity, but are followed with exaggerated zeal, apparently because they are fashionable (Carson et al., 2000). Fads by themselves have a poor track record and fail around 80% of the time, including the well known programs around business process reengineering (Bryant, 1998) and total quality management (Burnes, 2004). On the other hand, when fads are used as a source of ideas, they may be useful (Bohl, Slocum, Luthans & Hodgetts, 1996) - and they can stimulate conversation.

Again the recurring question: Is it the fad, or the conversation that the fad generates, that is most useful? If the same fad fails in one organisation but succeeds in an identical type of organisation, with all other external things being equal, were the conversations different? Would better quality and focus of conversation have made a difference?

This current research seeks to report on the role of conversation, exploring the direct link between conversation and outcomes, in the absence of conversation frameworks and assumptions.

#### Academic interest in Strategic Conversation

## Strategic Conversation - the ignored variable

More effort has been spent on understanding strategic thinking (Crouch & Basch, 1997) than on the conversation that occurs with it or after it. Some academic authors have acknowledged strategic conversation indirectly through topics like SWOT analysis (Duncan et al., 1998), fast decisions (Eisenhardt, 1989b), packaging of decisions to improve trustworthiness (Elsbach & Elofson, 2000) or the impact of the mission statement (Bart, Bontis & Taggar, 2001). In such cases, author(s) commonly make unstated assumptions about the role of conversation, and disregard its potential unwanted influence upon the relationships they explored. However, a few authors have explicitly mentioned the impact of conversation quality on any attempt to change organisational performance (Heracleous, 2002; Heracleous & Barrett, 2001). Bonn (2001) even went as far as to promote strategic conversation as a new core competency citing, among others, Eisenhardt's argument that executives need to:

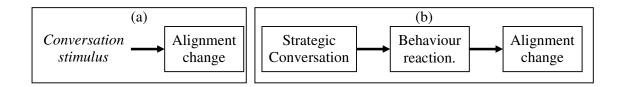
...develop and articulate arguments more effectively and clearly so that they can be conveyed to others. In turn, executives not only learn and shape their own view through this process, but they also come to learn those of others... continued communication builds an increasingly complex and realistic understanding of key information and preferences (Eisenhardt, Kahwajy & Bourgeois, 1997), p. 52).

Examples of relationships studied in relation to strategic conversation or dialogue include goal coherence (Haas & Algera, 2002), group performance (Tvorik & McGivern, 1997), organisation knowledge (Gnyawali, 1998), emergent strategies (Osborne, 1998), risk aversion (Gruber, 2000), and decision making (Kuhberger, 1998). However, in none of these cases was strategic conversation itself measured.

Instead, a common approach was to measure outputs or outcomes before and after engaging in strategic conversation activities.

Strategic conversation has yet to be recognised as either a DV, IV, or even a mediator. Instead, strategic conversation seems to be regarded as being a perfect conduit with zero loss or waste, explicitly or otherwise, when examining organisational variables of interest. For example, in research by (Haas & Algera, 2002) that investigated goal alignment before and after stimulating strategic conversation (depicted in Figure 2.1a), the quality of the conversation was never questioned, and neither were behavioural outcomes other than goal alignment.

A more appropriate model (Figure 2.1b) shows that strategic conversation could have been an IV if it had been measurable at the time, and behaviour changes could have assessed both intended and unexpected changes. The word 'reactions' in Figure 2.1 is a reminder that in any change effort, there may be unexpected behavioural reactions to the stimulus, in addition to the desired reaction, and should be recognised as potential hazards in research efforts with specific outcomes in mind.



<u>Figure 2.1</u>: Typical research model, (a) with conversation stimulus unmeasurable, compared with suggested model (b) with all components measurable.

Key aims of this research then, are to develop an instrument to assess appropriate attributes of strategic conversation, describe its relationship with key variables of Strategic Behaviour and Organisational Performance, and test its contributory role to strategic planning, including as a mediator between planning and

behaviour, while keeping alert for unintended/unexpected consequences or relationships. These aims will be formed into hypotheses in Chapter 3.

Emerging interest in Strategic Conversation - Summary

#### Strategic conversation

Literature was reviewed to clarify what is inferred by the use of the term 'strategic conversation'. Strategic conversation can be re-phrased as 'any conversation that is strategic in its context and purpose', making it by nature a generalisable construct. The increasing interest in strategic conversation is practitioner-led, but very few authors attempt to describe it, and none has defined it. Researchers promote the proposition that strategic conversation should be encouraged at all levels within an organisation, with some support in the form of goal alignment and improved financial indicators. The component terms of strategic conversation become important in understanding the emerging construct, and relevant literature refers to both processes and content of conversation. The processes refer to conversation etiquette and skills used in all communication media, with four common process styles described as dialogue, debate, discussion, and decision or negotiation. For conversation to be strategic, the content (topic) needs also to be strategic.

# Being 'strategic'

Being 'strategic' involves some action that could be described as creating, modifying, implementing, or evaluating a strategy. Strategy refers to the alignment and integration of organisational effort around a common and focused plan to position the organisation advantageously in its environment, which for many organisations means being competitive. Therefore, strategic conversation occurs while setting

strategic plans (the ends), managing (the means) or improving them (measuring outcomes and learning). A micro-view of strategic conversation looks at the focus of exchange during the various phases of the life of the topic, while the macro view looks at the strategic purpose of the conversation. There is a strong case to consider the two views as being inextricably linked.

# Summary of emerging interest in Strategic Conversation

Interest in strategic conversation is both practical and academic. Of practical interest is the expectation that strategic conversation is linked with Strategic Behaviour and with Organisational Performance. This relationship is already evidenced by prior research. The practical interest will be in the ability to measure strategic conversation so that intentional development of strategic conversation as a skill and knowledge, can be monitored, and demonstrate a relationship with performance. Of academic interest is the potential to measure Strategic Conversation as a covariant in studies where either Strategic Behaviour or Organisational Performance is the DV, and the researcher believes that conversation may play a role.

This research addresses the interests of both groups.

#### CHAPTER 3 - PLAN OF RESEARCH PROGRAM

This chapter describes the conceptual framework that led to the definition of strategic conversation, and the design of the research plan. The plan was also influenced by a call for researchers to acknowledge 'unintended consequences' of programs that cause, or are otherwise associated with, organisational change.

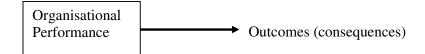
#### Conceptual framework

This section provides an overview of the role of the four constructs needed for this research, presented in the order of historic importance: Organisational Performance, Strategic Behaviour, Strategic Planning, and Strategic Conversation. The argument will be made that strategic conversation has more than one role, and describes how the research plan accommodates those roles and the hypothesised relationships with the other three constructs. The arguments will develop 9 hypotheses and lead to a definition of strategic conversation.

## The role of organisational performance

Organisation performance is concerned with achieving targeted outcomes. For a commercial entity, this would be profit, while for non-profit entities it could be service results. Organisational performance is successful to the extent that the intended outcomes are achieved. Management and executive decisions are largely concerned with choosing the desired outcomes and describing and obtaining the behaviours (actions) needed to achieve those outcomes. Although outcomes are beyond the control of organisations because the environment cannot be controlled by the organisation, internal behaviours are certainly within managerial influence, if not control. For this reason, considerable research and managerial interest has focused on

achieving organisational performance by means of behaviour management through what are inappropriately termed 'control mechanisms' (Staw & Epstein, 2000; Crandall, 2002). Unfortunately, this can lead to the practice of measuring only selected (desired) outcomes, and has contributed to the neglect of the full range of outcomes (Figure 3.1), especially unintended consequences (Sterman, 2001; Gilmore, Shea & Useem, 1997). Current performance assessment devices can therefore be criticised for an over-emphasis on expected and desired outcomes, while underemphasising other important consequences of planning.

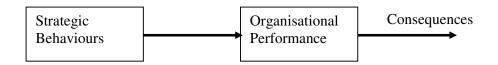


<u>Figure 3.1</u> Organisational Performance is 'managed' to produce the desired outcomes

A more comprehensive picture of outcomes, including the unexpected and less desirable ones, would provide a more accurate assessment of the overall impact of strategic conversation on organisational performance

# The role of strategic behaviour

Strategic behaviour refers separately to both internal behaviour of members within the organisation (Drago, 1997; Osborne, 1998), and external behaviours that are seen as whole-of-organisation behavioural styles by people in the marketplace (Porter, 1985). The behaviours of concern in this research were internal, precede organisational performance, and are sometimes referred to by alternative titles such as 'managerial actions' (Miller et al., 2004). Different combinations and ratios of distinct kinds of behaviours, discussed subsequently in Chapter 5, will variously impact organisational effectiveness and efficiency, resulting in different performances and consequences (Figure 3.2).



<u>Figure 3.2</u> Model of Strategic Behaviour impacting Organisational Performance, assessed as consequences (outcomes).

It is therefore proposed:

Hypothesis 1 expects Strategic Behaviour to demonstrate a positive relationship with, and be a predictor of, Organisational Performance.

# The role of strategic planning

Traditionally, strategic planning was regarded as an executive level function to set the strategic direction of the organisation, design the management controls to ensure that it happens, and arrange operational control (Anthony & Dearden, 1976). More recently, planning is described as the process for developing a program that manages organisational resources (Canback, 1999) and behaviours (Mintzberg, 1994b) (Figure 3.3) in a way to exploit current or emerging opportunities (Graetz, 2002). From this understanding of current literature, the following proposal is made:

Hypothesis 2: Strategic Planning will be found to relate to, and predict, Strategic Behaviour.



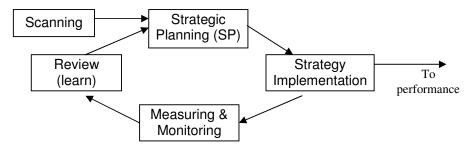
<u>Figure 3.3</u> Strategic Planning acts directly on Strategic Behaviour in order to influence Organisational Performance

Organisational executives may crave such a clear mechanism for control over behaviour, but even in those institutions where managerial power and control is absolute (e.g. jails), managerial programs are struggling to be effective (Nagayama Hall, 1995). In other words, absolute planning control over behaviour, as suggested in Figure 3.3, is not working, suggesting that something is missing from the model.

# Strategic conversation as a missing link

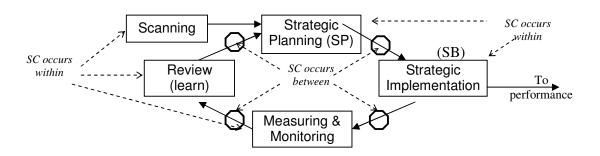
Studies of the link between planning and behaviour frequently refer to deficiencies in systems and practices of communication and motivation. For example, a study of British Telecom (Grundy & Wensley, 1999) mentioned the importance of communication and motivation to link planning with desired strategic behaviour. A more definite connection was made by Haas and Algera (2002) when they sought and obtained positive consequences from using purposeful dialogue to align behavioural goals with planning goals.

However, conversation in itself is not capable of causing anything to happen - it is only sound waves in the air, or marks on documents - it requires a behavioural response by at least one actor. Somebody has to DO something. When somebody does do something, it is hoped that the actions align with the plans. To that effect, interactive communication has been described as *the* link between strategic planning and strategic behaviour (Floyd & Lane, 2000), and because the relevant interactive communication is strategic by nature, it follows that strategic conversation might be a connecting link between planning and behaviour. By extension, it is argued that strategic conversation is the linking mechanism between all constructs of the typical organisational strategic loop (Figure 3.4), and that the loop will operate only as effectively as the conversation links permit.



<u>Figure 3.4</u> Typical organisational strategic loop cycle.

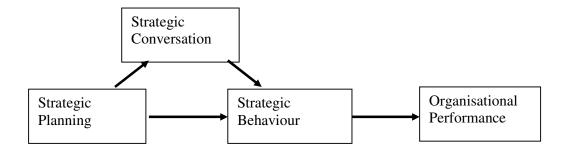
Strategic conversation also occurs *within* planning, behaviour, and within each other loop component. It is hard to imagine strategic planning occurring in the absence of strategic conversation. Strategic conversation also occurs within strategic behaviour, for example on topics of competitive efficiency. The quality of that conversation *within* constructs is therefore as much of interest as is conversation *between* them, and a definition of strategic conversation must accommodate both roles (Figure 3.5).



<u>Figure 3.5</u> The dual roles of strategic conversation - within and between strategy loop components.

Because strategic conversation occurs within strategic planning and strategic behaviour, and is a link between them, the evolving theoretical model of strategic

conversation of Figure 3.3 can be modified to include the hypothesised role of strategic conversation (Figure 3.6).



<u>Figure 3.6</u> A model of the hypothesised role of Strategic Conversation as mediator between Strategic Planning and Strategic Behaviour, and a direct relationship with each

From the preceding arguments that led to Figure 3.6, it is proposed that:

Hypothesis 3: Strategic Conversation will correlate with and predict Strategic Behaviour.

Hypothesis 4: Strategic Conversation will correlate with and predict Organisational Performance.

Assuming that specific improvements in communications could strengthen the link between strategic planning and strategic behaviour, it is proposed:

Hypothesis 5: Strategic Conversation will mediate between Strategic Planning and Strategic Behaviour.

The model of Figure 3.6 implies a mediating role for Strategic Behaviour between organisational variables and its performance. Therefore:

Hypothesis 6: Strategic Behaviour will mediate between Strategic Conversation and Organisational Performance.

These hypotheses allow for the possibility that strategic conversation could in some cases have a negative impact on behaviour and performance, in which case the

relationships would be negative rather than positive. This could happen, for example, if conversation style did not facilitate strategic thinking and active participation of the planning team. If this was a common occurrence then the overall relationships will be weak because data from negative and positive organisations will counter each other. In this early stage of research into strategic conversation, an assumption is made that ineffective communication styles will not lead to regular practice of strategic conversation – that the presences of strategic conversation as a regular practice probably indicates that an acceptable conversation style is in use.

With the conceptual framework describing strategic conversation as a missing link between strategic planing and performance, and hypotheses formed and strategic conversation defined, the research plan can be developed.

# Research design preparation

This section summarises a review of current literature on design of a research plan to develop a construct. Consideration will be given to design issues around learning and using strategic conversation, especially in seeking a plan that balances practical and academic foci. It will also be argued that the research plan needs to extend the scope of organisational performance to include identification and assessment not only of intended consequences of planning and behaviours, but also unintended consequences. Furthermore, unintended consequences could be at least as important to consider as intended performance gains, subsequent to intentional behavioural change.

#### Review of research plan design literature

Using a discreet and sequential stage approach recommended by Babbie (1995), the following 9-step process was compiled from current literature on research planning, as used as a guide for the present research plan. 1) Clarification of purpose

of construct, differentiate it from other constructs, and describe the expected relationships. Establish any balance between feasibility, usefulness, and academic rigour (Mohrman, Gibson & Mohrman, 2001). 2) Inductive collection and generation of information items about the purpose of the construct from which theory can be generated, a model proposed, and hypotheses formed (Scandura & Williams, 2000; Lee, Mitchell & Sablynski, 1999). 3) Design a theory-based construct using the collected items, literature, other constructs, and other sources such as experts (Schriesheim et al., 1993). 4) Deductively design and select items that represent the construct (Mumford, Costanza, Connelly & Johnson, 1996). 5) Develop the instrument. 6) Pre-test (pilot study) the instrument (Krosnick, 1999). 7) Test item, construct, and concurrent predictive psychometrics. 8) Test predictive psychometrics and causality (Bergh & Fairbank, 2002; Sandelowski, 1995; Harrison & Freeman, 1999). 9) Test statistical conclusion validity (Scandura & Williams, 2000; Halbesleben, Wheeler & Buckley, 2004). In a literature review (Scandura & Williams, 2000) on statistical conclusion validity, it was described as being the ability to draw conclusions after accounting for disconfirming evidence and alternative explanations, and establishing that there was adequate power, and concurrent and predictive validities.

## Confirmatory analysis and longitudinal study

Current practice is to follow exploratory analysis with confirmatory procedures to add to the research rigour (Cliff, 1983). This research therefore applies confirmatory analysis to test the fit of the factors found by exploratory analysis within each construct. However, such a plan does not help test causation, or the usefulness of the model or instrument. A 6-month longitudinal study (Study 3), to test impacts on the organisations over time while manipulating strategic conversation, was included in

step 8 for three reasons. Firstly, the purpose of the research was to explore the measurement of strategic conversation, and the longitudinal study provided a number of sequential measurement opportunities with specific participants. Secondly, a paper by Krosnick (1999) that summarised and described advances in survey research methodology, emphasised the important contribution to research rigour by including an experimental longitudinal sub-study to test survey predictive validity and causality. Finally, a longitudinal study had the potential to assess both usefulness and validity of the proposed instrument, even if a better model surfaced in the future. A longitudinal study could provide qualitative support of the quantitative findings. The longitudinal study adds practical relevance to the academic value of the psychometric study. Calls for researchers to reflect more on the usefulness of their work (Mohrman et al., 2001), and include statistical conclusion validity (Scandura & Williams, 2000), support the choice of checking longitudinal predictive validity.

## Balancing practical and academic foci

Mohrman and colleagues (2001) observed that science often lags behind practice, and that usefulness of the academic product is limited because the important information is buried within difficult language that serves only the academic audience. They remarked that usefulness is whatever is perceived by the practitioner, and that unless research is going to be useful, researchers won't gain access to organisational data. On the other hand, Scandura and Williams (2000) reported that attention to research rigor in such areas as validity was on the decline in the 3 prestige research journals reviewed over two time periods. While Scandura and Williams (2000) reported that sampling practices remained unchanged, others (Short, Ketchen & Palmer, 2002) were critical of sampling practices in a review of 437 studies. So the call is for researchers to improve both practicality and rigour, for more attention to

mastery of research techniques, and attention to the relevance of the contemporary situation of organisational members (Kilduff & Mehra, 1997). This program of research responds to the calls for a focus on both rigor and relevance. Part of the relevance is in the usefulness of the association of strategic conversation with other organisational variables such as performance (Study 2). If found useful, then relevance is explored (Study 3) relating to the learning and use of strategic conversation skills.

# Learning and using strategic conversation

Research planning for this program had to consider how participants could learn and use strategic conversation, a prerequisite for manipulating it as an IV in the longitudinal study. Previous research involving strategic conversation has engaged organisational members in strategic conversation by using conversation frameworks, but frameworks can influence performance in at least 2 different ways. Firstly, a framework (e.g. scenario planning (van der Heijden, 1997) or SWOT analysis (Armenakis & Harris, 2002)) provides strategic topics for discussion, or secondly, it may provide the topic *and* guide discussions and implementation as is done by Balanced Score-card © (Chesley & Wenger, 1999).

The inconsistent success reported for conversation frameworks such as Balanced Scorecard © may in part be due to framework-prompted strategic conversation being learned to a greater extent by members of those organisations that reported framework success. If this is the case, then strategic conversation skills can be regarded as important, and learnable, even without a full understanding of the construct. Support for strategic conversation being learnable also comes from the intentional development of conversation to align goals (Analoui & Karami, 2000). From these arguments, a proposition is formed:

Hypothesis 7 expects that strategic conversation skills can be learned and that results of such learning can quantified by assessing associated changed behaviours.

Intentional elevation of strategic conversation to align goals and reduce uncertainty (Analoui & Karami, 2000) has already been mentioned. Strategic conversation or similar activities have also been associated with better goal setting, alignment and achievement (Hollenbeck & Klein, 1987; Knight, Durham & Locke, 2001; Haas & Algera, 2002), improved strategic value of participative change (Rolland, 1992), better strategies in an uncertain environment (Daft & Lengel, 1984), strategic alignment between management layers (Clifford, 2001), and improved capacity to develop emergent strategies (Osborne, 1998). Uniquely, strategic conversation is its own meta-process because strategic conversation is necessarily involved in any intelligent process to help select strategic conversation frameworks (Salegna & Fazel, 1996), so strategic conversation would occasionally concern the topic of strategic conversation.

From these arguments, Hypothesis 8 expects that improvement in measured Strategic Conversation will demonstrate a positive and causal relationship with Strategic Behaviour. Hypothesis 9 expects Strategic Behaviour to demonstrate a positive and causal relationship with Organisational Performance.

## Recognising and assessing unintended consequences

In research, as in organisational management, a specific DV represents an expected output or outcome of some sort, and is typically the only DV assessed.

Unfortunately, this can lead to the neglect of the full range of outcomes, especially unintended consequences (Sterman, 2001; Gilmore et al., 1997) or reversed outcomes.

Unexpected consequences, when mentioned in literature, are more commonly presented as negative and undesirable (Campbell, 2000; Lewis, 2000) than as

potentially desirable, even though it is possible that unintended consequences may sometimes be positive (Dutton & Ashford, 1993). The latter authors argued that any behaviour change will probably result in some mix of both negative and positive outcomes.

In exploring the use of the words 'outcome' and 'consequence', a brief search of management-related literature revealed that 'positive consequence' was mentioned in 21 articles and 'negative consequence' in 102. This imbalance was increased when noting alternative prefix words that were invariably negative, such as devastating (Nutt, 2002), dysfunctional (Tepper, 2000), and hazardous (Vigoda, 2000) consequences. It seems that the words 'outcome' and 'consequence' are used selectively with a polarising frame attached: 'outcome' has a positive and 'consequence' a negative connotation. Such an imbalanced approach applies a bias that will clearly impact reported findings, unless the methodology side-steps the bias or it is acknowledged and accounted for.

The General Semantics approach circumvents this mindset trap of terminology by regarding everything that results from an action to be a 'consequence' regardless of polarity (MacNeal, 1997). The word 'outcome' is not used. Similarly, Systems

Theory avoids the problem by assuming there will be both positive and negative feedback at various times, and also recognises the existence of noise from connecting systems that will interfere both with relationships under study (Sutherland, 1973).

The present thesis similarly recognises not only the existence of unintended consequences, but the bipolar nature (viz. good or bad) of those consequences.

Perhaps 'consequence management' would be a more strategic and accurate term than outcome or performance management (Koch & Lewis, 1998). Such a frame of reference may promote a more inclusive mindset for managers to assess and review all

consequences, intended and unintended (Weick & Quinn, 1999; Heracleous, 2002) in both internal (Elangovan, 1988) and external domains (Rindova & Kotha, 2001). This thesis therefore approached the research plan with the intention of including participants in discussions about detecting and assessing unintended consequences.

#### Research plan overview

This section provides an overview of the three studies that, cognisant of the plan's preparations just described, collectively develop the constructs and instruments for Strategic Conversation, Strategic Planning, Strategic Behaviour, and Organisational Performance, test the psychometrics of those instruments, and then test the hypotheses.

The first study, to develop the constructs and instruments, was approached by converging data from multiple sources. Data from practitioner literature, academic literature, and expert panels, were converged with that from members of academia, government organisations, and non-government organisations. The Strategic Conversation and Strategic Planning instruments were developed from the converged constructs. The Strategic Behaviour instrument was the result of finding a match between a criterion list developed from literature, and an existing published instrument. The theory-based Organisational Performance construct was used as a basis to select or adapt items from existing performance instruments. All instruments were subjected to face and content validity checks by members of the expert panels, and then submitted to an independent validity panel comprising other academics, executives, and professionals.

Study 2 had three objectives: pre-test the instrument, test the psychometric performance of the instruments, and test hypotheses 1 to 6. The instruments were pre-tested using 70 organisational executive participants of study three's longitudinal

study, and psychometrically tested using 380 members across the hierarchical layers of the multiple participating organisations. Factors analyses (exploratory and confirmatory) were used to find and test the structure of the constructs, and correlational and multivariate statistical processes to complete the psychometric tests and test the hypotheses.

The third and final study combined qualitative and quantitative methodologies to test hypotheses 7, 8, and 9. This study used longitudinal data to assess both the transferability of strategic conversation skills, and any associated change in organisational behaviour or performance. A 6-month strategic conversation skills-acquisition program was designed to elevate organisational levels of strategic conversation, without the use of frames or other actions that might directly impact organisational behaviour. This final study used field-experimental methodology to confirm the expected direction of causation; namely, from strategic conversation to strategic behaviour, and then to organisational performance. In response to the call for sensitivity to unintended outcomes (Ulrich, 2001; Miller, 1994) and disconfirming evidence (Lee et al., 1999), Study 3 included a qualitative approach to sense unanticipated changes, and find a way to quantify and measure them.

# STUDY 1 - DEVELOP CONSTRUCTS AND INSTRUMENTS FOR THE FOUR VARIABLES

This study develops the models and constructs for strategic conversation, strategic planning, strategic behaviour, and organisational performance. The study comprises 3 chapters, with Chapter 4 focussing on the constructs for strategic conversation and strategic planning, while Chapter 5 is on strategic behaviour and organisational performance. Chapter 6 then uses the resultant models and constructs to develop the measurement instruments.

# CHAPTER 4 - DEVELOP CONSTRUCTS FOR 'STRATEGIC' CONVERSATION AND PLANNING

The purpose of this chapter is to describe the development of the constructs for strategic conversation and strategic planning, using literature and panels comprising subject experts from organisations, consulting, and academia. Study 1a uses the understanding of strategic conversation and strategic planning developed in Chapter 2, and the model developed in Chapter 3, to develop theory-based item pools. This item pool is then converged with another item pool developed by expert panels.

# Strategic Conversation - what to measure

It is impractical, as a means of measurement, to monitor an organisation for instances of strategic conversation. Alternative ways to assess the use of 'difficult to observe' skills or behaviours are to look for evidence of the expected outcomes, or for evidence of the processes. Broder and Schiffer (2003) argue that measuring outputs or outcomes can explain processes, in this case strategic conversation, but only if the output was predicted by a theory or model – as is the case here. If an outcome eventuates as predicted, then not only can claims be made for support of a model, but also for the process activities inherent in the model.

Of the two alternative ways mentioned, looking for process <u>evidence</u> of a behaviour or skill is more accurate than evidence of expected outcomes, because evidence of behaviour is more closely linked to the behaviour that caused it.

Eisenhardt (1989b), in a study on decision processes, found that behavioural 'evidence' is frequently the only realistic way to obtain data about organisational processes

(compared to direct observation). Therefore, when a model that is based on theory and known relationships is used to predict processes, behaviours or outcomes, then the actual conversation does not need to be sampled. The instrument being developed here should therefore seek evidence of strategic conversation activities.

# Strategic Planning - what to measure

The traditional understanding of strategic planning is as an executive level function to set the strategic direction of the organisation, design the management controls to ensure that the strategic direction is followed, and arrange operational control (Anthony & Dearden, 1976). In the more recent view, the planning process itself occurs when members of the planning team focus on creating a fit between existing resources and current or emerging opportunities (Graetz, 2002), and the plan's contents ideally describe objectives and the means of achievement (Hambrick & Fredrickson, 2001). Strategic planning therefore needs to indicate which behaviours are required by employees, set controls to generate and monitor compliance of behaviour by members (Mintzberg, 1994b), and assess the effectiveness of the chosen behaviours (Kim & McIntosh, 1999).

However, there have been mixed results from efforts to link strategic planning with desirable organisational outcomes (Miller et al., 2004). Literature has attributed this inconsistency of conceptualization of planning to a variety of causes (Venkatraman & Grant, 1986), including the inconsistent, or lack of, involvement by non-executives (Collier, Fishwick & Floyd, 2004), lack of awareness of choices and decision processes concerning strategy alternatives (Leavy, 2003), and insensitivity of planning practices to the volatility of different industry markets (Mullins & Cummings, 1999). Strategic planning has even been associated with destructive outcomes (Burgelman, 2002). Summarising, the mixed results have been attributed to

either poor research methodology or to variable levels of competence in organisational planning processes. The latter argument is reflected in research that found that even though strategic planning was the most common management tool or process used by 67 of 135 survey respondents in Ireland, it ranked a poor 19<sup>th</sup> for satisfaction and usefulness (Cullen, O'Connor & Mangan, 2004). Offering explanation, O'Neill, Pouder, and Buchholtz (1998) discuss the combinations of contexts and organisational characteristics that prompt the spread of inefficient strategies. At the extreme negative end of explanatory opinions about strategic planning, Grieves (2000) argues that strategic planning is a legacy of the past when things were slow enough for strategic planning cycles to keep pace, and that strategic planning is no longer a valid tool, which raises the question "why are we still trying to make it work?"

In spite of the arguments and evidence against strategic planning, it has been shown to be useful across a wide range of industries (Andersen, 2000), and successful strategic planning has been linked with 'attention to planning processes' and 'organisational learning' (Hilse & Nicolai, 2004). Besides - few organisations would admit to having no plan at all.

Strategic planning, according to more recent views summarised by Mintzberg (1994a), is an interactive process that involves people in communication about planning the organisational goals, and the processes to support those goals.

Thererfore, any instrument intending to capture and assess those planning activities must directly or indirectly observe the activities, or examine the contents, of such plans for evidence of adequate planning processes. Due to their confidential nature, direct observation of strategic planning sessions is difficult for a researcher. However, members of the organisation can report on evidence of planning activities.

In view of the disparate opinions in literature regarding assessment of strategic planning activities, help was sought for both the definition of strategic planning, and on how to assess it, from expert panel members chosen because of their knowledge and expertise in the subject.

Study 1a - Develop constructs for 'strategic' conversation and planning

This purpose of this study was to develop both a theory-based and expert-panel generated version of a construct for strategic conversation, ready for convergence and testing. Because of its conceptual proximity to strategic conversation, and the 'best-use' of the availability of the experts, the construct for strategic planning was developed simultaneously.

#### <u>Method</u>

# Literature-derived strategic conversation construct

This section reports on the gathering of components to form a theoreticallybased construct of strategic conversation.

#### Procedure

For this inductive part of the process, the construct components were derived from the literature reviewed for Chapter 2. Comments or arguments from literature were collated into a list of opinions, and those were sorted into several different patterns of similarity. The deductive part of the process was to make sense of those patterns and generate a construct.

Searches were conducted within academic and practitioner journals for relevant material. Six two-word searches were used where the fist word was either strategic or organisational (or organizational), and the second word was dialogue, conversation, or discourse. For each 'hit' the document was examined for the use of the words to see if it provided definitions or explanations of the terms, or merely mentioned the search

term. Where relevant information was identified, extracts were taken of comments, findings, propositions and hypotheses that provided some explanation of, or insight into, the nature or use of strategic conversation.

Three hundred and five relevant extracts were recorded. For example, the necessity to discuss and clarify organisational purpose (Chesley & Wenger, 1999) and to talk about and align goals (Haas & Algera, 2002). The key points of each extract, referred to as items below, were then entered into one column of an Excel spreadsheet, from where sorting could be tested in multiple ways. The items were first sorted by the researcher according to the dual criteria of whether they directly related to strategic conversation itself, or to issues associated with strategic conversation. For example, "Strategic meeting members practice equal risk-taking (sticking neck out at the meeting)" was regarded as being associated with strategic conversation, but not a component of it. On the other hand, "Every strategic topic includes consideration of external risks" was considered to be a core strategic conversation matter. The items that directly related to strategic conversation itself were retained and sorted by the researcher into as many different sets of thematic groupings as possible, while items that were regarded as only 'associated' with strategic conversation were disregarded. This sorting was an intuitive process because of the multiple possible themes that were possible, and the absence of any clear way to score or classify the items.

# Results

There were four different ways found to sort the retained items into clusters.

Each set of clusters represented a potential (competing) construct, and each cluster within each set was a potential component of that construct. The selection criteria for the preferred construct was based on whichever of the four possible constructs made

use of the majority of pooled items. This choice of criteria was based on the pursuit of content validity. The construct that used the majority of items (Table 4.1) contained only two components - strategic purpose of conversation, and topic of conversation.

Theory-based components of Strategic Conversation

Table 4.1

\_\_\_\_\_

<u>Components</u>

Strategic purpose (why we are having this conversation)
Strategic topic (what we are talking about)

The term 'theory-based' is used here in the context that it is a tentative theory about strategic conversation based on prior research and argument, and as such is a concept that is not yet verified but that if true would explain certain facts or phenomena. The 'purpose' component of strategic conversation (the reason we are having this conversation) requires that a conversation concern the purpose of the organisation in terms of the relevant environments (economic, political, business) and selection and use of strategic information sources (internal and external), from which goals and strategies can be developed and pursued. Discussions about purpose will include attending to 'what if' and 'why' questions about unknowable future environments. In order to be strategic, conversation must not be about known, certain, operational, or administrative issues (Porter, 1985). The 'topic' component (what we will talk about) requires that the conversation topic concerns an activity within at least one part of the strategic loop. In other words, the topic could be about collecting or using information, planning strategies, strategic implementation of planning, measurement of strategic plans, or organisational learning about strategically relevant matters.

#### **Summary**

The derived construct that used the majority of pooled items for strategic conversation, comprised the two components 'Strategic Purpose' and 'Strategic Topic'.

Between them they address the 'why' and 'what' of the conversation. This construct compared closely with that derived from the expert panel.

# Expert panel-derived constructs for 'strategic' conversation and planning

This part describes the processes used to form expert panels, and facilitate their meetings objectives to 1) agree on the component parts of strategic conversation, 2) decide what parts of strategic conversation needed to be measured, and 3) suggest what readily available evidence would exist to indicate the presence of those strategic conversation behaviours. From objectives 1 and 2 would emerge a construct, while objective 3 would help generate measurement items. The expert panel members were also helpful in post-meeting checking of the researcher's interpretation of the meetings.

## Participant recruitment

Potential members from industry and academia were contacted with help from industry, government, and academic networks. The criteria for panel membership were that the potential member had to be a key decision-maker, or have direct influence on and participate in, executive level strategic decision processes, or have expert knowledge on the topic (e.g. lecture on strategy-related topics or have written relevant papers). Interested individuals were sent information on strategic conversation (Appendix 1).

## Expert panel participants

Two diverse expert panels were convened from a membership pool comprising four decision-makers from the corporate sector, four from the government sector, and

four from academia, two of whom were also corporate consultants. Five members were male and seven were female. The roles represented were CEO (e.g. national insurance company), HR director (e.g. manufacturer, state government department), executive (state govt. strategic planning, exporter), lecturer (strategic planning, HR), and corporate consultant (executive coaching, strategic planning).

Members indicated that their individual exposure to strategic responsibilities had been a gradual and varying process, making time-based measures of 'strategic experience' difficult to estimate. However, based on their best approximations, members' engagement in strategic level decision-making ranged from 5 to 15 years, with a mean of 9.25 years and SD = 3.11.

#### Ethical considerations

Panel members agreed that names should not be reported, and that case examples they introduced should be regarded in confidence, and not recorded. It was agreed that no comment would be reported in a way that enabled identification of the originator.

# Procedure

A document that described the project, and a brief overview of strategic conversation, was supplied a week in advance of the meeting for each group. This was intended to inform panel members of the current state of knowledge of strategic conversation (Appendix 2).

The purpose of each group's ninety minute meeting had been agreed upon over the phone. As members had not previously met, each panel member introduced him/her-self and described relevant experience in matters strategic. The researcher acted as facilitator. In the first phase of the meeting, agreement was canvassed on a general definition of strategic conversation as being conversation that is strategic. The

process of the meeting communication style then followed the 'dialogue → debate → discuss → decide' sequence mentioned in Chapter 2. The facilitation strategy was to let each group find its own way to both a definition and construct of strategic conversation. Each of the two sessions began in an explorative manner with the aim of accumulating as many ideas about, and components of, strategic conversation as possible. Each group expressed the need to clarify the meaning of 'being strategic'. Rather than consume valuable time on that, a definition assembled from current literature was offered. Each panel agreed that the definition was suitable, encompassing enough characteristics that they considered important.

A strategy is a fundamental pattern of present and planned objectives that place the organisation in an advantageous (market or other) position, reducing negative impact from competitors or other threats including environmental factors [the ends]. The planned objectives take into account in-house, outsourced and needed organisational capabilities, and inter-actions that focus on discovery, developmental alignment and delivery of those capabilities [the means].

From that definition, it followed that being strategic described a behaviour that designs, implements, or engages in some activity that is directly related to, a strategy. Furthermore, these activities would belong to at least one of the components of the strategic loop (Figure 3.4).

Strategic planning, which is the process of designing a strategy, and includes planning the means to ensure implementation and assessment of the strategy, was also defined.

Strategic Planning is a process that designs a program, the contents of which are intended to modify and utilize optimally the organisation's resources to 1) take advantage of present and future (probable and possible) opportunities, 2) sense, evaluate, and respond to threats to the organisation. (Note: to 'utilize optimally'

infers assessment of efficiency and effectiveness of both strategy and its implementation)

This is similar to the literature-derived definition (the process for developing a program that manages organisational resources (Canback, 1999) and behaviours (Mintzberg, 1994b) in a way to exploit current or emerging opportunities (Graetz, 2002)) that led to the development of hypothesis 2 (Strategic Planning will be found to relate to, and predict, Strategic Behaviour.).

Panel members were then invited to think freely to suggest attributes or properties that described conversation that was 'being strategic', and these were recorded on whiteboards without editing. Notes were attached or lines connected as the list grew. The descriptive data collected from the expert panels were initially sorted by them into meaningful categories along with three related pieces of information; 'importance attached', 'how often it emerged in reality', and the component of the strategic loop (Figure 3.4) to which the item belonged. The purpose of this was to isolate items that belonged uniquely to the strategic planning component. Isolating these items would reduce conceptual overlap, and help develop the instrument for strategic planning (Chapter 5).

The sorting process used in this part of the research, while guided by grounded theory to sort non-quantitative data into variables (categories, concepts and properties) and their interrelationships (Glaser, 1992; Noble & Mokwa, 1999)), deviated from the recommended processes in two ways. Firstly, grounded theory seeks more information about each item than was obtained from the expert panels in the time available, and secondly, coding and initial sorting was performed with the help of the panels rather than by the researcher alone. The adjusted procedure seemed more

accurate and rigorous, largely because panel members were more knowledgeable than the researcher in the area of investigation.

It was agreed that some items from the remaining pool, while not considered part of the planning process or part of strategic conversation, were associated strongly with it. Examples were items that were classified as 'preconditions' or 'conversation etiquette'. Thus, each panel identified each entry as belonging to strategic planning, strategic conversation, or a peripheral association. Each strategic conversation item was discussed and examples were sought, partly to confirm common understanding of the item and the reason it was retained, but also to aid later item generation of the instrument. That procedure was repeated with strategic planning items.

Coding and discussion led to core conversation items being easily sorted into columns. The columns were then regarded as clusters that were named descriptively. With named clusters to prompt more idea generation, further items were added within each cluster, and some were transferred between clusters, or removed. Again, the same process was repeated for the items that described actions regarded by members as belonging to strategic planning.

There were slight differences between the beginning processes of the session for each group, complying with expectations of action research cycle principles. The first panel's session served as a learning exercise for the processes of the next session. In reviewing its own process, the first panel made process recommendations in the interests of the performance of the next panel. For example, the first panel suggested spending less time on clarification of assumptions and definitions because it was certain where the deliberation would end. In other words, the first group provided the second group with those assumptions and invited their challenge. The intention was to invest the saved time on the intended task – creating the construct. With the

additional time available, the second panel generated more strategic conversation items (22 versus 16), and sorted them into more core clusters (4 versus 3) (Appendix 3). Strategic planning items (12 versus 10) were sorted into two clusters for each group.

# Results and analysis - strategic conversation

The first panel developed strategic conversation 'items' into the same two groups as had occurred in the literature-based process - those items that directly concern strategic conversation, and those items that are important but are on the periphery (e.g. climate 'for' strategic conversation). Of the items that directly related to strategic conversation, the panel sorted them into three clusters that they labelled 'topic', 'method' (or 'process'), and 'knowledge'. The 'topic' component required that the subject of conversation address organisational purpose or goals, and was intended to create and/or respond to 'what if' questions. 'Method' and 'process' referred to the conduct of the formal or informal meeting at which the conversation occurs, and the use of appropriate conversation skills and group etiquette. 'Knowledge' referred to the attendance of people with appropriate technical and strategic knowledge and skills.

The second panel sorted its strategic conversation items into four clusters labelled 'intent', 'focus' (topic), 'purpose', and 'individual capabilities'. Intent referred to the strategic intention of the conversation, for example to create a strategy or modify an existing one. Focus (topic) contained items concerning obtaining and processing information in specific strategic contexts, for example risks and contingencies. Purpose referred to the reason that prompted the conversation; for example responding to an opportunity or a threat would require setting new goals and deciding the means of achieving those goals. 'Individual capabilities' describes the

presence of leadership, technical and other skills necessary for a conversation to be strategic.

### Results and analysis - strategic planning

The first panel labelled the two clusters 'proactive' and 'reactive', while the second panel initially used the terms 'opportunity' and 'risk'. Members of panel 2 explained that when people meet for a strategic planning session, it is to develop a plan to take advantage of opportunities, and/or and to attend to risk issues and contingencies. It also considers 'things we must start and things we must stop' - the resource tug-of-war that concerns the organisation's relative market effectiveness. In other words - strategic planning is about discussing the allocation of available resources, and adjustment of resource inventory, to address known, probable, and possible opportunities and threats.

The proactive cluster of panel 1 was identical to the opportunity cluster of panel 2, while the reactive cluster was the same as risk. The total pool of strategic planning items were therefore sorted into the two-component construct and named 'opportunities' and 'threats', fitting well with the terminology and intention of a SWOT analysis. The title of 'threat' was chosen in preference to 'risk', not only because of the consistency with SWOT terminology, but also because a threat can be construed as a more imminent and potent phenomenon. Contemporary thinkers about strategy would propose that threats are opportunities in disguise for emergent strategies (Knight et al., 2001; Chatterjee, Lubatkin & Schulze, 1999).

The resultant construct fits well with the theoretical understanding and definition of strategic planning given earlier (Chapter 2).

#### Analysis - Convergence of strategic conversation constructs

The three strategic conversation constructs from literature and panel processes were used to arrive at a converged structure. There were strong similarities between all three constructs when compared according to their item contents (Table 4.2), although the component titles did not align. For example, the second panel's 'intention' comprised items similar to the first panel's 'topic', and was similar to the theory-based 'purpose'.

Table 4.2

Comparison of constructs derived from literature and expert panels

Literature-derived	Panel 1	Panel 2
Purpose	Торіс	Intent
		Focus
Topic	Method	Purpose
	Knowledge	Individual capabilities

When comparing items between the three constructs, the literature-derived items covered a broader spectrum of behaviours than did either of the expert panels. For example, neither of the panel constructs acknowledged the strategic system loop, or the organisational penetration of strategic conversation – both of which were considered important in literature. Panel constructs mentioned behaviours associated with certain strategic loop components such as scanning and planning, but did not require that all components of the strategic loop be tested.

Looking from the other direction, all items generated from the panels had direct equivalents in the literature-based construct, which resulted in a total overlap of the panel constructs, by the literature-derived items. Convergence therefore occurred to the extent that the constructs from the expert panels agreed with and fitted within the construct derived from literature. Perhaps rather than convergence, the triangulation process provided valuable cross-validation

#### Discussion

That the panel members did not identify as many strategic conversation items as were obtained through literature was not surprising since the panel members had no prior opportunity to explore the topic, and panel time was relatively brief. Subsequent contact with group members, as the combined model evolved, allowed them more time to reflect. Subsequent comments offered by panel members suggested that, in time, they would have more closely approached the complete literature model. The reason the literature construct was more comprehensive than those from the panels was probably because it had evolved from the efforts of researchers and thinkers who had invested considerably more time exploring and testing strategic relationships and the role of conversation, than had the expert panel members. While the value of the panels was expected to be in the convergence of constructs, the value became that of providing cross-validation of the literature-derived construct.

An alternative explanation for panel-derived constructs having fewer items could be that the panel members' models were more accurate, and that the literature-derived construct was too elaborate. Although that possibility was given consideration, it was discounted by the simplicity of the final construct, and the increasing alignment of subsequent comments from panel members.

The strategic planning construct, being developed simultaneously as part of the strategic conversation development process, allowed early differentiation, on theoretical and practical grounds, of items between the two constructs. Given the close conceptual proximity of the two constructs, the early differentiation by expert panel members was regarded as assisting the achievement of research rigour.

# CHAPTER 5 - DEVELOP CONSTRUCT FOR STRATEGIC BEHAVIOUR AND ORGANISATIONAL PERFORMANCE

# Strategic behaviour - what to measure

The purpose of this chapter is to describe the development of the constructs for strategic behaviour and organisational performance, based on current theoretical literature and reported practices. A criteria list is developed to help identify a suitable construct and instrument for strategic behaviour. Literature on generic performance is used to develop a new instrument.

# Current understanding of the concept of strategic behaviour

In their review of organisational performance variance, Bartlett and Ghoshal (1991) found that research emphasis had shifted over the past decade from an external (environmental) to an internal focus. The wisdom of such a directional shift is supported by findings that internal variables explained twice the organisational performance variance (38%) as did external variables (18.5%) (Hansen & Wernfelt, 1989). A second study reported similar ratios of the impact of internal and external variables on performance variance, with internal factors correlated r = .761 with performance, and external factors correlated r = .493 with performance (Tvorik & McGivern, 1997). The shift of focus from external to internal factors, when pursuing organisational change, is justified by both the increased influence of internal factors, and the relative ease to change internal variables than to attempt to change external variables such as environmental benevolence.

Bartlett and Ghoshal (1991) remarked on the absence of a similar shift of focus in papers concerning strategic behaviour, specifically citing the paucity of material dealing with the strategic behaviours of people within the firm. This is in spite of the apparent importance of the role of strategic behaviour, as discussed in Chapter 3.

Strategic behaviours are generally described as being either internal or external. Internal behaviours are those of members within the organisation as perceived by others in the organisation (Drago, 1997; Osborne, 1998), and external behaviours are whole-of-organisation behavioural styles (Porter, 1985) that are seen by those outside the organisation as they share (e.g. competitors) or visit (e.g. customers) the marketplace. Other authors describe strategic behaviour categories as exogenous versus endogenous (Ansoff, 1987), individual behaviour level (micro) versus sociopolitical level of the organisation (macro) (Bourgeois, 1984), competitive versus cooperative (Augustine, Boyd & Hanlon, 1997), and induced versus autonomous (Burgelman, 1983). Current writers might rename induced-autonomous as reactive versus proactive (Weick & Quinn, 1999), or perhaps historic versus emergent strategies (Crouch & Basch, 1997; Osborne, 1998). In the 30 years since the first classification (Anderson & Paine, 1975) there has been little consensus on a model for strategic behaviour, although there is no argument against the view that strategic behaviour occurs both within the firm, and between the firm and its environment.

External strategic behaviours are those that improve the financial and/or competitive standing of the firm (Derkinderen, 1988), and researchers have measured these along the lines of competitive strategy styles (Porter, 1985; Robinson & Pearce, 1988). Internal strategic behaviours are patterns of behaviours for attainment of strategic objectives (Anderson & Paine, 1975) or "the cognitive, emotional and

territorial interaction of managers within (or between) groups when the agenda relates to strategic issues" (Grundy & Wensley, 1999, p. 326). The internal behaviours have posed more of a measurement problem than external strategic behaviour over the 30 year history of the topic. For example, Robinson and Pearce (1988) chose to assess internal strategic behaviour by assessing strategic planning sophistication as indicated by plan contents. Sophistication was measured as presence of a short term plan, assigned responsibility for attainment, company-wide planning effort, supportive climate, and that the plans were to be used to judge managerial performance. It was assumed that the extent of sophistication indicated internal strategic behaviour. However, planning does not guarantee that behaviour will follow. Yet the substitution of planning or intention as a measure for behaviour seems to happen frequently. As a start to developing a definition and construct for strategic behaviour, it first needs defining.

## Defining internal strategic behaviour

For any internal activity to warrant the term 'strategic behaviour', even though it may look and sound strategic, it must ultimately control *operational* activities in such a way as to impact the firm's external strategic behaviour (Ansoff, 1987). Internal strategic behaviours such as those described by Anderson and Paine (1975), Drago (1997), and Osborne (1998), are purposeful activities that occur within some part of a strategic action cycle, such as that shown in Figure 5.1. They therefore include behaviours associated with searching for information, planning, internal change, execution, and feedback (Anderson & Paine, 1975). This shows that planning is only one single and separate segment of a strategic loop, and may therefore be a poor indicator of strategic behaviour.

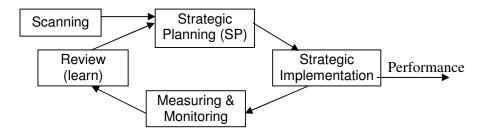


Figure 5.1: Underlying form of action cycle for an organisational strategic loop.

## Strategic behaviours - examples from literature

The actual behaviours that are associated with strategic behaviour, regardless of where they happen in a strategic loop, have been itemised by several researchers. In their study of British Telecom, Grundy and Wensley (1999) categorised strategic behaviours as a number of broad categories including; strategic tasks, analytical processes, individual characteristics, interpersonal processes, and dynamic processes. Each category was operationalised by actual behaviours. For example, analytical processes were operationalised as anticipating, brainstorming, clarifying, consolidating, creative thinking and others. Floyd and Lane (2000) described strategic behaviours as those associated with the roles of various levels. For example, top management behaviours were those associated with ratifying, directing, and recognizing - leading ultimately to decision-making behaviours. Burgelman (1983) described the strategic behaviours of middle managers and lower as those actions that not only respond to strategic initiatives, but originate and champion strategic ideas. When ideas emerge from lower hierarchy individuals, then the strategic behaviour is described as selling upwards (Dutton, Ashford, O'Neil & Lawrence, 2001), an example being to seek a management champion for the idea. In other words, strategic

behaviours by individuals occur throughout an organisation and encompass actions that are more widely dispersed than just the executive levels – such as during strategic planning.

#### Selecting what to measure

Because this research project is concerned with internal relationships, strategic behaviour will hereafter refer only to internal behaviours. Researchers who have previously needed to measure Strategic Behaviour have typically measured external behaviours as indicators of internal behaviour, although there have been some efforts to assess internal behaviour via qualitative exploration to discover local behavioural indicators (Grundy & Wensley, 1999) or laboratory experimentation using scenarios based on expected behaviours (Derkinderen, 1988). Even though it is difficult, research that does not assess actual internal behaviour at the level of an individual person, ignores the significant impact of the creativity of people (Bourgeois, 1984).

However, criticism has been levelled at some research that mixes behaviour at an individual level function with organisational level actions such as strategy (Gunz, 1996). The warning refers to statistical and conceptual risks when crossing organisational levels between IV's and DV's. However, such concerns conflict with other findings that multi-level research has often led to superior research quality because it draws upon resources of diverse disciplines to develop and clarify underlying theory (Halbesleben et al., 2004). The arguments were of concern for this research because it seeks to do just that - assess the link between behaviours across organisational levels when linking Strategic Behaviour with Organisational Performance. The argument for seeking to assess that link in this paper, and not settling for Strategic Behaviour as the terminal DV, is that Organisational Performance is the final DV of concern for an organisation. Organisational benefits

from this research will be diminished unless it helps executives and managers set and/or reach organisational performance goals.

## Developing a construct for strategic behaviour

In the absence of an obvious choice of an instrument to measure strategic behaviour, this section describes the process used to develop theory-based 'requirements' for such a measure. The list was used to guide the search for an appropriate instrument.

#### Operationalising measurement of strategic behaviours

Two obvious ways to collect information about strategic behaviours are through direct observation, or by evidence. Collection of observed data on a large scale or at frequent intervals is usually impractical compared to collecting evidence of behaviour. Evidence may be either objective from recorded data sources, part-objective and part perception from individuals who claim access to evidence - to 'know', or subjective from perceptions of individuals. A discussion on the merits and otherwise of perceptual data is included in Chapter 5.

# Strategic Behaviour measurement requirement 1

Perceptual data may describe transient or habitual behaviours, and either of those could be strategy-related or not. Transient behaviours are less likely than behavioural 'practices' to impact overall performance, so strategic behaviour will tend to describe only those behaviours that are both strategic and habitual. This does not exclude spontaneous responses or urgent actions, because a strategically astute organisation would have a systematic approach (habitual behaviours) to sensing and managing emergent strategic issues (Osborne, 1998; Burgelman & Grove, 1996)

Therefore, in choosing the behaviours to measure, the habitual strategic activity within each component of the strategic loop (Figure 5.1) is relevant, and the habit should be widespread throughout the organisation and not just at the executive level.

Strategic Behaviour measurement requirement 1: The data required to assess strategic behaviour should allow scoring of behaviours that are strategy-related, happen regularly, belong within the strategy loop, and occur widely throughout the organisation.

## Strategic Behaviour measurement requirement 2

It is unlikely that strategic behaviour could exist without prior conversation, simply because strategic activity requires intelligent data collection, analysis, interpretation, and decision making (Porter, 1985). Osborne (1998) demonstrated such a role for conversation in organisational processes by linking teams operating within an interactive management style with the ability to take advantage of emergent (quick / fast) opportunities, and with performance that was superior compared to performance of conventional management styles in the same environment. The interactive management style that was referred to, necessarily includes inter-level communication (Christakis & Brahms, 2003; Osborne, 1998). In separate research, the actions of dealing with new and possibly urgent information (emergent, unexpected, spontaneous, opportunistic) were, along with deliberate selection of decision styles and other conversation-related behaviours, found to relate to performance (Oktemgil & Greenley, 1997), again linking conversation and behaviour. By contrast, but still reinforcing the point, poor conversation quality was found to degrade the uptake of new strategic behaviours by managers (Clifford, 2001).

Strategic Behaviour measurement requirement 2: An instrument aspiring to measure strategic behaviour should address both long and short term actions, and

assess the associated formal (systematic) and informal (spontaneous, conversational) information-gathering behaviours.

## Strategic Behaviour measurement requirement 3

Conversation also has a more direct role in shaping the Strategic Behaviour measure. Relationships were reported between the use of dialogue and organisational knowledge, and between organisational knowledge and effective strategic decisions (Gnyawali, 1998), where effective decisions were those that successfully impacted behaviour and performance. Strategic dialogue was also found to relate to goal coherence within and between groups (Haas & Algera, 2002) where goal coherence was the result of specific strategic practices that engaged organisational members in conversation to set, agree on, and align the goals. Being goal-focused, those behaviours were strategic. Therefore goals, which have already been linked with organisational profitability (Terpstra & Rozell, 1997; Harris, Daniels & Briner, 2003), provide topics that connect conversation with strategic behaviour. The clarity of those goals depends, in turn, upon the clarity of means and ends in mission statements (Bart et al., 2001). Indeed, a clear mission statement must exist, and be used, in order for strategic behaviours to follow (Mosakowski & Earley, 2000). The role of a mission statement to guide strategic behaviour is clear from its definition - a mission statement "... defines what business the organization is in, its beliefs about how business should be conducted, the markets and customers it serves, and the unique value it contributes to society at large." (Levin, 2000, p. 93). The presence, and then the use, of a mission statement are in themselves instances of strategic behaviour, and also suggest the presence of subsequent strategic behaviours that are guided by the use of the statement.

Strategic Behaviour measurement requirement 3: An instrument for Strategic Behaviour should assess the extent of active use of a mission statement.

## Strategic Behaviour measurement requirement 4

The first opportunity for strategic behaviour in a strategy loop (e.g. Figure 5.2) is in relation to the task of 'scanning' the internal and external environments. The importance of scanning the environment and using that information to plan to adapt quickly (altering performance) has been linked (r = .56, p < .01) to financial performance (Analoui & Karami, 2000). Similarly, a link has been demonstrated between theoretically derived optimal strategy style and management's selected strategy style using performance as the indicator of fit of the selected strategy in each context (Oktemgil & Greenley, 1997). These researchers found that having balanced capabilities between diverse information scanning, decision making, and implementation monitoring, added to organisational adaptability and profitability. The insufficiency of an intended strategy alone is demonstrated by the lack of relationship between strategic intent and performance (Fawcett et al., 1997). That there must be implementation action, and it must be monitored, was the conclusion of the same researchers who found a significant relationship (r = .40, p < .01) between what actually gets measured by the organisation, and the resultant performance. Their results demonstrated that what gets measured gets done, rather than what gets planned gets done.

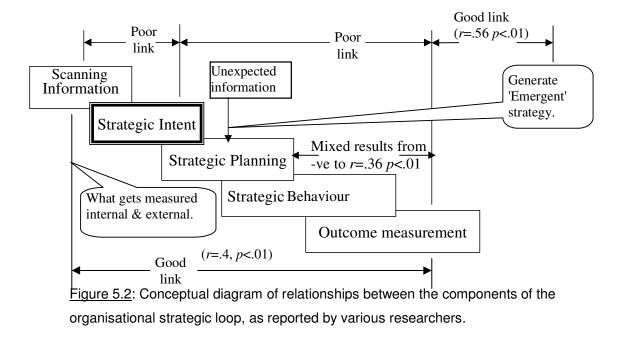
Recent studies into the relationship between strategic planning and performance have used an all-inclusive definition of planning that embraces planning-related actions (e.g. behaviours) throughout the strategic loop. Using a broad definition, a relationship between strategic planning and financial performance (r = .355, p < 01) has been recorded (Andersen, 2000). However, such an inclusive definition blurs the

distinction between the meanings of strategic management (Mintzberg, 1990), strategic programming (Mintzberg, 1994a), and resultant behaviours. Simply because there are mixed results for the efficacy of planning seems poor reason to broaden the definition rather than refine it. In summary, planning is followed by behaviour, and strategic behaviour must be preceded by planning. Therefore, while a Strategic Behaviour instrument might check that strategic planning has been performed, it must avoid duplicating the measurement of planning.

Strategic Behaviour measurement requirement 4: The Strategic Behaviour instrument should not attempt to evaluate the strategic planning process or content, but simply assess whether planning behaviour exists.

## **Summary**

Figure 5.2 presents a conceptual summary of the current understanding of relationships between the components of the strategic loop, and the role for internal strategic behaviour.



In summary, strategic behaviours are strategy-related, happen regularly, belong within the strategy loop, occur widely throughout the organisation, may be long or short term, involve both formal (systematic) and informal (spontaneous, conversational) communication, relate to active use of a mission statement, and include the setting and achieving of goals but do not include strategic planning processes. From this compilation of the four Strategic Behaviour measurement 'requirements', two expectations arose. Firstly, because the 'requirement' descriptions (criteria) for a strategic behaviour are so broad, and the behaviours are so varied, it was unlikely to be a factorable construct. In other words, Strategic Behaviour might be a single factor construct. Secondly, an instrument to assess the behaviour would assess the topics identified in the criteria list. Therefore, a suitable instrument for strategic behaviour would address the criteria, and probably demonstrate a single-factor construct.

# Developing a construct for organisational performance

This section describes the process to develop a construct of organisation performance. This measure of performance was required as a DV to assess the impact of strategic conversation, strategic planning, and strategic conversation on organisational outcomes. An inappropriate measure of performance could either mask or accentuate those relationships. To compare organisational performance across industry and organisation types requires the use of a generic measure of performance. A search of the literature failed to locate such a generic instrument even though some carried or implied the claim. This section reviews the literature to form a criteria list for such an instrument, suggests a generic model for performance, and develops an item pool from the criteria list and the model.

## What exactly is - 'performance'?

It is not only apparent that performance can be many things to many people, but what many people think of as performance - perhaps isn't. This section will examine the many interpretations of the meaning attached to 'organisational performance', and the problems associated with obtaining a generic measure of that performance. To illustrate the problematic nature of performance assessment, consider the example of a sudden jump in an organisation's sales. One might assume that performance has improved. However, according to Duquette and Stowe (1993) this may not necessarily be the case. Sales are merely one indicator of performance, and it is possible for sales to remain static while other aspects of performance either increase or decrease. These authors regard performance 'indicators' as being a single type of data such as outputs, inputs, or outcomes, while performance 'measures' are ratios of indicators (e.g. efficiency (input to output) and effectiveness (output to outcome)), and give a more accurate understanding of performance. For example, in the above example of increased sales, the costs may also have increased such that profit was lower, meaning that profit, which is a ratio of indicators, would more accurately reflect actual performance than would sales alone. However, Goll and Rasheed (1997) would argue that even profit is not an accurate measure of performance, because changes in market munificence can cause profit changes independently of organisational efforts. A further argument against the Duquette and Stowe (1993) ratio model exists even if market munificence remained unchanged. Douglas and Judge (2001) would argue that rather than ratios, it is the *change* (improvement) in the organisation's profits or ratios compared to its own previous figures, or compared to those of competitors, that better describes performance. Such a comparison seems to accommodate efficiency, effectiveness, and munificence. However, a change in

profits may merely be the result of changed relative marketing prowess (McKoll-Kennedy, Kiel, Lusch & Lusch, 1994).

This raises a fresh argument with potentially diametric responses. Once again, let us consider an example. If an organisation manages to build up sales and market share, but the ratio of outputs and inputs remains stationary, do we say that performance is stationary? The Duquette and Stowe (1993) model would say so. However, such a conclusion might not be logical because the ratios model does not account for such things as re-investment of profits or marketing investments. The competitive model does recognise such investments of resources, and regards the organisation that gains a larger increase in share of the market to be a superior performer. However, in doing so it discounts the competitor who concentrates on ratios to make a higher profit on fewer sales. In this case, the Duquette and Stowe ratio model would favour the business with the smaller market but higher profit. Investors would probably agree with this analysis, at least in the short term. Yet if an organisation were to be managed to optimise performance on that basis, the executive decisions may cater more to investors in the near term, than to actual organisational performance. This leads to the conclusion that focusing measures of performance on the narrow interests of any stakeholder group may be too simplistic an approach.

Interestingly, if performance of any one organisation was simultaneously measured according to each of these models, they would give different results, making comparisons problematic. A generic model of organisational performance would need to generate reports that are meaningful over time, and between organisations.

## Clarifying a generic understanding of performance

The Oxford Dictionary defines performance as the act of performing; of doing something; using knowledge as distinguished from merely possessing it, and any recognized accomplishment (Fowler & Fowler, 1964). Thus, 'performance' can refer to either the 'ends' (results) or the 'means' (actions) that produced the ends. Ends performance (e.g. profit) is necessarily historic in nature because it occurs before being reported. Means performance (e.g. production rate) describes current processes at the time of reporting. Ends performance is, in effect, a later indication of the success or otherwise of previous means performance. So, already there are problems in defining a generic construct; are we talking about 'ends' or 'means', or can both fit within the one construct?

Another categorisation describes the many different kinds of performances expected by different stakeholder groups with vested interests in an organisation. Differentiated by stakeholder group, the focus of a performance measure will depend upon its intended stakeholder audience (Harrison & Freeman, 1999; Delmas, 2001; Berman, Wicks, Kotha & Jones, 1999), and the level of organisational performance activity (production, supply, executive etc.) or output to be examined (Crilley et al., 2002; Cross & Lynch, 1988; Duquette & Stowe, 1993).

Yet another categorisation applies from individual through group and team to whole-of-organisation performance, and measures effectiveness and efficiency by assessing outputs, outcomes, consequences, profit, and other financial indicators. The aspect that is measured will depend upon the purpose of the measure.

This introduces the possibility of an instrument being generalisable, but not generic. An instrument that focuses on, say, effectiveness, may apply with equal

relevance across industries or nations, but it is not generic because of its narrow focus.

A generic instrument will need to examine broad performance issues.

# Generic performance

This section describes the requirements of a model of performance that has generic applicability, with a view to setting design criteria for such an instrument.

## Current views

If organisations that are to be compared for performance are all of one kind (e.g. manufacturing) and in the one industry (e.g. motor vehicles), the issue of performance comparison is uncomplicated because the same measures apply with equal 'fit' to each. If, however, organisations operate in different industries, then measured performance differences could be due to such external variables as industry profitability and stability (Kumar & Subramanian, 1997), and environmental munificence (Goll & Rasheed, 1997). For example, higher performance in a stable industry is shown to relate more to cost-cutting efficiencies, while in a dynamic industry it is related more to effective innovation and creativity (Porter, 1985; Kumar & Subramanian, 1997).

Environmental influences such as uncertainty or rate of change, complexity, and munificence, have been shown to influence the relationship between rational management practices and organisational performance (Goll & Rasheed, 1997).

Therefore, while financial outcomes have historically been the preferred performance indicator, the different industry expectations render meaningful comparison difficult.

The question about what should be measured becomes even more complex when the organisations being compared include a mix of non-profit, profit, government, service, and any other forms. Approaches to these problems have varied.

A proposal to assess organisational performance via strategy performance rather than overall financial performance, seemed to offer promise because such an approach could readily generalise across a mix of organisation types, accommodate different time frames (Eisenhardt, 1989b; Nguyen Huy, 1999), and address the expectations of multiple stakeholders (Schwartz, 2000). Strategies, by their nature, attempt to balance multiple stakeholder issues (Ogden & Watson, 1999), and balance the long-term need to consume current valuable resources to build long-term capacity and capability for the expected future against the short-term need for economic or equity interests of some stakeholders (Maritan, 2001). However, it has been observed that the pressure of specific stakeholders causes an emphasis in the pursuit of short-term goals, that in turn tends to dilute the resources available for the long term view (Ireland & Hitt, 1999; Leana & Van Buren, 1999). Even stronger forces have been reported within managerial culture of organisations that facilitate the short term (strategy-free) view (Laverty, 2004). It has also been observed that the smaller the business, the closer it becomes to being strategy-free even if it performs well (Quinlan, 1997; Berry, 1998; Analoui & Karami, 2000). Therefore, strategy performance is not representative of organisational performance for comparison purposes.

#### Researching performance comparison

To deal with the problem of comparing performance between organisations, researchers have employed a number of tactics to minimise the problem for a specific project. For example, organisational samples have been drawn from a particular industry range (Table 5.1), or a narrow measure of performance was chosen that suited the industry range (Table 5.2).

Table 5.1

Examples of research 'sample' categories

Category	Example	Reference
Within one organisation		(Haas & Algera, 2002)
- Within one industry	Hospitals	(Kumar & Subramanian, 1997)
	Golf courses	(Crilley et al., 2002)
- Within one category	Manufacturing	(Fawcett et al., 1997)
	Public service	(Bronn & Olson, 1999)
- Geo-economic zone	New Zealand	(Guthrie, 2001)
- Special categories	Visionary organisations	(McGivern & Tvorik, 1998)

Table 5.2

<u>Examples of 'performance' categories that attempt to be generic to facilitate</u>
performance comparisons

Measure	Reference
financial returns	(McGivern & Tvorik, 1998)
financial ratios	(Andersen, 2000)
level of innovation	(Andersen, 2000)
qualitative indicators such as climate and culture	(Cobb et al., 1998)
Strategic reference points	(Fiegenbaum et al., 1996)

A generic and generalisable instrument would allow comparisons between more than one organisation, more than one industry, more than one category, and more than one economic zone. It also follows that an effective generic instrument would allow comparisons between intervals for the same organisation.

# <u>Problems in specifying generic performance</u>

Literature on generic performance has, over time, contributed criteria for such an instrument, but the information has not been collated, nor has an instrument been developed to meet the criteria. These criteria are summarised in Table 5.3.

Table 5.3

<u>Criteria debated in literature as necessary for a generalisable instrument</u>

Criteria	Desired feature	Undesired feature	Argued by:
Focus	Unlimited	Targeted	(Floyd & Lane, 2000)
Applicability	Broad	Narrow	(Bazerman et al., 2000)
	Across population	Within population	(Sauley & Bedeian, 2000)
	Across cultures	Within cultures	(Law et al., 2004)
	Across geographic areas	Single location	(Boeker, 1997)
Assumptions	Broad and many	None	(Snyder & Stukas, 1999)
Sample	Multiple	Single	(Podsakoff et al., 2003)

There were a number of common themes found in the literature on generic performance. The most noticeable themes related to multiple views, multiple domains, temporal sensitivity, multiple industries, relative importance of dimensions to each other, and business environment. Each of these views contributes to an understanding of the requirements for a construct of generic performance.

# Multiple views

Multiple views refer mainly to the various, sometimes conflicting, views of different stakeholders groups. Stakeholder theory offers explanations of how organisations strive to meet these performance pressures (Sirgy, 2002). Archer (1995) divided stakeholder interactions into quadrants about two axes - whether the interactions help or hinder each other and whether they are necessary or not. An example of opposing quadrants is represented by the balance between employee expectations of reasonable salary, and investor demand for return on investment. Performance management therefore remains a balancing act (Harrison & Freeman, 1999) that requires relevant multi-view performance information.

Fraser and Zarkada-Fraser (2003) suggest that stakeholder perceptions of management performance emphasize the 'means' view and are related to actual management performance in terms of both behaviours and outcomes. They also argue that stakeholder perception is a more useful measure than objective 'ends' performance

because the latter fails to indicate the effect of management behaviour on stakeholders. Ends measurements do not expose the efforts and decisions concerning the balancing of stakeholder interests. Without multiple views of performance, organisations are unlikely to have the metrics needed to achieve the balance required to address each stakeholder group's concerns adequately and fairly.

It is useful to note at this point that it is possible to over-service or over-satisfy a stakeholder group. There is an optimum level of performance required by any stakeholder group, and performing beyond that level for any group will not translate into improved corporate gains, only increase the costs of doing business (Soetano, Proverbs & Holt, 2001). Over-attending effectiveness reduces efficiency. This finding reinforces the argument for using perceptual versus objective performance measures, since only perceptual measures can sense performance satisfaction levels, and the attainment of targeted achievements of them.

Requirement 1: A generic performance instrument should acknowledge different stakeholder groups, and assess their perceptions of performance.

## Multiple dimensions

Recent measures of performance have moved away from single measures of organisational performance because they do not capture enough of its dimensions. The prevailing argument is that multiple items and dimensions are preferred for content accuracy and reliability. An example of a multiple dimension instrument was the model of performance for the Office of Inspector General, where the researchers developed an instrument to assess efficiency, effectiveness, relevance (ratio of outcomes to impact), and sustainability (endurance of benefits over time) (Duquette & Stowe, 1993). However, while the authors were comprehensive in their review of the need to assess multiple dimensions, and produced a comprehensive instrument that

covered multiple dimensions and the needs of important stakeholder groups, it was limited to historical data related to current performance. It ignored current efforts and resource allocations invested to improve future performance.

The Balanced Scorecard © is an example of a performance measure that looks at multiple dimensions in terms of both lag and lead indicators to assess performance in terms of effective attention to both current and future performance (Norton, 1998).

This instrument will be discussed further, but is not useful for research purposes in comparing performances between organisations, and is suited more to internal management of strategic development.

Requirement 2: A generic performance instrument should include multiple dimensions that look at historic, current, and future timeframes.

## Temporal sensitivity

Like financial results, many performance reports indicate the results of **past** activity (Youngblood & Collins, 2003), rather than the performance itself. The decisions that determined today's performance have already been made and cannot be changed, and today's performance decisions impact only future performance. This is not the same as comparing past and present performance, but refers to the time lag between decisions and performance outcomes. Performance 'management' by definition therefore needs to focus on true predictors of future performance rather than historical finance reports or today's performance. Research has shown the inability of historical financial data to predict future performance (Cross & Lynch. R., 1990), although it can be improved by the organisation's "learning effectiveness" (McGrath, 2001) and tailored as learning occurs (Cross & Lynch. R., 1990). This temporal complication means that a current conversation about strategies for future performance should also examine the relationship between strategic decisions and

subsequent performance outcomes, and apply those relationships to the current conversation about future performance.

Staw and Epstein (2000) demonstrated such attention to temporal detail when they explored the link between popular management techniques and performance. They found that adoption of popular management techniques did not relate to higher economic performance. The authors accommodated the temporal influence by looking at performance outcomes (impact) of 1995 as the dependent variable, and used performance decisions made in 1994 and 1990-1992 as independent variables. They reported a negative performance result of popular management techniques in the short term (1 year), and neutral change in the longer term (3 to 4 years). Performance was measured as return on assets (ROA), return on equity (ROE), and return on sales (ROS) of a sample of Fortune 500 companies (Staw & Epstein, 2000). A one year lag was used when studying the international diffusion of ISO 9000 (Guler, Guillen & Macpherson, 2002), and 6 months when looking at the impact of emotional intelligence on performance (Sosik & Megerian, 1999). However, little justification was offered for the choice of interval between decision and impact measurement, suggesting that the choice may have been based more on researcher convenience than on scientific reason.

Requirement 3: A generic performance instrument should acknowledge the temporal nature of performance responses to performance stimuli.

## Multiple industries

Different industries have been shown to share characteristic performance traits (Schmalensee, 1985) that can confound comparisons. When Fortune Magazine publishes the Fortune 500 list of organisations, it also publishes a comparison of average industry performances for the year. The industry comparison can be used by

researchers (Weaver, Klebe, Trevino & Cochran, 1999; Staw & Epstein, 2000;
Berman et al., 1999) to control for industry when assessing relative performances. For example, Stimpert and Duhaime (1997) compared performances according to industry, corporate, and business levels of analysis of performance of 160 of the Fortune 500 companies, when proposing a generic model of performance. However, this measure did not satisfy the requirement of multiple dimensions (requirement 2), because it was based solely on financial results. It also did not satisfy requirement 3 because it ignored temporal concerns; nor did it satisfy requirement 1, because it was insensitive to divergent stakeholder interests.

Requirement 4: A generic performance instrument should not discriminate between industry types, and instead, facilitate inter-industry performance comparisons.

#### Relative importance and interactions of performance dimensions

Not all components of generic performance will apply with equal relevance to each organisation, or even to the same organisation throughout its life cycle. Few, if any, performance measures seem to acknowledge the issues of interaction and trade-offs between metrics (Youngblood & Collins, 2003). A trade-off occurs when an improvement in one performance metric will result in the decrease in one or more others, and relative values become important in making a performance decision.

Examples of this are the tug of war between long and short-term plans, between the demands of employees, customers and investors, and between growth and profit. The Balanced Score-card (Kaplan, 1999) has been criticised for failing to acknowledge that some performance metrics are more important than others when analysing a system's overall performance (Kaplan & Lamotte, 2002).

Requirement 5: A generic performance instrument should acknowledge the differing degrees of importance of specific metrics between organisations.

#### Business environment

The roles of business, economic, political and competitive environments have been mentioned, and market munificence discussed. Market munificence should impact all similar entities approximately equally, whereby high munificence can lead to favourable indications of performance, and low munificence can have the reverse effect. Even if an organisation does nothing itself to improve or degrade performance, measured performance may change due to munificence. Two ways to minimise the impact on performance measurement are to account for, or side-step, the influence. Munificence can be measured separately and then treated as a covariant, as was done in a study on stakeholder orientation (Berman et al., 1999). Alternatively, the munificence artefact can be sidestepped by comparing only the relative performances of organisations, in which case environment influence is common to all organisations.

Requirement 6: A generic performance instrument should acknowledge munificence, either by including it as a variable, or by excluding its influence by assessing only comparative (competitive) performance between organisations at the same time.

#### Quality / accuracy of perceptual data

In addition to the above considerations, there is also a need to be sensitive to the quality of perceptual data. Perception is an individual awareness of something after individual interpretation of meaning of an input to the senses (Lefton, 1994). If perception is to be used in performance assessment, and perhaps subsequent decision making, then clearly, accurate perceptions are more useful than inaccurate ones.

Organisations that monitor organisational and marketplace actions and reactions

comprehensively, are likely to improve accuracy of perceptions, and enable decisions to be based on better information (Jennings & Lumpkin, 1992). This is demonstrated by a very strong relationship between information scanning and performance (r = .82, p < .01) (Analoui & Karami, 2000), also by a finding that no strategic planning will be implemented in small to medium businesses where senior managers or owners lack strategic awareness (Berry, 1998), and again when scanning was linked to strategic awareness (Analoui & Karami, 2000; Nastanski, 2004).

In addition to differences between organisations, there may also be a wide range of accuracy of perceptions within an organisation, based on the extent to which organisations collect and share data to inform those perceptions. Even under ideal circumstances, not every member of an organisation has equal exposure to all stakeholder groups or to data on internal processes. For example, an individual perception might be based on a vague feeling, a good reason, or sighted evidence. This means that the quality of perceptual data will vary to the extent to which the providers of that data are well informed. This is more an issue of 'certainty' of data accuracy than of data accuracy itself, because it is quite possible that ill-informed perceptions are relatively accurate based on the total sensory input available that formed the perception. Poorly-informed people may have the same perception as well-informed people, or it may be very different, putting some doubt on reliance upon perceptual data unless each response is associated with a rating of certainty.

Requirement 7: A generic instrument seeking perception data should assess the 'certainty' of accuracy of each response for each respondent, based on his or her claimed access to relevant information.

The 7 requirements assembled for a generic performance measure are summarised in Table 5.4

Table 5.4

Criteria List for generic performance

Requirements	Description
Requirement 1:	A generic performance instrument should acknowledge different stakeholder groups, and consider using perceptions rather than absolute indicators.
Requirement 2:	A generic performance instrument should include multiple and current dimensions, not just historical financial or production figures.
Requirement 3:	A generic performance instrument should acknowledge the temporal nature of performance.
Requirement 4:	A generic performance instrument should not discriminate between countries, industries, or other non-organisational performance variables.
Requirement 5:	A generic performance instrument should acknowledge the differing degrees of importance of different metrics for different kinds of organisations
Requirement 6:	A generic performance instrument should acknowledge munificence, perhaps by including comparison of competitive performance
Requirement 7:	A generic instrument should acknowledge the differing quality of respondent perceptions - depending on their source.

# Generic performance - examples.

In order for this research to have general relevance, it required the use of a generic performance instrument. A literature review found a few examples of instruments used for their generalisable properties, but they were limited in not meeting the requirements of a generic performance instrument.

For example, an instrument developed to measure performance of the Office of Inspector General (Duquette & Stowe, 1993) did not meet requirements 5, 6, or 7 (did not recognise differing degrees of importance of items, did not account for munificence, and did not acknowledge differing quality of perceptual responses).

As a second example, a financial-focused instrument by Powell and Dentmicallef (1997) did recognise perceptions of stakeholder groups (requirement 1) and permitted organisations to be compared on financial data, thus accounting for environmental munificence (requirement 6). Using Cronbach's test, the instrument's (Table 5.5) reliability alpha was .94.

Table 5.5

Financial performance instrument by Powell and Dent-micallef (1997)

```
Over the past 3 years, our financial performance has been outstanding Over the past 3 years, our performance has exceeded our competitors'
Over the past 3 years, our sales growth has been outstanding
Over the past 3 years, we have been more profitable than our competitors
Over the past 3 years, our sales growth has exceeded our competitors
```

An adaptation of that instrument, shown in Table 5.6, was used to study strategic flexibility and performance. Cronbach's test for this instrument was alpha = .84 (Worren, Moore & Cardona, 2002). However, the instruments did not satisfy generic requirements other than 1 and 6.

Table 5.6

Adaptation of the Powell and Dent-micallef instrument

```
Over the past 3 years, our financial performance has been outstanding Over the past 3 years, our financial performance has exceeded our competitors'

Over the past 3 years, our sales growth has exceeded our competitors'
```

A final example is the various quality or business excellence awards such as Australia's Gold Award for Quality (Australian Organisation for Quality, 2003), Europe's Foundation for Quality Management awards (see http://www.efqm.org/), USA's Malcolm Baldridge National Quality Award (see http://www.quality.nist.gov/) and Asia's Deming Prize (see http://www.deming.org).

The awarding authority in each case seeks examples of excellence by comparing the performance of one organisation against others. While there are subtle differences between the various awards formats, all are based on a broad construct (requirement 2), and recognise multiple stakeholders (requirement 1). The nature of the dimensions is similar for each Award (Table 5.7), although the contents of comparable dimensions differ, and are regularly revised for each organisation.

Table 5.7

Comparing 'Awards' performance criteria

Focus	EFQA	Baldrige	AS9004:2000	Balanced
	(Europe)	(USA)	(Austr./NZ)	Scorecard
Customer/market	Y	Y	Y	Y
Internal processes	Y	Y	Y	Y
Staff focus	Y	Y	Y	
Leadership	Y	Y	Y	
Business	Y	Y		Y
Strategy focus	Y	Y		Y
Use results as feedback for		Y	Y	Y
improvement				
Employee	Y			
Society	Y			
Resource Mng	Y			
Systems focus			Y	
Decision-making focus			Y	
Supplier focus			Y	

The Balanced Scorecard was included as a commercially marketed performance system, similar in construct to the various awards, but differing in a philosophy that emphasises the use of 'lead' indicators thought to drive future performance rather than 'lag' indicators of past performance (Kaplan & Norton, 1993).

While these formats are useful for organisations to help manage organisational development, they do not readily satisfy the needs of generic measurement. To begin with, they do not recognise the temporal nature of performance (requirement 3), nor do they acknowledge munificence (requirement 6) or perception quality (requirement 7). Furthermore, these formats are individually tailored to suit each organisation, and

measurement parameters change annually. Finally, even if the awards results were comparable, they are private and therefore not available for comparison purposes.

Only the awarding authority has enough data for comparison purposes.

No generic instrument for performance was found. Excellence awards were designed for generic use, but more for organisational development than comparisons between organisations. The evolving instruments, models, and constructs of performance do, however, have in common the sense that to adequately capture, assess, and compare performance, requires a broad construct.

# Approaching generic performance

In the absence of a suitable generic instrument for performance, the purpose of this section is to use the previous understanding of performance to consider an approach to take when designing a generic instrument. Performance measurement instruments that attempt to capture most of the broad performance measurement requirements, risk becoming unwieldy, as in the case of the Awards' programs. Furthermore, the Awards' approach requires each organisation to select and adjusts its own metrics, making inter-organisational comparisons a cumbersome and unscientific process that includes a high component of subjective judgement. Yet to use some other form of measure to enable comparison is to move away from what the organisation considers important - how it assesses performance according to its priorities. Realistic statistical comparison between organisations' performance requires narrowing the meaning of performance to make it wieldy, yet including enough universal indicators to capture multiple organisational performance foci.

# Narrowing the meaning of organisational performance

Youngblood and Collins (2003), citing comprehensive reviews of literature on selecting performance variables, argue the importance of limiting performance

measures. They suggest doing so by assessing the extent of alignment of activities with an organisation's strategic initiatives, rather than by multiple discreet indicators such as stakeholders' views. This challenge to the reasoned importance of broad metrics that acknowledge stakeholder views of performance, has been joined by arguments that it is the organisation's own performance with respect to itself, its competitors, or other threats, that is most important overall (Henriques & Sadorsky, 1999; Mitchell, Agle & Wood, 1997). Consider for example, the danger of short-term strategies to keep investors happy, but may weaken future performance that a longterm strategy might have addressed. Consider also that a narrowly focused report, such as the investors' financial report, does not reflect true performance because it ignores the big picture - e.g. the strategic focus on future gains. Does this mean that stakeholder perceptions of performance are irrelevant? Probably not, but it does identify the limitations of seeking data about performance from a single or illinformed source, such as a stakeholder group. The reason the organisation exists is more complex than merely satisfying the customer or the investor. Performance targets should ideally include securing a healthy and growing organisation, and may sometimes be in tension with the interests of various stakeholders.

The only people in intimate contact with the organisation, and who can potentially understand all its external stakeholder groups, and are also in a position to balance all the competing issues, are the appropriate organisational members. However, the accuracy of their knowledge of external stakeholders will depend upon having an active information system (Calori, 1989; Nastanski, 2004). In other words, the people within a well-informed organisation are the most appropriate source of relevant information regarding organisational performance, and it may be perceptual

or objective depending upon their access to data. The difference would be the 'certainty' discussed in the previous section on 'Quality / accuracy of perceptual data' Summary

Current performance instruments do not help researchers or members make inter-corporate and inter-industry comparisons, and simultaneously monitor organisational progress. The Awards type instruments, while intended to facilitate such comparisons, are limited by the way in which organisations individually select their measurement foci, and change them periodically. Of the measurement concepts reviewed, strategy-based measurement was the only one to accommodate the part played by the munificence of the environment, and provide for assessment of effort spent in positioning for the future. Only the Balanced Scorecard © explicitly addresses the issue of future-planning. An instrument is required that assesses and combines both real-time and changing-performance measures to satisfy the emerging criticisms of temporal neglect in research (Brown & Eisenhardt, 1997), and balance performance assessment in terms of managerial and strategic performance.

Attending to the temporal aspect of performance measurement complicates an already complex problem, and timing varies according to the reason for the particular performance measure (Ancona, Goodman, Lawrence & Tushman, 2001). For example, how long after a strategic conversation will performance change? The only suggestion to date has been to make multiple measures over time to sense the direction of outcome change, and perhaps to attempt to predict eventual outcome (Brown & Eisenhardt, 1997; Mitchell & James, 2001). This solution does not help in the design of an instrument, but does help in its use, and will be discussed in the longitudinal study.

## **Discussion**

In drawing the arguments and conclusions together, the performance model of Figure 5.3 is offered as one that fits with those arguments and conclusions. The greyed block shows the munificence, resources, infrastructure, and competition experienced by all organisations within that environment. An organisation's success depends, therefore, on how it performs by comparison with others in that environment. Measurement may report that it is holding, losing, or improving its position of relative performance.

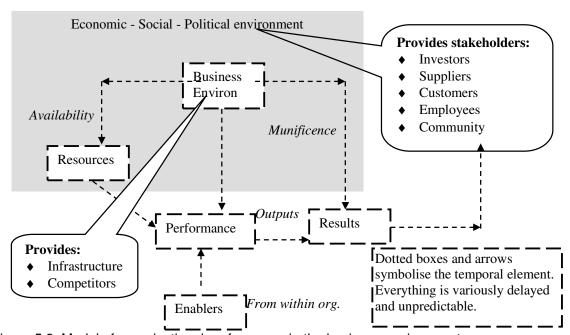
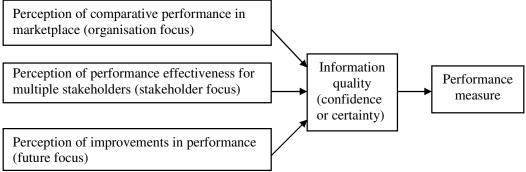


Figure 5.3 Model of organisational performance in the business environment.

While an organisation has to manage both objective performance and the perception of performance to stakeholders, it is the perception of performance that motivates stakeholders to 'do business'. The organisation therefore has strategic choices to make about selecting or targeting specific stakeholders. For example, it might sometimes be better to attract different customers, investors, board members (Allio, 2004; Ireland et al., 2001) or even new employees than to continue with the current ones. By acknowledging this, we differentiate between managerial

performance (efficiency) and strategic performance (effectiveness - the right thing for the 'right' stakeholders). Assessment of effective strategic decisions can be made by comparing marketplace growth between organisations, while efficiency can be assessed by various financial ratios such as profit.

A generic instrument has the potential to assess both strategic and managerial performance, preferably using internally available information. The instrument must assess current comparative performance, stakeholder perceptions, and efforts to learn how to improve performance. The three domains for performance can therefore logically be named as organisational focus, a stakeholder focus, and a future focus. If perceptual data were to be used, then the instrument should comprise items to assess those domains, and also assess the quality or certainty of those perceptions. Figure 5.4 shows the construct model.



<u>Figure 5.4</u> Model for general organisational performance using perceptions on competitive performance, stakeholder views, and improvement over time.

Although there is an extensive amount of literature on organisational performance research covering the past few decades, a review did not locate a generic instrument that could satisfy the requirements of the model. However, the work that has been published on generic performance, and the list of requirements that has been developed here, can guide the selection of items from the many existing performance instruments to assemble a new instrument that suits the proposed three-domain construct.

## CHAPTER 6 - DEVELOP INSTRUMENTS TO MEASURE DERIVED VARIABLES

This chapter reports the process of developing all four instruments from the constructs. Firstly, an argument is made for the use of perceptiual meaures, then statements associated with each construct are collated as potential instrument items. The chapter concludes with checks on substantive, content, and face validity.

## The argument for perceptual measures

While objective data are often preferred and argued as superior (Mintzberg, 1994b), there are both theoretical and practical disadvantages. A theoretical disadvantage is that objective data measures only 'ends' performance, that is evidence of previous performance. A practical disadvantage is that objective data can be very difficult for researchers to acquire. By contrast, perceptual performance data may be superior because it reflects the current environment and behaviours (Fombrun & Zajac, 1987), and is generally more easily obtained.

Although perceptions are nothing more than the opinions of performance by relevant informants, they are considered to provide acceptable validity and reliability when objective sources of performance data are unavailable (Dess & Robinson, 1984). Perceptions have been shown to converge with objective measures (Powell & Dentmicallef, 1997; Venkatraman & Ramanujam, 1987), although not always very highly (r = .27, p < .07, n from 20 to 30) (Saxton, 1997). Although the findings at organisational performance level generally support the positive relationship between subjective and objective performance measures, there has been at least one report

where objective and subjective relationships were found to be of opposite polarities.

This was in a study of the relationships between supervisory leadership and subordinate performance (Yammarino, Spangler & Dubinsky, 1998). Apart from this exception, subjective data has been shown to be able to represent objective data.

A number of other studies have made comparative use of both objective and perceptual measures. For example, a meta-study on performance of salespeople (William et al., 1995) found that the corrected mean correlation between objective and subjective measures of performance across 22 different samples was .41. The authors argued that subjective data were more accurate because of their global nature, and found that objective measures account for only about 15 to 20 percent of a person's performance. In a study on perceptions of risk, objective assessment related to teamperceived risk (r = .66, p < .01, and r = .61, p < .01) for two different experiments involving post-graduate students in a war game (Knight et al., 2001). Bart, Bontis, et al. (2001) found that senior executives response to "How satisfied are you with the firm's current performance?" (sales, profit and growth) compared closely with Return on Sales (r = .412) and Return on Assets (r = .411) both with p < .01. In another study, Return on Assets was related to perceptual performance of hospitals (r = .40, p< .01) (Douglas & Judge, 2001). Finally, a study comparing strategy styles and performance produced similar results using both Return on Assets and performance perception data (Wagner & Digman, 1997).

Far from perceptual measures being a substitute for objective data, some writers argue the superiority of subjective assessment of performance over objective because only subjective assessments consider the interpersonal effect of organisational members on stakeholders (Fraser & Zarkada-Fraser, 2003). Furthermore, the multi-

stakeholder view of organisational performance is increasingly seen as a subjective experience (Malan & Kriger, 1998).

In an effort to minimise disadvantages associated with perceptions that may be poorly informed, in this case organisation performance, Bart et al. (2001) suggested asking for knowledge of 'evidence' of performance rather than for an opinion of performance. The merit of questioning 'certainty' of a response has already been discussed. However, literature was not found that discussed what might be done with a 'certainty' score. It is unclear how much help this qualifier might offer in assessing responses from different parts or levels of an organisation. 'Certainty' of performance data, sought in this research, was therefore purely exploratory and opportunistic, and without associated hypotheses. Perhaps comparison of certainty scores might indicate the extent of communication sharing in the organisation. If group scores do not differ, then perceptual data from all three levels of certainty could be used to improve statistical power. If groups differ, then it may be prudent to use only 'certain' data.

#### Long-term and short-term perceptions

Employees, as one special group of organisational members, provide perceptions that possess an additional favourable attribute compared to perceptions of other membership groups - a longer term view of stakeholder relationships (Savery & Luks, 2004). By contrast, CEO's experience an ever shortening span of time within any given company as 'CEO-churning' increases (Bennis & O'Toole, 2000), and therefore don't have the same history of contact with stakeholders as do the employees, and are compelled to demonstrate, and think in terms of, quick improvement. Indeed, most stakeholder groups, other than employees, retain a short-term focus. Employees are motivated to take a longer view because of their long-term

personal economic dependency prompted by mortgage repayments and future retirement benefits (Savery & Luks, 2004).

The CEO, executives, and employees will therefore demonstrate varying and complementary quality and depth of relationships with non-member stakeholder groups. Each member will tend to be more certain about the views of organisational performance held by one group, and less certain about others. Any attempt to assess organisational performance by having organisational members to report those views, should recognise this variability of certainty.

## Response scale

The Likert-like scale of 1 to 5 was selected because it is generally accepted in research circles, and is familiar to respondents. The scale range was Strongly disagree, Disagree, Neither, Agree, Strongly agree, and Don't know

The use of a [Don't know] response option was added to the scale because of the probability that a respondent may not know the answer to one or more questions, and selecting [Don't know] was considered preferable to guessing. For example, organisational members at lower hierarchy levels may not be aware of the purpose, goals, strategic plans or performance of the organisation, unless the organisation communicates that information freely. Intentional communication of such information has been associated with improved goal alignment (Haas & Algera, 2002), agreement with mission statement (Bart et al., 2001), use of visions (McGivern & Tvorik, 1998), using collective initiative (Crouch & Basch, 1997) and emphasis on opportunities for interactive strategic communication (Osborne, 1998). Therefore, if many members of an organisation signal 'Don't Know' to the strategy behaviour questions, it suggests a particularly low level of strategy communication that would

predict less strategy-related behaviour. Future research could test if the use of the [Don't Know] option is inversely related to strategic conversation, strategic behaviour, and organisational performance. For this research, participant use of [Don't Know] will be ignored, and is used only to reduce the likelihood of a forced-choice error.

The [Don't know] option was located on the right edge of the Likert-style scale for the following reasons. Had the [Don't Know] been located on the left, it would have been the first box to tick and may have attracted cognitively lazy votes (Krosnick, 1999). If positioned in the middle of the scale it may have threatened the assumption of unidimensionality (Cheung & Mooi, 1994) and destroyed the impression of a graded (linear) scale. Positioned at the right edge, it was more likely to be regarded as intended - an alternative when needed.

#### Develop instruments

This section identifies the items selected for each instrument, considers the influence of environmental and stakeholder factors on the item selection process, and combines the resultant instruments into a measurement package.

## <u>Items for strategic conversation instrument</u>

Table 6.1 lists the pool of items for strategic conversation derived from the expert panels and literature, and from which the construct was formed. The items are presented in domain order, and framed as statements intended to collect response perceptions about evidence of strategic conversation. The purpose component asks strategic 'why' questions, and the topic component asks 'what' questions.

Table 6.1

Proposed construct items for Strategic Conversation

```
Items for "Purpose" component.
We regularly discuss information from our formal external scans.
We regularly discuss information from our formal internal scans
We periodically discuss the current business environment
We periodically discuss the possible future environments
We regularly have conversations that focus on a strategic question
     (not operational, administrative etc...)
We have regular strategic planning sessions (e.g. annual)
Informal conversation about goals is actively encouraged
Items for "Topic" component
We purposefully cultivate a climate that encourages effective bi-
    directional and strategic communication
Every completed plan is reviewed to learn about what we do best
Every completed plan is reviewed to find what we need to improve
We are systematic in the progression of each strategic topic (E.g.
    from question - through action - to follow-up)
Every strategic topic includes consideration of external risks.
Every strategic topic includes consideration of unintended outcomes
    of achieving the goal. [The destination may cause damage]
Every strategic topic includes consideration of unintended
    consequences of pursuing the goal (E.g. Resource conflict).
     [The journey may cause damage]
```

# Items for strategic planning instrument

The items listed in Table 6.2 are those suggested by literature and the expert panels for strategic planning, framed for perceptions of evidence. Inspection will show that the items apply to activities that occur within the strategic planning event. Items listed can also be seen to relate to activities across traditional parts of the strategic cycle (information scanning, planning, implementation, measurement, and review) as well as triggers that detect sensitivity of strategic planning to emergent opportunities. The opportunity and threat items are identified. The 'unplaced' items

did not obviously belong to one domain or the other, but were retained in the construct because they were valid strategic planning questions (and for curiosity to see what a psychometric analysis did with them).

Table 6.2

<u>Proposed construct items to measure Strategic Planning</u>

Opportunity We always set performance goals to check for expected progress We always set indicators to warn of threats to our plans. We actively scan inside the firm for strategic topics We systematically seek external strategic information We have specific triggers looking externally to initiate impromptu strategy meetings We use a formal "quick-strategy" process to evaluate and handle We assess the strategic relevance of every strategy topic. We score and record the strategic priority of every strategy topic. Threat We perform risk analysis before commencing new strategic actions We perform risk analysis of not doing suggested new strategic actions With problems, we always conduct risk analysis of favoured alternative strategy With problems, we always seek and assess contingency plans Unplaced Each strategic topic is assessed for its impact on other strategies before implementation commences.

#### Develop Strategic Behaviour instrument

We have regular strategic planning sessions (E.g. annual)\_\_\_

To develop a measure of strategic behaviour, one option was to use an existing model to facilitate development of a construct and instrument, checking against the criteria developed earlier. However, no models were found that met the criteria. An approximate fit was noted in a quadrant model proposed by Anderson and Paine (1975). These authors combined the dimensions of perceived certainty and perceived need for change, and argued for different proportions of emphasis on mission,

objectives, strategies and policies, organisational form, and role of policy maker.

However, in the subsequent 30 years, no supporting empirical work appears to have been conducted on this, or any other model.

In the absence of a model, a relatively simple but valid procedure to develop an instrument was followed. The procedure involved collation of strategic behaviours noted in literature, selecting those behaviours that should be measured, and generating appropriate instrument items - borrowing from existing instruments where possible. Literature already includes work on understanding the behaviours associated with strategic actions that are part of a strategic loop such as that in Figure 5.1. These include strategic intent (Hamel & Prahalad, 1989), strategic planning (Mintzberg, 1994b), strategy implementation (Mumby-Croft & Williams, 2002), strategic feedback (McKee, Varadarajan & Pride, 1989), and aligned performance (Band, Scanlon & Tustin, 1994). In combination with other literature that specifically described strategic behaviours (Drago, 1997; Anderson & Paine, 1975; Grundy & Wensley, 1999), a list of strategic behaviours was collated. Each entry was checked for compliance with the previously derived requirements 1 to 4, and for its application to some part of the strategic loop.

A search was conducted for any instrument, regardless of its intended purpose, that directly or indirectly measured most of the identified behaviours. An instrument was found that had eluded earlier discovery because it was not based on a model of strategic behaviour. This instrument (Boyd & Reuning-Elliott, 1998) assessed behaviours associated with conducting or responding to mission statement, trend analysis, competitor analysis, goals setting, planning, and performance evaluation. In doing so, the instrument met the four requirements developed above, and also

managed to spread the items across the components of the strategic loop. At face value, the instrument had content validity and adequacy.

However, the authors described it as an instrument to measure strategic planning, rather than strategic behaviour. Perhaps this is more evidence of the previously discussed divergence of opinions between what is understood as planning and behaviour. The instrument satisfies the criteria identified in this research for measurement of strategic behaviour, and not of strategic planning. It was therefore chosen as the instrument for strategic behaviour (Appendix 4).

## Developing an instrument to measure performance

This section will use the developed understanding of generic performance and the approach described to develop a generic instrument for performance.

## **Environmental factors**

Even though the external environment can impact performance, it has been found to be less important than internal factors that facilitate performance. Hansen and Wernfelt (1989) reported that organisational determinants explained more variance of organisational performance (38%) than did economic (18.5%). A subsequent study replicated these findings with 32% and 19% respectively (McGahan & Porter, 1997), and another showed that organisational factors have almost twice the impact on performance ( $r^2 = .761$ ) as do economic factors ( $r^2 = .493$ ) (Tvorik & McGivern, 1997). These consistent findings, while acknowledging an important role by external factors such as environmental munificence in influencing performance data, the organisation's internal factors are approximately twice as important.

One suggestion made earlier for dealing with environmental influences when assessing performance, was to account for those influences. To do so would require an assessment of external influences, a requirement that adds an element of difficulty

to any research effort. The alternative strategy was to regard the environment as a common element among organisations and compare performance differences within that common environment. Responses to a statement such as "Over the past 3 years, our performance has exceeded our competitors" (Powell & Dent-micallef, 1997) would yield data that could be compared between organisations. In this particular example, the statement is already comparative by nature. The instrument's other items, however, did not recognise the role of stakeholder views.

## **Stakeholders**

The work done by the many researchers developing the various excellence awards (Table 5.7) provide examples of multi-stakeholder assessment. Each of those stakeholder groups will tend to focus on a different aspect of performance. Table 6.3 suggests what these aspects may be.

Table 6.3

Probable performance focus of stakeholder groups

Performance interest	Relevant stakeholder
Our quality of services / products	Customer / client (internal / external)
Organisational climate	Organisation member
Participation in community and environmental issues	Community / Nation
Productivity (efficiency)	Investor / owner / shareholder
(outputs compared to inputs)	
Efficiency in labour use (person-hours and skills used)	Executives / managers
Relationships with suppliers	Suppliers

The gains from involving stakeholders as a data source have been well researched (Berman et al., 1999; Harrison & Freeman, 1999) and reviewed (Koch & Lewis, 1998). Ideally, their perceptions would be canvassed on some appropriate sampling basis. However, bearing in mind the strong relationships already discussed

between organisational employee perceptions and objective reports, a more economical way to collect stakeholder data is from the members of the organisation. It can be argued that members from different parts of the organisation will be more accurately aware of opinions held by certain stakeholders. For example, CEO's and executives are more in touch with the big picture issues associated with owners, investors, and major clients (Sharfman, 1998). Therefore, CEO's are the preferred source for organisational performance in those strategic terms, a view indicated by Hambrick (1981). However, CEO's demonstrate poor awareness of stakeholder perceptions in general unless the organisation deliberately focuses on what is referred to as 'Corporate Social Performance', or the stakeholders are powerful enough to be heard, as reported by a relationship ( $r^2 = .47$ , p < .05) between CEO awareness of stakeholder perceptions and corporate social performance (Agle, Mitchell & Sonnenfeld et al., 1999).

By contrast, employees are in daily contact with customers, suppliers, alliance members and the community (Band et al., 1994), and the employee stakeholder group is the crucial common stakeholder forming dyads with each of the other groups (Rowley, 1997). However, organisational members in direct and regular contact with any stakeholder group can provide information only to the extent of the frequency, intensity, and proximity of interaction with those referents (Rice & Aydin, 1991). For some employees, their perceptions may be based on 'a feeling' about stakeholders perceptions, while others may have hard evidence or direct personal experience of those perceptions. For this reason, a questionnaire seeking stakeholder perceptions from employees could consider seeking additional information about the quality of the opinion. For example, each question could be accompanied by another asking "How certain are you?" with options 'Very uncertain' - 'Have reason' - 'Have evidence' or

perhaps 'Very certain'. By accepting that those employees closest to the suppliers or to the customers are appropriate information sources regarding those stakeholders, then the 'certainty' score could help identify the appropriate members for each question. Where there are differences, the responses from people who were "certain" will probably be more accurate than those from people who were 'very uncertain'.

## **Develop** instrument

The instrument has two functions, to collect data reflecting perceptions about performance according to the model of Figure 5.4, and to provide the opportunity for the respondent to indicate the certainty of each perception. The present instrument aims to satisfy those requirements while using or adapting previously published performance items.

### Selecting instrument items.

The three dimensions of the construct (Figure 5.4) are: performance in the marketplace, performance for stakeholders, and improvements in those performances. The Powell and Dent-micallef (1997) instrument satisfies the first requirement - i.e. assess generic comparative performance in the marketplace. The same style of question can be used to fashion questions with a multiple-stakeholder focus. Similar adaptation can devise questions to assess improvements over time in the organisation's own effectiveness and efficiency. Table 6.4 shows these adaptations in the proposed perceptual instrument with its three sections - marketplace, stakeholders, and future.

#### Table 6.4

### A proposed instrument to measure generic performance

#### Performance in the marketplace

Over the past year, our financial performance has been outstanding

Over the past year, our performance has exceeded our competitors

Over the past year, our sales growth has been outstanding

Over the past year, we have been more profitable than our competitors

Over the past year, our sales growth has exceeded our competitors

#### Performance in terms of stakeholder outcomes

Over the past year our investors/owners regard our performance as outstanding

Over the past year our clients/customers regard our performance as outstanding

Over the past year our employees regard our performance as outstanding

Over the past year our executives regard our efficiency as outstanding

Over the last year our suppliers regard our performance as outstanding

Over the last year our local community regards our performance as outstanding

### Performance in terms of previous performance

Over the past 6 months our productivity has improved greatly

Over the past 6 months our quality of services / products has improved greatly

Over the past 6 months our organisational climate has improved greatly

Over the past 6 months our efficiency has improved greatly

Over the last 6 months our participation in community and environmental issues has improved greatly\_\_\_\_\_

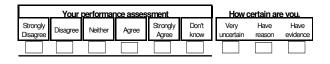
## **Including quality of perceptions**

The certainty of perception is likely to differ for each question, so each question is accompanied by an option to indicate certainty. The [Don't know] option has been discussed previously. Following each performance assessment item, the respondent is asked to indicate "How certain are you?" - [Very uncertain] [Have reason] [Have evidence].

A sample question, with headings, is shown in Figure 6.1

### Performance in the marketplace

Over the past year, our financial performance has been outstanding.



<u>Figure 6.1</u> Section of performance instrument showing 'performance' and 'certainty' options.

## **Summary**

Literature was reviewed to compile a criteria list for a generic measure of performance. When instruments used in previous performance research were reviewed, they did not satisfy the criteria. The criteria were then used as a basis to assemble a model to better understand the interacting forces on performance. From the model, a construct and instrument were developed that satisfied the criteria. Only one generic requirement was not met, and suggestions were made for its future inclusion. Support for the construct came from its similarity to a construct developed using 'strategic reference points' theory (Fiegenbaum et al., 1996).

The end result was a construct and instrument developed theoretically, and uses items from an existing instrument with known performance. Some items were adapted to accommodate multiple domains, set a time frame, and to query performance improvement. Perceptual certainty was also captured for each response.

## Assembling instrument package

The complete instrument package was assembled, comprising consent form, instruction page, information page, and instruments for Strategic Conversation, Strategic Behaviour, Strategic Planning, and Organisational Performance.

#### Assess constructs

This section uses literature and panels separately to assess validity of the Strategic Conversation, Strategic Behaviour, Strategic Planning, and Organisational Performance constructs. The assessment will consider content, substantive, and item face validity.

### Literature-based assessment of constructs.

## Strategic Conversation and Strategic Planning constructs

Item face validity and content validity were already indicated by the developmental process that assembled the constructs from multiple sources. Although the assembling process was more like convergent interviewing (Dick, 1990a) than converging data, the outcome was the same because both processes will lead to a construct that is homogenous rather than integrated or hybrid. Integration describes sources that come together as a co-mingling of ever-distinct components of a single construct (Weaver & Trevino, 1994), and hybrid describes a mix or cross-breed of incomplete but complementary contributions from each donor towards a new whole (Fowler & Fowler, 1964). The expert panels provided data that partially overlapped and partially added to each other, and they in turn were overlapped by the literature-based construct.

Component substantive validity, generalisability, and face validity were also satisfied by the process to generate the construct, since both literature and panels were sources of expert opinion providing data in the form of face-valid items and comments. The final selection of construct components was performed by the researcher, and may have been influenced by the biases (unconscious) and preferences (conscious) of the researcher. Study 1b uses Panel tests to minimise the impact of this source of errors.

## Strategic Behaviour construct

Because the single-factor construct and four-requirement list for strategic behaviour were argued and developed from literature, the proposed construct has inherent support from that literature. No equivalent construct was found for comparison. However, the examples of strategic behaviour listed earlier, all qualify as

strategic behaviours when compared against the criteria. Those behaviours are so varied that the only common theme is that they are strategic, thus supporting the likelihood of a single-factor construct.

## Organisational Performance construct

Since the model was derived from a theoretical understanding performance, the proposed model has intrinsic literature support. Further support came from its similarity to the 'strategic reference points' model (Fiegenbaum et al., 1996) which was shown to be effective in strategic performance areas such as marketing (Shoham & Fiegenbaum, 1999) and managerial efforts such as in HRM (Bamberger & Fiegenbaum, 1996). The 'strategic reference points' model dimensions of temporal (past/present/future), internal (ends/means) and external (stakeholders), extract similar information to the proposed construct of Figure 5.4.

### Summary

All three constructs have theoretical support. The following section describes the processes used to obtain additional support from strategy experts and academics.

### Study 1b - Panel assessment of the constructs.

The purpose of this study was to use panels to test for face validity, content validity, and content adequacy of the constructs. To be face valid, each component of the construct must look like it fits the theory (Babbie, 1995) and each item of each component must appear on its face to belong, and not be extraneous (Schriesheim et al., 1993). Content validity requires that the component or item provides substantive validity by being based on an underlying model (Mumford et al., 1996), and generalise across organisations, nations, industries gender and similar concerns (Mumford et al., 1996). To be adequate, there must be sufficient components to represent the content universe (Schriesheim et al., 1993). The construct needs to 'look

like' it fits the theory, and components must 'look like' they belong - providing face validity of the construct (Babbie, 1995).

'Content validity' has been criticised as a statistical test because contents might conceivably be valid, but inadequate to cover the content universe of the construct (Schriesheim et al., 1993). The authors remarked that there need to be enough items to cover the construct - adequately. Particular mention was made that representing a construct at a level beyond adequacy, is wastage (viz. that there is no benefit gained from excessive representation). In the case that there are superfluous items, only the best representative components should be retained. This study therefore asked panel members to look at the construct from two directions. Firstly, that the construct's components did belong there, and secondly for any items that were extraneous or superfluous.

## Panel assessment of constructs

This study provided the opportunity to test content adequacy and extraneous or superfluous components, in a way that minimised influence of researcher bias. To achieve this, there were two parts to the study. The purpose of the first part was to ensure that the converged construct faithfully represented the understanding of strategic conversation held by members of the expert panels. The second part provided independent assessment of the suitability of the selected items in terms of superfluity or ambiguity.

### Method

## **Participants**

Members of the original expert panel participated in the first part of this study, and a separate validation panel was formed for the second part. Prerequisites for membership to the validation panel were first-hand experience of strategic processes,

post-graduate qualifications, and experience with academic level scientific research. Participants with research experience were required, given the need to critically assess construct validity, content validity and adequacy, face validity, and substantive validity. The panel comprised 2 practicing organisational psychologists with 7 and 5 years respectively consulting to industry and government agencies, 1 Doctoral candidate with over 10 years consultancy and training experience, 2 export business owners with over 100 employees each, and 2 senior (executive) managers from government agencies. All members held post-graduate qualifications at Masters level or higher. Only the Doctoral candidate was currently enrolled in an educational institution.

### **Materials**

Copies of all constructs and proposed items were provided for comparison and evaluation purposes. The strategic conversation and planning constructs were those converged from literature, panel 1, panel 2. These constructs and items were familiar to expert panel members, but not the validity panel members. The performance construct and strategic behaviour material had been developed by the researcher, based on theory, and were therefore unseen by panel members, although the concepts and purposes were familiar.

### Procedure 1 - Expert panel members

Expert panel members were visited individually and shown all construct summaries and component material. Each panel member was asked four questions to prompt discussion on strategic conversation. The first question queried that the converged construct faithfully represented the group's understanding of strategic conversation. This question served as a reminder of the material they had discussed as a panel member. Second, to assess content validity, that the two components titled

'purpose' and 'topic' belonged in the construct of strategic conversation, as did the items representing each component, and that there were no superfluous items. Third, members were asked to argue against the allocation of components and items. It was possible that items belonged in other constructs, or were poorly matched to strategic conversation. This disconfirming evidence was sought partly to keep discussions open to construct developmental possibilities, and partly in response to general criticism that researchers too infrequently seek such evidence (Lee et al., 1999). Fourth, members were asked if any elements of strategic conversation were not catered for in the construct, as an indication of content adequacy.

The same questions were asked in relation to the Strategic Planning construct, comprising items for the components 'opportunity' and 'threat'.

The Strategic Behaviour single-factor construct, model, criteria, and proposed items were reviewed. The questions asked by the researcher were "In what way do you disagree with this construct of strategic behaviour?", "Do you support this construct", and "Do the items provide content adequacy?".

The performance construct with its three components of 'Marketplace', 'Stakeholder', and 'Future' performance, was reviewed in terms of "In what way do you disagree with this construct of performance?", "Do you support this construct", and "Do the items provide content adequacy?".

As successive members were interviewed, item adjustments were collected so that successive members could see the progressively updated constructs, the originals, and the accumulating comments. This process was a variation on the process of 'constant comparison' (Halbesleben et al., 2004), and might be termed 'progressive comparison' as an alternative process for use when people can't meet. In that respect, it is a quicker alternative to the Delphi process (O'Loughlin & McFadzean, 1999),

except that where Delphi is iterative to the same people (McIntyre, 2004) and suits a need to arrive at a consensus via subtractive thinking, this process was iterative to sequential people and arrived at a 'total' opinion via additive thinking. The number of item changes diminished with each interview, and interviews continued until there were no further changes suggested. This point of theoretical saturation (Sandelowski, 1995) occurred after 5 interviews (2 members of group 1, and 3 of group 2).

## Procedure 2 - Validation panel

The objective of this separate panel was to provide opinions in addition to those from the expert panel members who had helped develop the construct. Expert panel members' opinions may have been biased by their experience within the developmental process. The validity panel's independent opinions would reflect their academic approach more so than the subject content approach of the expert panels. Validation-panel members were visited individually, whereupon the derived constructs were explained by the researcher and discussed during sessions lasting from 1 to 2 hours. Members were asked to comment critically first on each component item in terms of relevancy and ambiguity, and then on each construct in terms of validity and adequacy. This order of inspection (items then construct) was intentional so that item familiarity would assist their assessment of validity and adequacy.

## Results and analysis

The expert panel members did not suggest any changes to the structure of the constructs, and indicated their endorsement of face validity, substantive validity and adequacy, of the components of each construct. Validity panel members endorsed all constructs and component items in terms of construct validity and content adequacy.

## **Summary**

The constructs for strategic conversation and strategic planning emerged gradually throughout the exploratory efforts, and the constructs were largely comparable from the perspective of different groups. All groups agreed with the validity and adequacy of the final constructs and component items for all four variables. The expert panel members were from occupations and activities where a high level of strategic prowess was needed, and were able to engage immediately in intense discourse about strategic conversation.

The strategic conversation instrument in particular, as the focus of this research, was developed using action learning cycles that started from a theoretical base with a literature-derived model, and became more exposed to practitioner influence. The expert panels' members were more than data providers, becoming co-researchers and model-builders. The research process was adjusted during the multi-part program, according to their contributions. That doesn't mean "research by committee" or unguided journeys, but thoughtful mindedness in this early stage of life for this topic (Eisenhardt, 1989a; Glaser, 1992).

The constructs were thus regarded as having face validity, substantive validity, construct validity, and content adequacy.

### Assess instruments

All instruments were submitted to the expert panels for review, but the performance instrument, being a 'generic' adaptation of a collection of pre-tested single-item indicators, is first assessed for literature support.

### <u>Literature-based assessment of Organisational Performance items</u>

Asking about 'outstanding performance' in a single item attracts all the usual arguments for and against (Smith et al., 2003) single-item measures. For example, (Wanous, Reichers & Hudy, 1997) claim the single item is more robust, and (Tett & Meyer, 1993) agree that a single item does capture all, but point out that it will not cancel random errors as do multiple observations. While some of the items of the proposed instrument are broad in what they capture (e.g. financial performance), each item is only one of several in the construct, thus allowing 'multiple observations' reliability tests.

The definition of performance was shown to refer to both the 'ends' and 'means' where ends refer to 'what' was achieved and means refers to 'how' it was achieved.

The success of the ends is assessed in terms of effectiveness - i.e. delivering the right product or service at the right time and place to the right clients. The success of the means is assessed in terms of efficiency - i.e. the greater output for the lower resource cost. The proposed instrument assesses both ends and means. For example, sales growth refers to quantity of business and indicates effective strategies, and profitability is an indication of effectiveness because it is a ratio of revenue against costs. There is also a direct question referring to efficiency.

The argument was made earlier that multiple perceptions provided a more realistic view of actual performance than did narrow views or objective data. The proposed instrument uses perceptual data that represents six stakeholder groups; investors/owners, clients/customers, employees, executives, suppliers, and community.

Executive performance tends to be regarded as strategic, while managerial performance is seen as operational in nature. Strategic assessment is achieved by

measuring comparative performance, sales growth, comparative growth, and improvement. These indicate strategic levels of analysis and planning. In the proposed instrument, operational performance is assessed by measuring customer and supplier perceptions, productivity, and efficiency. The behavioural choices of managers and members have considerable impact on these measures.

The proposed instrument is multi-dimensional in the sense that it is designed around the three dimensions of current performance in the marketplace (competition), performance in terms of stakeholder perceptions, and future-focus as seen by performance improvements in key areas of productivity, quality, organisational climate, efficiency, and community participation.

The proposed instrument is potentially useful in both research and management. For researchers the perceptual data are easily collected, provide three domains for separate analyses, and in meeting the requirements described in this summary, the instrument is closer to being generic than other reviewed 'generic' instruments.

Table 6.5 summarises the requirement list and the manner of compliance by the proposed instrument. The only generic requirement that the proposed instrument does not satisfy, is the differing relative importance to an organisation of the various components of performance. An initial design of the instrument did include provision to respond, but was omitted from the final instrument because each question then appeared too complex, and may have deterred some participants. The omitted question was "How much importance is placed on this?" [Very much], [Some], [Very little]. Had that column been included, the instrument would have met all generic criteria.

Table 6.5

Extent to which each item addresses the proposed criteria list for generic performance

Requirement	Description	How it is measured by the
No.		proposed instrument.
Requirement 1:	different stakeholder groups - use	Stakeholders assessed -
	perceptions.	perceptions used
Requirement 2:	multiple and current dimensions,	Financial, sales, climate, growth
	not just historical financial or	etc
	production figures.	
Requirement 3:	acknowledge temporal nature of	Mix of current, growth, and
	performance.	improving performance
Requirement 4:	not discriminate between	Needs testing, but nothing overtly
	countries, industries, or other non-	seems to offend this requirement
	organisational performance	
	variables.	
Requirement 5:	acknowledge the differing degrees	This is not catered for
	of importance	
Requirement 6:	acknowledge munificence	Comparing relative performance -
	(compare against others)	munificence is common to all
Requirement 7:	acknowledge the differing quality	'Certainty' is separately measured
	of respondent perceptions.	to qualify each response

The temporal concerns mentioned earlier referred to the unknown time between a strategic decision and the resultant performance change. When asked to respond to a statement such as "Our financial performance has been outstanding", different respondents may imagine different time frames. As discussed earlier, non-executive organisational members tend to think in longer time frames. The proposed instrument begins each statement with "Over the past year ..." to fix the time frame to 12 months. This period is short enough for accurate recall, and long enough to average out seasonal performance fluctuations. The performance improvement questions set the period to 6 months because 'change' is something that happens over a relatively shorter period. Furthermore, the assessment of change needs to be able to detect ongoing improvements, and frequent but irregular assessments would demonstrate if improvement efforts are only occasional or short-lived.

Certainty of perception is assessed in that a respondent could indicate the level of certainty associated with each response. What was unknown at this stage was what

to do with that information. Analysis of certainty data from this research is discussed, and suggestions made.

## Study 1c – Panel assessment of instruments and items

The purpose of this study was to check that instruments were ready for a pilot study. Members from the two types of panels (viz., expert and validation), were asked to check the accuracy of meaning of each question in relation to the wording of the original item, question ambiguity (unclear meaning or multiple meanings), equal distribution of questions across construct components, and that construct components were adequately represented.

Firstly, members of the expert panel checked the instruments, resulting in minor grammatical changes. Then members of the validation panel checked that each question accurately reflecting the item meaning, and that each question was unambiguous.

### Method

This method details the study of the instruments by members of the expert and validation panels.

#### Participants 1

Participants for this first procedure comprised available members (5) of the original expert panels

## Procedure 1

Expert panel members were visited individually and shown the four proposed instruments. Panel members examined the instrument questions during their final check of the construct.

Corrections and removals of items were made between meetings for the first four members, then no further adjustments were recommended. Fifteen questions remained for strategic conversation, 14 for strategic planning, and 16 for organisational performance (Appendix 3). The visited members indicated their endorsement of the final instrument.

### Participants 2

Participants for this second procedure comprised members of the validation panel.

## Procedure 2

The instruments were presented as a package (consent form, instruction page, information page, and instruments for strategic conversation, strategic behaviour, strategic planning, and organisational performance) to individual members of the validation panel. The instructions were to complete the instrument with their organisation in mind, and to identify any difficult, ambiguous, superfluous, or extraneous question.

### Results

No questions were eliminated, and 12 adjustments were made to 11 questions. Each expert in procedure 1 made at least three suggestions, but they became less substantial with each exposure. Not each suggestion was acted upon. In procedure 2 it seemed quite possible that the process would never end if allowed to continue, with each person looking for something to find. Theoretical saturation was considered to occur when the issues raised were no longer substantive.

## Study 1d – Organisational pre-test of instruments

Each of the previous stages of development and testing of the instrument sought participants who were very familiar with things strategic and with the nature of conversation. To be useful the instruments had also to be understandable to people who were not experts in these fields. To assess legibility to non-experts, the

instrument was assessed by senior members from varied organisational environments. Essentially, this was a test of face validity and instrument ambiguity by people from the population for which the instrument was designed.

### Method

## **Participants**

Seventy different business entities in the vicinity of Brisbane, Australia, were represented by the CEO, owner, a senior decision-maker or equivalent person.

Business sizes ranged from single person to hundreds of employees, covering a wide range of industrial, commercial, and professional business activities.

#### Materials

A paper version of the instrument package (Appendices 4 & 5) was used, and an on-line version with an identical layout was available.

## Procedure

Participants met as 9 groups of 5 to 11 people, at which the instrument packages were handed out. The web address for the online version was also provided.

Participants were asked to mark or note ambiguous questions, and to comment on any question that they considered irrelevant.

## Results and Analysis

Thirty seven completed instruments (29 paper and 8 web-based) were returned in time for this analysis. The only early negative comment was that for some questions, some participants were unsure if they were answering for themselves or for the organisation. The instrument's instructions were clarified. Apart from that, the feedback was positive and the instrument was regarded as measuring what it set out to measure, and instructions and questions were unambiguous.

## Summary of Study 1

The strategic conversation construct was assembled from literature-based arguments and reports, as well as from both inductive and deductive conversation by members of two expert panels. The inductive processes helped explore the concept of strategic conversation in literature and by expert panels, and develop a list of comments relating to the construct. Deductive processes helped sort the comment items into clusters, discard redundant contributions, and select a preferred construct. The research plan to converge data for triangulation was modified to include convergent interviewing to help shorten the spiral-like journey of the development of the construct and its items.

Face and content validity of the Strategic Conversation construct were checked using three processes. First, the nature of the development process provided initial validity. Second, specific assessment was conducted by expert panel members. Third, assessment was repeated by an independent validity panel. Finally, validity and ambiguity assessment was undertaken by senior members of seventy different organisations. The instrument items are listed in Table 6.6 along with a brief explanation of why the item was selected.

The extraction of organisational clusters into other than strategic conversation and strategic planning constructs (e.g. pre-conditions and etiquette) pointed to opportunities for future research.

Table 6.6

<u>Items of instrument for measuring strategic conversation.</u>

Items for "Purpose" component.	Reason for question
	(why the conversation is happening)
We regularly discuss information from our formal <pre>external</pre> scans.	External information may trigger a meeting, the purpose being to discuss opportunities or threats. The question asks whether such meetings are regularly held, indicating a formal mechanism to give purposeful attention to collecting and using such information.
We regularly discuss information from our formal <pre>internal scans</pre>	The same logic as above, but indicates balanced attention to both internal and external sources.
We periodically discuss the <u>current</u> business environment	The purpose concerns best use of current resources.
We periodically discuss the possible <u>future</u> environments	The purpose is to plan future resource requirements
We <u>regularly</u> have conversations that focus on a strategic question (not operational, administrative etc)	This question taps informal exhanges of strategic topics, the purpose allied to organisational gain.
We have <u>regular</u> strategic planning sessions (e.g. annual)	This taps formal exchanges.
Informal conversation about goals is <pre>actively</pre> encouraged	This taps informal alignment of goals.
Items for "Topic" component	The part of the strategy loop where topic links
T	
Every completed plan is reviewed to learn about $\underline{\text{what}}$ we do best	Organisational learning
	Organisational learning  Capability planning
we do best  Every completed plan is reviewed to find what we	·
we do best  Every completed plan is reviewed to find what we need to <a href="improve">improve</a> Each and every topic <a href="leads to a decision">leads to a decision</a> (e.g. to commence action, to NOT commence, or to cease	Capability planning
we do best  Every completed plan is reviewed to find what we need to <a href="improve">improve</a> Each and every topic <a href="leads to a decision">leads to a decision</a> (e.g. to commence action, to NOT commence, or to cease current actions)  We are <a href="systematic">wsystematic</a> in the <a href="progression">progression</a> of each strategic topic (E.g. from question - through action - to	Capability planning  Decision-making
we do best  Every completed plan is reviewed to find what we need to <a href="improve">improve</a> Each and every topic <a href="leads to a decision">leads to a decision</a> (e.g. to commence action, to NOT commence, or to cease current actions)  We are <a href="systematic">wsystematic</a> in the <a href="progression">progression</a> of each strategic topic (E.g. from question - through action - to follow-up)  Every strategic topic includes <a href="consideration">consideration</a> of	Capability planning  Decision-making  The loop is completed for each topic

## STUDY 2 - TESTING CONSTRUCTS AND INSTRUMENT ITEMS

Study 2 comprises 2 chapters to test the psychometric and predictive ability of instruments in a one-shot study of varied organisations. Chapter 7 undertakes a pilot study using 70 participants, followed by a psychometric study of 380 members of participating organisations. Chapter 8 then tests some hypotheses by examining the relationships between Strategic Conversation, Strategic Planning, Strategic Behaviour, and Organisational Planning.

### CHAPTER 7 - PILOT STUDY AND PSYCHOMETRIC TESTING

This chapter reports two sub-studies. Study 2a was a pilot study to check and clarify the meaning the instructions and questions of the compiled questionnaire package comprising Strategic Conversation, Strategic Planing, Strategic Behaviour, and Organisational Performance. Study 2b was an exploratory cross-sectional study to refine the constructs and assess the psychometric properties of the instruments, and a confirmatory factor analysis to support the construct models.

## Study 2a - Pilot study

The purpose of the pilot study was to check the meaningfulness and clarity of questionnaire items and instructions. The pilot study was also used, as suggested by Floyd and Widaman (1995), to perform a preliminary check of the inter-item relationships of items within each construct. The authors recommend that each item

correlate at least .20 with several other items of the same construct, otherwise they should be considered for rewording and re-testing, or rejection.

### Method

## **Participants**

Participants from the longitudinal study (Study 3) filled the role of pre-testers in this study. Seventy different commercial organisations were represented in Study 3 (Chapter 9) by a CEO or someone at executive decision-making level from small to medium sized organisations. The longitudinal study was arranged as 9 groups of participants, with 6 to 11 individuals per group, and each individual represented a different organisation and industry. Participants of Study 3 undertook this pre-testing role during the first meeting for each group.

## **Materials**

The instrument package comprised the instruction sheet, consent form, and instruments to measure strategic conversation, strategic planing, strategic behaviour, and organisational performance (Appendices 4, 5).

### Procedure

Participants received an instrument package during the first meeting for their particular longitudinal study group. The data collection process adopted proposals from a review that summarised a decade of work on survey research methodology (Krosnick, 1999). The proposal discussed using a combination of three data collection methods to reduce common method variance within pilot studies. The three methods were debriefing, behaviour coding and cognitive pre-testing. Debriefing occurs after questionnaires have been completed, and participants provide feedback about the questions and the questionnaire. Behaviour coding describes the observation of participants as they complete the questionnaire, and perhaps converse with each other,

while the observer quietly notes the problematic questions. Cognitive pre-testing involves an open session where participants 'think aloud' as they fill in the questionnaire, and can ask questions.

The first two groups (n = 14 and 8) completed the instrument in the presence of the researcher and discussed questions openly as issues emerged. For the subsequent 7 groups (n varied from 6 to 15), the questionnaire was either completed at the meeting, and problems or comments debated openly afterwards, or the package was taken away and posted back with comments. Some groups were constrained by time and had to keep to the hour allotted, so they took the instrument away. Other groups were more flexible and could allocate the extra time needed to complete the instrument and discuss it.

Because the various groups' meetings were at intervals according the when each group started over a 6 week period, there was time to respond to pilot study group recommendations, and make adjustments to grammar and ambiguity. As more meetings were completed, fewer problems were reported. This progressive correction of the package components indicated that the participants, representing typical instrument users, had similar ideas about what was ambiguous.

#### Results

Early reports from the first 2 groups indicated that the questions of the Strategic Behaviour part of the instrument package were ambiguous. This was the instrument adopted from strategic planning (Chapter 5), with items unchanged. As an example of the ambiguity reported, the first question refers to the mission statement:

"We have a mission statement that is brief and is known and understood by all relevant stakeholders - employees, customers etc. Strategic plans and operational

decisions are made with constant referral back to the mission statement. Personal goals are set in a way to align with goals as are performance goals."

The criticism had been anticipated in Chapter 4 because the Strategic Behaviour questions had not followed accepted practices of good question construction (Foddy, 1995) (viz - there was more than one question within each question (Leeds, 1993)). All questions were therefore disassembled into their individual questions, for example, question 1 became 3 questions:

"We have a mission statement that is brief and is known and understood by all relevant stakeholders - employees, customers etc."

"Strategic plans and operational decisions are made with constant referral back to the mission statement."

"Personal goals are set in a way to align with goals as are performance goals."

The revised scale was submitted to the remaining groups, and adverse comments ceased. Each scale (Strategic Conversation, Strategic Planning, Strategic Behaviour, Organisational Performance) was tested for inter-item correlation, and all scales showed that each item had more than two relationships above r = .2. Floyd and Widaman (1995) argue that correlations below .2 indicate that an item would likely perform poorly in a construct.

No items were removed during the pilot study. The instruments were established as unambiguous, with clear instructions, and adequate baseline inter-item correlation.

Study 2b - Psychometric assessment of instruments

The purpose of this study was to test the constructs and psychometric characteristics of the instruments measuring the constructs of Strategic Conversation, Strategic Planning, Strategic Behaviour, and Organisational Performance.

# Method

## **Participants**

Personal approaches were made by the researcher to local (Brisbane, Australia) organisations, specifically contacting CEO's, business owners, and appropriate executives to enlist the participation of their organisations. All types and sizes of industries were contacted with approximately equal effort, so any uneven distribution of participating organisations within industry reflects industry response rate rather than researcher's choices.

Industry types were categorised according to a template that seems to be in common use by governments (StateDev, 2004), commercial research organisations (Ibis, 2004), and education institutions (Barmstrong, 2004). The distribution of participants across types of industries is presented in Table 7.1.

Table 7.1

The distribution of participants across types of industries

Description		Number
Accommodation, cafe, restaurant, hotel	0	
Agriculture, forestry, fishing	0	
Communication services	4	
Construction and building	6	
Domestic home services	2	
Education	0	
Electricity, gas and water	3	
Finance and insurance	2	
Government admin and defence	7	
Health & community services	67	
Manufacturing	183	
Mining	10	
Personal and other services	8	
Property and business services	25	
Recreation, entertainment & cultural	3	
Retail, agents and brokers	13	
Transport and storage	3	
Wholesale trade	6	
Unknown	38	
Total	380	

Note: 'Number' refers to the number of participants who identified themselves as being from an industry.

Group Organisation size ranged from 5 to 99,000 members with a mean = 1,389 (Table 7.2). It was not known how many organisations finally participated because the survey did not require that each participant identify his or her organisation.

Table 7.2

The distribution of participants across a range of organisation size

]	Rar	nge	Number
1	_	10	41
11	_	50	24
51	_	100	12
101	_	500	138
501	_	1000	52
< 1	000	)1	45
> 1	000	0.0	7
Unkı	nov	√n	61
Tota	al	•	380

<u>Note.</u> 'Unknown' refers to those respondents who did not identify the size of their organisation.

Of the 197 organisational members who participated, 133 were male, 36 female, and 28 did not disclose their gender. Status (Table 7.3) refers to the hierarchical rank of the participant within the organisation, and shows an acceptable distribution for the purpose of this research.

Table 7.3

The distribution of participants across hierarchical ranks

Status	Number
Member	90
Supervisor	64
Manager	127
Executive	30
CEO/Owner	9
Missed	60
Total	380

CEO's of all participating organisations were invited, and 9 instruments were returned that identified that rank. Their mean time at the current organisation was 10.7 years with SD = 9.12yrs (Table 7.4).

Table 7.4

The distribution of participants' length of tenure at the current organisation

At o	current	Number
orga	anisation	of years
< 1	year	35
1+	year	93
5+	years	61
10+	years	91
20+	years	32
30+	years	13
Miss	sed	55
Tota	al	380

Participants were asked about both their formal and informal education levels (Table 7.5). The 'formal education' question asked: "What formal education from recognised sources have you completed?" The 'informal education' question was: "Non-formal learning experiences matter a lot. What is your life-learning equivalent to?" The two education questions were posed for two reasons. Firstly, there was a possibility that education altered the relationship between the key variables (Thompson & Donohue, 1993; Hambrick & Mason, 1984). Secondly, although anonymity of participation has been shown to reduce socially desirable responding (Zerbe & Paulhus, 1987), providing an option that recognises the importance of informal learning may reduce the temptation to exaggerate formal education claims. It was hoped that by recognising informal learning, there would be less social penalty felt when admitting a lower formal level. If social desirability was to influence this response, the participant would have to decide which option might look better, a higher initial education with less chance for subsequent improvement, or a lower initial education with greater room to claim subsequent personal development. In

effect, this was a forced choice between two equally desirable options, a tactic used in questionnaire construction to reduce social desirability (e.g. (Sauley & Bedeian, 2000). Finally, since conversation in general and strategic conversation in particular receive little or no attention in formal education programs, conversation skills such as influence and leadership are possibly learned more through informal methods. Gathering data on the two sources was therefore an exploratory test for any relationship between strategic conversation and informal learning.

Table 7.5

The distribution of participants across education levels

Level	Formal	Informal
Primary	1	0
Secondary	58	20
Certificate	47	34
Diploma	36	37
Degree	113	80
Honours	23	33
Masters	40	51
Doctorate	4	11
Higher	4	12
Missed	54	102
Total	380	380

## **Materials**

The instrument package comprised consent form, information sheet about the research, instructions about the questionnaire (Appendix 5), a return-paid addressed envelope, and the four-questionnaire package (Appendix 4) comprising Strategic Conversation, Strategic Planning, Strategic Behaviour, and Organisational Performance. All instruments used a 1 to 5 Likert-like scale from "Strongly disagree" to "Strongly agree", with a [Don't Know] option added.

An identical electronic form for web-based use was also developed. Developed on web-development software Net-Objects and Macromedia Dreamweaver, the

program collected participants' responses on the web-server. Suitable for intranet or internet application, the instrument was installed on www.strategic-conversation.com.au for access by participants.

The instrument collected limited biographical information including organisation type and size, participant status, time at current organisation, gender, and education level. Age was unimportant to this research, and therefore omitted.

Exploratory factor, correlation and regression analyses were performed on SPSS Version 13.0, and confirmatory factor analysis on Amos 5.0.1.

## Procedure

Common methods variance and social desirability bias are potential concerns with all data collected from individual respondents to a survey instrument. The issue here was in determining whether measured covariance among observed variables was due to valid relationships, or to common methods variance. Vulnerability to common methods variance errors relate in this case to timing (collecting data at a single point in time), single data source, single researcher creating the instruments, single researcher collecting data, and single method. These common method errors were reduced by collecting data over a longer period (Fiske, 1982), in this case 6 months, using different media for data collection, using literature and expert panels to dilute single researcher bias, and varying methodology for development of each construct.

Six hundred instrument packages were distributed using three mechanisms participant company intranet (1 company that made extensive use of computers, and
internal communication was via e-mail), internet, and paper instrument. Data were
collected from company intranet (72 cases), internet (30), and paper instrument (278).
The website address was available to organisations or individuals who expressed a
preference for that mode of data collection. Paper-based instrument packages were

distributed to participating organisations for internal distribution, and 46.3% were returned.

In exchange for participation, individual participants were offered a report about strategic conversation based on their data, sent to an email address they nominated.

Organisations were offered an organisation-wide report with participant anonymity ensured.

### Results

## Data description

Missing data were distributed throughout the items: 7.4% of strategic conversation data items, 14.5% of strategic behaviour, and 23.9% of organisational performance data. There was no attempt to replace or estimate missing data. Thirty of the 197 respondents answered every question, so 160 respondents failed to tick one or more questions, or ticked [Don't Know]. Although a large proportion (84%) of questionnaires were incomplete, the missing data were scattered such that 'n' was large enough for each statistical processes undertaken.

Of the 120 questions on the questionnaire, the 16 organisational performance questions required two responses so there were 136 response opportunities overall. The average omission or use of [Don't know] amongst the respondents was 23 out of 136 questions (17%). The [Don't know] count may be of organisational diagnostic interest, but not to this research project. The [Don't know] option was included to reduce likelihood of false selection of a 1 to 5 option. A correlational analysis between 'Time in the organisation' and use of the [Don't know] option, found a low negative correlation (r = -.18, p = .001). To determine whether this observation was statistically significant, Levene's test for homogeneity of variance (p < .001) found

that the data did not come from populations with equal variances so the relationship was disregarded.

One hundred and sixteen (59%) participants provided an e-mail contact so they could receive a report based on their data. Fifteen organisations were identified by 151 participants; the remaining participants did not identify their organisation.

## **Data normalisation**

All scale items were Likert-type in the range 1 to 5. The results for 39 scale items were skewed and gave a false indication of central tendency, or returned kurtosis readings that may have interfered with the sensitivity of the item within the range of responses. Non-normal kurtosis may result in underestimation of the variance (Tabachnick & Fidell, 1996), so appropriate transformation processes (Tabachnick & Fidell, 1996) were used to achieve kurtosis < abs(0.6), and skew < abs(0.6). Subsequent factor analysis comparison between transformed (normalised) and untransformed data showed that transformed data provided factors with less cross loading. Correlation comparison of transformed and untransformed data for the 5 variables were not significant (t = 1.31, p = .247). Since linear processes generally prefer normalised data (Tabachnick & Fidell, 1996), and since the normalised data provided clearer factors, the transformed data were used for further analysis.

## Splitting the sample

An emerging practice is to use both exploratory and confirmatory analytic processes to add statistical rigour to research such as this, and validity is further enhanced if the confirmatory processes are performed on an alternate sample (Tinsley & Brown, 2000). To achieve this, researchers can set about obtaining two samples, or alternatively can split the one sample (Cliff, 1983). Data from the 380 participants were divided into approximately two equal groups according to the order received.

Data from the first 198 participants were regarded as Group A, and were used for the exploratory part of this study. Data from the final 182 (Group B) were used in the subsequent confirmatory analysis. As a check that both groups represented the same population as far as this research was concerned, this study reports on confirmatory findings of both groups (Van Prooijen & Van der Kloot, 2001). Cliff (1983) remarks that this tactic of splitting the sample can demonstrate that the results are stable. Had the two samples not returned the same findings, the explanation could have been either poor construct validity or flawed methodology. Group confirmatory findings that are similar support a valid construct and acceptable methodology.

# Extraction of construct factors from Group A.

## Overview of Analysis

Principal axis factoring (PAF) is recommended over principal components analysis (PC) when the intention is to extract variables that explain the item correlations, and the factors are hypothesised to cause those item inter-correlations (Reise, Waller & Comrey, 2000). PC is suited more for data reduction than factor extraction (Floyd & Widaman, 1995). PAF calculations are based on shared (common) variance, and as such, accounts for some item variance, while the remainder is accounted for by influences external to the construct. PAF communality of an item indicates the extent to which the construct accounts for variance of that item. PC assumes that the total variance is accounted for within the construct, and therefore reports communality as 1 for each item. PC will therefore report 'higher variance accounted for'. Reise (2000) remarks "principal components are best conceived as the effects rather than the cause of the variable correlations", p295. With these arguments in mind, participant responses to the questionnaire were analysed using principal axis factoring.

The main options for rotation of factors are orthogonal or oblique. Oblique rotation is recommended over orthogonal analysis unless it is certain that the factors are orthogonal (Reise et al., 2000), in which case the oblique rotation would report the same orthogonal factors anyhow. Oblique rotation reports the operating relationship between factors, which if high (above .85) indicates extensive conceptual overlap (Garson, 2004). To the extent that inter-factor correlation is low, the scale exhibits factor discrimination. The smaller the inter-factor correlation, the better is the discrimination between each factor and the more unique the contribution of each factor to the construct. Therefore, oblique rotation was used in all factor analysis.

Because PAF uses only shared variance, and the reported structure may be influenced by external variables, PAF may report a different structure to PC analysis that ignores external influence. If the structures are different, it may suggest that the variables were poorly chosen and are overly influenced by unknown external variables that cannot be tested for stability or reliability. For that reason, it would be preferable not only to have reasonable communality scores (a topic to be discussed below), but to know that external influences do not alter the functional structure found by the PAF process. Each construct was therefore check-tested using PC analysis to compare against PAF results. All PC analysed structures were identical with PAF structures, but as expected, with different item loadings, and PC reported higher 'variance accounted for'. In summary, external influences did not alter the internal item relationships enough to change the factor structure reported by PC and PAF.

To test factorability of data, Bartlett's test of sphericity (SPSS, 1993) and the Kaiser-Meyer-Olkin (KMO) (Kaiser, 1974) measure of sampling adequacy were performed on all four constructs. Bartlett's test of sphericity sought to test that the correlations in a matrix were zero. However, the test may become unreliable as the

number of cases per variable lifts above five, and a more reliable test then becomes the KMO (Tabachnick & Fidell, 1996), that compares observed correlation magnitudes against partial correlation coefficients. A low comparison indicates that correlations between pairs cannot be explained by the other variables. A result above .9 was described by Kaiser (1974) as "marvellous", above .8 as "meritorious", and above .7 as "middling".

In selecting factors from a factor analysis, eigenvalue is often used as a factor selection cut-off because when it is less than 1, the factor accounts for less variance than does the average single variable. However, because the maximum possible eigenvalue is the number of variables, which could be any number from 2 upwards, an absolute eigenvalue cut-off number has no scientific basis (Floyd & Widaman, 1995). The scree test (Cattell, 1966) has been extensively researched (Reise et al., 2000) and remains one of the preferred and least error-prone ways to select factors. Variance accounted for is another guideline, with a typical target being 50% of total variance (Streiner, 1994). For example, if the eigenvalue and scree tests fall just short of 50% variance accounted for, and an additional factor lifts above the 50% mark, the researcher may decide to add the factor. This is supported by other research on PC analysis that finds that more factors are better than fewer factors when making such choices. Factor selection for this research was based on a combination of eigenvalue of 1, scree plot elbow, and cumulative variance support. In each case, eigenvalue agreed with the scree test, and variance did not need improving or would not have improved enough to warrant an additional factor.

The following analysis uses data from Group A. All constructs in the present research achieved KMO's at or above .8, satisfied Bartlett's test of sphericity, and evidenced acceptable factor discrimination (maximum r = .54 inter-factor correlation,

overlap ranged from 9% to a maximum of 24%), so factor discrimination was acceptable (See Table 7.6)

To select items to retain in factors, only loadings above .4 were accepted, and items cross-loading above .2 were rejected (Tabachnick & Fidell, 1996).

Table 7.6

<u>Summary of findings of factor analysis of constructs</u>

			Inter-	Cumulative
	Bartlett test		factor	Pct
Scale	of sphericity	KMO	correlation	Variance
Strategic	483, p < .0001	. 80	. 21	61%
Conversation				
Strategic	489, p < .0001	. 85	. 54	60%
Planning				
Strategic	620, p < .0001	.86	n/a	<b>59</b> %
Behaviour				
Organisation	491, p < .0001	. 87	. 47	<b>62</b> %
Performance				
·			·	·

The analysis of each construct at item level includes results for communality, mean, and item-scale correlation. Communality is of interest because it explains the extent to which the scale can predict the item, and therefore also the extent to which the item is correlated with external (non-construct) variables. A low communality indicates a weak link of the item with the construct and a stronger link with an external variable, or links with many other variables. The researcher has to decide whether to retain a variable with a weak communality, based on the item's importance to the construct regardless of its relationships elsewhere.

The mean of each scale is 3 (scale range from 1 to 5), against which the item mean can be compared. The item-scale correlation describes the strength of the relationship between the item and the scale. The higher the correlation, the less the item needs to vary in order to influence the construct compared to a weaker correlation. This is different to communality in that it is quite possible for inter-item correlation to be either low or high when communality is either low or high. These 4

high-low combinations of item-scale relationships and communality are visible in the present constructs. Communality, in indicating item variance accounted for the construct, also infers the strength of external relationships, while item-scale indicates the strength of the internal relationships.

Item-scale correlation cut-off was set at .3 by using recommended inter-item correlation cut-off as a guide. Tabachnick and Fidell (1996) note that items without .3 correlation with some other items, should probably be excluded from factor analysis. No items were discarded due to this test.

# The structure of employees' perceptions of Strategic Conversation

The construct of strategic conversation was hypothesised to have a 2 factor structure: purpose and topic (Chapter 4). A PAF oblimin analysis and factor selection (viz - scree test and variance accounted for) identified 2 factors (*KMO* = .80, *CumPct* = 60.9%). Item selection resulted in the loss of 5 items from the 15 original (viz - 2 failed to load above .3, and 2 cross-loaded). Item lost from the notional item pool because they did not load on either factor include two from the pool for 'topic', and 3 from the pool for the 'purpose' of conversations. The number of items retained was adequate to describe each factor and the construct (Table 7.7).

Factor 1 comprised items describing the strategic purpose of conversation.

These items described discussions of hypothetical 'what if' questions about unknowable future environments, using information from both internal and external sources. Strategic conversation is never about known, operational or administrative issues. The importance of an external and hypothetical focus is evidenced by such high loading items defining the factor.

Table 7.7

<u>The Structure of Strategic Conversation</u>

Item	Item Factor loading Purpose Topic		Communality	Mean	Item-scale correlation
We periodically discuss the <u>possible</u> <u>future</u> environments	.80		.62	3.45	.81
We regularly discuss information from our formal <u>external</u> scans.	.69		.39	2.92	.75
We periodically discuss the <u>current</u> business environment	.63		.39	3.66	.80
We regularly have conversations that focus on a strategic question (not operational, administrative etc)	.60		.41	3.03	.77
We regularly discuss information from our formal <u>internal</u> scans.	.61		.50	3.28	.74
Every completed plan is reviewed to learn about what we do best.		.76	.51	2.8	.70
Every completed plan is reviewed to learn what we need to improve.		.71	.59	2.91	.82
Every strategic topic includes consideration of unintended consequences of pursuing the goal (e.g. Resource conflict).  [The journey may cause damage]		.67	.59	2.73	.77
Every strategic topic includes consideration of unintended outcomes of achieving the goal.  [The destination may cause damage]		.64	.73	2.72	.80
We purposefully cultivate a climate that encourages effective bidirectional and strategic communication		. 44	.40	2.79	.70
Eigenvalue	3.1	1.69			
Percentage of variance		17.0%			
Cronbach's alpha	.82	.84	[Total scale	alpha	= .83]

Factor 2 described topics for strategic conversation such as reviewing, risks, unintended outcomes and contingencies. The items in factor 2 focused on learning, reflection, and review of the activities that occur within the previously described functional components of the organisation's strategic loop. Where factor 1 is more about the 'why' of a topic under discussion, factor 2 is concerned with the 'what' and 'how'. The factors do not represent a full description of either purpose or topic, but are sufficiently representative to identify whether strategic conversation exists, and to what extent.

Items loading on the predicted factors indicated construct validity. The interfactor correlation (r = .21) indicated that the factors were not orthogonal, and provided evidence of discriminant validity. Both the whole scale (Cronbach's alpha = .83) and the individual factors (factor 1 'Topic' alpha = .82, factor 2 'Purpose' alpha = .84)) demonstrated sound levels of reliability.

While it is important for the content universe of a construct (Schriesheim et al., 1993) to be represented, attention needs to be given to the possibility of superfluous, or perhaps redundant, items. There need to be sufficient items to cover a construct adequately, yet recognise that there is no benefit gained from excessive representation. Items that may be superfluous can be identified as those that correlate highly with many other items. Items with many inter-item correlations may measure the same phenomenon. By contrast, an item with few inter-item relationships is more likely to capture a discreet phenomenon. In the case of strategic conversation, items capture data from the complete range of components of the strategy cycle (viz - scanning, planning, implementation, measurement, and assessment). For strategic behaviour, they capture individual activities of 'being strategic' (viz - creating, modifying, implementing, or evaluating a strategy). In a high performance organisation, there would probably be high inter-item correlation because everything is being done and done well, and poor performance would demonstrate low inter-item correlation.

Inter-item correlations overall were mid-range, suggesting that the items were neither superfluous nor isolated. The mid-range correlations also suggest that for those items, the organisations adequately represented the broad range of performance levels in the business environment.

An important requirement discussed earlier was that a measure of strategic conversation should not be sensitive to styles of conversation (e.g. dialogue, debate

etc). There were no items in either of the two factors that appeared to relate to such conversation styles, suggesting that the measurement to be made of strategic conversation would be equally effective for all strategy styles.

The Strategic Conversation instrument demonstrated construct validity, reliability, and factor discrimination, in conformance with theoretical expectations.

## The structure of employees' perceptions of strategic planning

The construct of strategic planning was hypothesised to have a two factor structure: opportunities and threats. A PAF analysis with oblique rotation and factor selection identified these factors (*KMO* = .85, *CumPct* = 59.6%). Factor 1 was defined by 6 items describing actions of a pro-active nature associated with attending to organisational opportunities. Factor 2 (4 items) described actions that attend to risks and contingencies associated with threats to the organisation (Table 7.8). This structure reflects the logic of item generation (viz - report of efforts to pursue strategies that optimise opportunities, and also efforts to pursue strategies that either minimise or exploit threats).

In factor 1, the relatively high inter-item correlation (r = .67) between assessing strategic relevance of every topic and recording the priority of every topic is not necessarily an indicator of redundancy (Schriesheim et al., 1993) or construct overlap (Spector, 1987) if the items represent separate actions. Assessing relevance of all topics applies to all topics of the planning process, and is quite different to prioritising the relevant topics to assist subsequent operational decisions such as allocation of resources.

Table 7.8

The Structure of Strategic Planning

Item	Factor Opportu	loading nity Threat	Communality	Mean	Item-scale correlation
We assess the strategic relevance of every strategy topic.	.81		.65	2.83	.79
We always set performance goals to check for expected progress	.71		.44	3.51	.76
We score and record the strategic priority of every strategy topic.	.74		.54	2.58	.77
We systematically seek external strategic information	.46		.43	3.17	.72
We actively scan inside the firm for strategic topics	.61		.43	2.91	.72
Each strategic topic is assessed for its impact on other strategies before implementation commences	.45		.55	2.74	.71
We perform risk analysis before commencing new strategic actions		.76	.52	2.76	.82
We perform risk analysis of not doing suggested new strategic actions		.94	.81	2.82	.85
With problems, we always conduct risk analysis of favoured alternative		.53	.39	3.02	.76
strategy. With problems, we always seek and assess contingency plans		.47	.26	3.36	.71
Eigenvalue	4.55	1.4			
Percentage of variance Cronbach's alpha	45.5% .84	14.1% .8	[Total sca	ale alph	na = .86]

The inter-factor correlation was .55 (i.e. each factor accounts for 30% of the variance of the other), indicating moderate factor discrimination. Reliability for the whole scale (Cronbach's alpha = .86) and for each factor (factor 1 'opportunity' alpha = .84, factor 2 'threat' alpha = .8) was satisfactory.

The Strategic Planning instrument demonstrated construct validity, reliability, and factor discrimination, in meeting theoretical expectations.

## The structure of employees' perceptions of strategic behaviour

As previously discussed, the Strategic Behaviour instrument was adapted from one published to measure strategic planning. Original questions were disassembled into component parts following pilot study findings of ambiguity. However, all the questions of the original scale were included to maintain content validity.

PAF oblique analysis and factor selection identified a 2 factor structure, with one factor having 10 items, and one factor with 2 items. Three items cross-loaded and were discarded. Cross loading occurred where the items referred to both internal and external matters (e.g. "We *monitor* products, services, our environment, and our performance to show *trends*."). Italics were emphasised in the questionnaire to assist readers understand the question. The two-item factor represented an external focus of behaviours, where one item loaded strongly at .98 and the other much weaker at .65. Because 3 is regarded as being the minimum number of items required to describe a factor (Floyd & Widaman, 1995), and the second factor had only 2 items with very uneven loading, the factor was discarded.

The construct was subsequently tested as a single factor, whereupon one item was removed due to cross-loading, leaving 9 items (M = 2.81, SD = .22). Item loadings were on or above .58 (mean .72), and no item provided a major portion of the loading to the construct (Table 7.9).

The 9-item scale's sampling adequacy was adequate (*KMO* = 0.86) and the factor accounted for 53.8% of the total variance, supporting construct validity. Reliability of the scale (Cronbach's alpha = .91) was high. Guadgnoli (1988) refers to component saturation (the average item loading score) as the most important influence on scale stability, and when saturation levels are between .60 and .80, once the minimum sample size has been reached, further improvements will be small. With the component saturation (mean) of .77 and Cronbach's alpha of .91, the scale was conceptually sound, reliable, and stable.

Table 7.9

The Structure of Strategic Behaviour

Item	Factor loading	Mean	Item-scale correlation
The connection with goals are documented for each and every short-term action plan	.85	2.50	.85
Decisions are always shown to relate to goals	.81	2.89	.81
Our annual goals are not just about budgets, but concern every part of our performance model	.77	3.04	.79
Each performance goal is objectively set and appropriately monitored.	.76	2.95	.82
We have specific action plans to support our goals	.72	2.68	.72
Personal performance goals are set in a way to align with organisational goals.	.70	2.90	.73
We monitor and improve our processes to set, plan, implement and monitor our goals.	.69	2.43	.79
These plans are transparent and understood by everyone	.68	3.04	.72
Strategic plans and operational decisions are always made with constant referral to the mission statement	.58	2.52	.68
Eigenvalue	5.29		
Percentage of variance	53.8%		
Cronbach's alpha	.91		

## The structure of employees' perceptions of Organisational Performance

The construct of organisational performance was hypothesised to have 3 factors - current marketplace performance, current performance in the opinion of stakeholders, and improvement in performance. The first compared the current organisation performance against competitors; the second compared current organisational performance against expectations of all stakeholders; and the third against the organisation's past performance.

PAF (Oblimin) analysis produced the expected 3-factor structure, however, the 3-factor solution exhibited excessive cross loading. A 2-factor solution (KMO = .88, CumPct = 52.9%), accurately separated 'current' performance and 'improving' performance items, suffered minimal cross loading, and with factor correlation (r = .45) provided discriminant validity. The 2-factor solution merged two of the expected

factors into one. The two expected factors that were merged were <u>current</u> marketplace performance and <u>current</u> performance in the opinion of stakeholders. Because the theme in common from the contributing sub-factors was the 'current' nature of performance, the merged factor was named 'current performance'. The second factor retained its title 'improving performance'

Table 7.10

The Structure of Organisational Performance

Item	Factor loading Current Improve	Communality	Mean	Item-scale correlation
Over the past year, our financial performance has been outstanding.	.93	.68	3.32	.85
Over the past year our investors/owners regard our performance as outstanding.	.81	.62	3.19	.84
Over the past year, our performance has exceeded our competitors'.	.71	.54	3.39	.79
Over the past year, we have been more profitable than our competitors	.68	.52	3.23	.77
Over the past year our employees regard our performance as outstanding	.66	.55	3.24	.80
Over the past year, our sales growth has been outstanding	.63	.46	3.17	.76
Over the past year our executives regard our efficiency as outstanding	.62	.53	3.08	.73
Over the past year our clients/customers regard our performance as outstanding	.55	.40	3.37	.66
Over the past 6 months our <u>efficiency</u> has improved greatly	.85	.54	3.19	.84
Over the past 6 months our <u>productivity</u> has improved greatly	.70	.49	3.41	.86
Over the past 6 months our organisational <u>climate</u> has improved greatly	.70	.51	2.87	.81
Over the past 6 months our <u>quality</u> of services / products has improved greatly	.66	.40	3.26	.83
Eigenvalue	5.3 1.9			
Percentage of variance	44.4% 16.0%			
Cronbach's alpha	.87 .84	[Total scal	le alph	1a = .89

Although this was not the expected factor structure (Table 7.10), the 2-factor solution discriminated between current and improving performance, and both

solutions (2, & 3-factors) retained close resemblance to the expected three-factor solution. With its lower evidence of cross-loading, the 2-factor solution was accepted as supporting the construct validity of the scale. Factor 1 high-loading items described traditional financial and investment performance in a competitive sense, while the lower loading items acknowledged the opinions of stakeholders. Factor 2 described improvements over the past 6 months

Factor 1 demonstrated the need to assess both strategic and operational (Eonsoo & McIntosh, 1999) components of performance. The four highest loading items are strategic in nature, while the final four tend towards operational. The highest loading item refers to financial performance as being the most significant performance indicator, and this fits with the general view of the purpose of an organisation. This importance is further emphasised by the next item that refers to satisfying the investors/owners. The customers rate the lowest priority of this factor. The items are not exclusively strategic or operational, as demonstrated by the highest loading item in that it requires effective functioning from, and integration of, the strategic and operational areas of the organisation. Strategic assessment of executive decisions for the organisation is separately achieved by those items that refer to perceptions of direct competitor comparisons. Operational performance, or managerial effectiveness (Bart et al., 2001; Barnes et al., 1988), was assessed via organisational efficiency, climate, and customer relationships.

Other ways to broaden a performance measure to include both operational and strategic performance include calculating 'added value' (Ellinger, Ellinger, Yang & Howton, 2002), and 'Tobin's Q' (Tobin, 1997), both of which assess the value added by executive management to the value of the firm's assets. A disadvantage of these processes is that the calculations require extensive access to objective organisational

and market data. The current research indicates that the use of perceptual data to assess both kinds of performance is a simpler alternative

Factor 2 demonstrates by its highest loading item that the most sought after form of performance improvement was perceived as being efficiency, followed by productivity. There was less agreement on the perceived importance placed by organisations on climate and quality of services or products. It would seem that organisational leaders have not yet accepted the roles promoted by the considerable literature on quality and climate. Perhaps in this respect, factor 2 represents an opportunity for unique organisational improvement in predictive performance - a valued organisational strategic goal.

Attention by this research to the temporal component facilitates prediction of performance, satisfying yet another call, this time for organisations to change from a mindset of 'control' to one of 'prediction' (Wheeler, 2000). Literature on prediction of performance seems to divide between the use of lead and lag indicators such as those used in Balanced Score Card © (Kaplan & Norton, 1993; Wilcox & Bourne, 2003), and theory-based models or systems that inherently suit predictive application (Barnes et al., 1988). There is very little empirical support for the Balanced Score Card (Wilcox & Bourne, 2003) even though it is the most popular current tool for performance management and its authors were cited in 70% of performance articles reviewed in 2002 (Marr & Schiuma, 2003) compared to the next most cited author in 40% of the articles. The reasons for such a widespread adoption of a process that lacks empirical support is unclear, and relatively little research exists on factors associated with the processes of choosing between the performance measurement alternatives (Ittner & Larcker, 2002). There is little support for lead/lag indicators.

However, for factor 2 to be effective in its predictive role, there is an assumption that improved current performance depends upon there having been some prior focus on achieving the improvement. Present performance is, after all, a result of decisions in the past (Kaplan, 1999). In other words, there must have been future-planning in the past. If past behaviour is, as generally believed, a good predictor of future behaviour, then habitual previous future-planning of performance is probably a good predictor of current future-planning. Improvement of performance is therefore an indicator that the organisation attends to future-planning strategy development, making performance improvement a different performance indicator than the marketplace comparative performance described in factor 1.

Both the whole scale (Cronbach's alpha = .88) and the individual factors (factor 1 'current' alpha = .87, factor 2 'improving' alpha = .83) demonstrated sound levels of reliability, providing initial support for the two theoretically based factors.

#### Constructs as derived variables

The purpose of this section is to form organisational derived variables from the constructs, so they can then be used in testing the hypotheses. Preferably, for statistical processes such as correlation and regression, the variables will exhibit normal distribution across the sampled organisations.

Variables for hypotheses testing were calculated as the mean of all factor items of all factors in each construct. The calculated variables were tested for skewness, kurtosis, and analysis of variance (ANOVA) to compare between-organisation variance against within-organisation variance. The ANOVA procedure requires normality of population and homogenous variances. Skewness tests on each variable indicated normal distribution, and Levene's results showed that homogeneity of

variance was not significant (p > .05). The ANOVA details will be presented for each variable.

### Treatment of missing data in variables

It was anticipated that the capacity of participants to respond meaningfully to difficult questions would vary as a function of their time in the job, time with the firm, role, interest, and education level. In other words, there would be legitimate and understandable use of the [Don't know] option. The research philosophy therefore was to focus on data provided, rather than be overly concerned about data that were missing. Questions that were considered by the expert panels to be important were not omitted simply because some or many participants were unable to respond to them. Notably, questions that related to management and strategic issues attracted more [Don't know] responses.

With that philosophical context, while calculating a variable (e.g. 'Topic' of strategic conversation - factor 1) from its component items, there were a number of ways to treat missing responses. The whole case could be omitted because of a single instance of missing data in the variable, or the missing data could be estimated or averaged based on the response of others (Tabachnick & Fidell, 1996). Unfortunately, averaging across participants dilutes the variance, and substituted data introduces errors. In valuing only whatever data was offered, the decision was taken to calculate variables as the mean of the component items that the respondent was able to provide - in other words, average the remaining data of that factor from the respondent.

Where a participant omits all questions of a factor, then that particular variable would be missing for that participant. The error potential was the extent to which a 'true' item data would have altered the factor average for that one participant - had they had been able to supply a true item. For example, if a variable comprising 5 questions

attracted responses of 1, 2, 3, 4, 5 then it would matter which one was missing. Taking them as missing one at a time starting from 1, the averages of the remainder would be 3.5, 3.25, 3, 2.75, and 2.5 respectively. This introduces what we could call an 'absence' error, and could accumulate if missing data were always distant from the real mean, and always in the same direction. It was reasonable to assume, however, that such errors would accumulate to neutral (central tendency). Indeed, the greater the number of [Don't knows] or cases of missing data for any given question, the more neutral the error must become due to the tendency for the errors themselves to follow a more normal curve. In other words, those errors should form a normal distribution, and tend to cancel out absence error.

An early decision was made to calculate all scales, variables and combinations to the same range of 1 to 5 to simplify regression comparison. Option 6 for each question on the questionnaire [Don't know] was regarded as missing data and ignored. The mean was calculated according to the number of responses provided by a participant. Using strategic conversation as an example, computational instructions were: Strategic Conversation = mean(purpose, topic), topic = mean(q10c, q11c, q50c, q59c, q60), and purpose = mean(q1c, q2, q3c, q4c, q12c). Descriptives of strategic conversation factors, calculated this way, are presented in Table 7.11

Table 7.11

<u>Means and standard deviation for the strategic conversation factors of purpose and topic</u>

Variable	N	Mean	Stdev
Purpose	196	3.28	8 .83
Topic	194	1 2.7	7.72
Strategic Conversation	196	3.02	2 .63

### Strategic Conversation variable

For Strategic Conversation to be a useful construct, it would be regarded as a single variable that comprises a number of factors, as is the case with constructs such as job satisfaction, organisational commitment, and organisation climate. The strategic conversation variable could then be tested as an independent or dependent variable. The calculation of strategic conversation from its factors became an issue because the expert panels argued that both factors were necessary to operationalise the construct (viz - the presence of either purpose or topic alone was not sufficient). Thus, the absence of a score on either factor would indicate the absence of strategic conversation. In this sense, there has to be a strategic purpose for the conversation, and the topic has to relate to activities within some part of the strategic loop, such that those activities cater to the purpose of the conversation. The two obvious choices for computing the variable strategic conversation from its component factors, were addition (strategic conversation = Topic + Purpose) or multiplication (strategic conversation = Topic x Purpose). Only multiplication was capable of producing an overall zero result if the value of either of the factors was zero. For either factor to be zero and maintain the scale range, the scale scores had to change from 1 to 5, to 0 to 4. Then if either was zero, the result would be zero, as required. However, a difficulty with multiplication was the curved nature of the resultant scale. As the factors 'topic' and 'purpose' moved linearly from 0 to 1, 2, 3, 4 the calculated output moved from 0, 1, 4, 9, to 16 - the output squared. Using the square root of the calculation overcame this.

The multiplication strategy was still problematic because it implied a strong correlation between the factors, in that one factor could neutralise the other. The low correlation measured between strategic conversation factors meant that neither factor

had the ability to neutralise the other - strategic conversation could not be zero while ever one factor was above zero. This argument favoured simple addition of factors to calculate the variable strategic conversation.

The logical arguments in favour of addition of factors were simply that both factors contributed to strategic conversation, and addition accomplished a linear calculation. The optimal calculation for strategic conversation was likely somewhere between additive and multiplicative, so regression tests were run to compare the differences that each method had on strategic conversation as a predictor of Strategic Behaviour (Table 7.12). Separate calculations were made using each additive, multiplicative, or a combination of both processes, to identify which calculation method gave strategic conversation the higher predictive ability.

Table 7.12

Three possible ways to calculate strategic conversation

```
A) Additive S.Conversation<sub>1</sub> = topic + purpose

B) Interactive S.Conversation<sub>2</sub> = SQRT((topic-1) * (purpose-1))

Both A & B S.Conversation<sub>3</sub> = topic + purpose +

SQRT((topic-1) * (purpose-1))
```

With Strategic Behaviour as the dependent variable, and strategic conversation and strategic planning in stepped regression with strategic conversation for each calculation method, the Beta and T Sig. results showed that the simple additive option gave strategic conversation higher predictive ability, and better significance score (Table 7.13). Therefore, the strategic conversation variable was subsequently calculated using the additive formula - as were all other construct-based variables.

Table 7.13

Comparison of regression summary using different calculation processes

· · · · · · · · · · · · · · · · · · ·						
Calc Mode	R	В	SE B	Beta	Т	Sig
A) Additive	.698	.578	.060	.453	9.49	.0000
B) Interactive	.681	.466	.059	.397	7.79	.0000
Both A & B	.682	.163	.020	.397	7.87	.0000

<u>Note.</u> Comparison of regression summary using 3 different calculation processes, additive only, multiplicative only, and a combined calculation.

Scores for strategic conversation were recorded for the 15 identified organisations (Table 7.14) and compared by ANOVA. Levene's test was not significant (p < .05), and there were significant differences between organisation scores, F(14,285) = 2.789, p < .01. Post-hoc tests were intentionally omitted since the identification of organisations with greater differences was not required.

Table 7.14

<u>Mean strategic conversation and standard deviation score for each source organisation</u>

Source			
Organisation	N	Mean	Deviation
Org 1	22	3.08	.51
Org 2	5	3.15	.30
Org 3	6	2.84	.66
Org 4	3	3.52	.04
Org 5	9	3.28	.58
Org 6	3	3.66	.14
Org 7	15	3.31	.39
Org 8	6	3.49	.34
Org 9	4	3.19	.32
Org10	13	3.10	.42
Org11	7	3.11	.68
Org12	43	2.95	.57
Org13	41	3.04	.58
Org14	6	3.12	.52
Org15	5	3.23	.57
Total	188	3.12	.55

Note: N = number of participants from that organisation.

The mean of 3.1 is close to the mid-scale anchor (3), indicating even distribution of scores about the scale mean. For a normal curve, SD would be .63, so strategic conversation data at SD = .55 presents a slightly leptokurtic distribution across the scale. Within-organisation variance was therefore less than might be expected in a normal population. If replication of this study with other samples duplicates the leptokurtic distribution reported here, it may suggest that the scale be modified. However, the SD is well within the range presented as examples of good kurtosis and skewness by Tabachnick and Fidell (1966). No pattern was detected to suggest that there is a relationship between organisation size and strategic conversation score, but will be tested in Chapter 8.

### Strategic Planning variable

Descriptives for the strategic planning factors are presented in Table 7.15, and the comparison scores between participants in Table 7.16. In order to establish that the strategic planning variable could differentiate between organisations, a one-way ANOVA of 'strategic planning by source organisation' was conducted. The result, F(14,289) = 2.87, p < .001, was significant, indicating that strategic planning scores were significantly different for each organisation. Strategic Planning may therefore be used as a variable for predictive purposes.

Table 7.15

Means and standard deviation for the strategic planning factors of opportunity and threat

			Valid
Variable	Mean	Std Dev	N
Opportunity	2.89	.66	177
Threat	2.86	.75	173
Strategic Planning	2.89	.63	173

Table 7.16

Mean strategic planning and standard deviation score for each source organisation

Source			
Organisation	N	Mean	Std. Dev.
Org 1	25	2.76	.63
Org 2	5	3.02	.43
Org 3	6	3.12	.57
Org 4	4	4.02	.74
Org 5	9	2.89	.77
Org 6	3	3.73	.52
Org 7	20	3.27	.41
Org 8	9	3.43	.46
Org 9	6	2.91	.37
Org10	17	2.94	.61
Org11	10	3.04	.74
Org12	80	2.77	.71
Org13	73	2.87	.52
Org14	6	2.86	.61
Org15	7	2.98	.67
Total	193	2.92	.63

Note: N = number of participants from an organisation.

During the screening process for these data, several outlying cases were removed. The mean of 2.9 is close to the mid-scale anchor (3), indicating even distribution of scores about the scale mean. The *SD* at .63 is the same as for a normal curve, so the data are accepted as being of normal distribution.

No pattern was detected that suggested a relationship between organisation size and strategic planning score, but this will be tested in Chapter 8.

# Strategic Behaviour variable

Descriptives of the single-factor Strategic Behaviour variable are shown in Table 7.17. ANOVA analysis with variable Strategic Behaviour by Organisation Code returned F(15,335) = 4.55, p < .001, so the organisations' Strategic Behaviour scores were significantly different.

Table 7.17

Mean Strategic Behaviour and standard deviation score for each source organisation

Source			
Organisation	N	Mean	StdDev
Org 1	21	3.24	.55
Org 2	4	3.02	.55
Org 3	6	2.30	.55
Org 4	4	3.25	.06
Org 5	8	3.74	.61
Org 6	4	3.94	.14
Org 7	14	3.71	.48
Org 8	5	3.41	.54
Org 9	4	3.62	.40
Org10	12	3.05	.53
Org11	8	2.72	.51
Org12	45	3.09	.80
Org13	44	3.03	.59
Org14	7	4.05	.45
Org15	6	3.17	.51
Total	192	3.19	.68

The mean (3.2) is close to the mid-scale anchor (3), indicating even distribution of scores about the scale mean. For a normal curve, *SD* would be .63, so data represent a slightly platykurtic distribution across the scale. Within-organisation variance was greater than might be expected in a normal population. If replication of this study with other samples duplicates the platykurtic distribution reported here, it may suggest that the scale be modified. However, the *SD* is well within the range presented as examples of good kurtosis and skewness by Tabachnick and Fidell (1966). No pattern was detected to suggest a relationship between organisation size and Strategic Behaviour score, but this will be tested in Chapter 8.

### Organisational Performance variable

Descriptives for the two organisational performance factors are presented in Table 7.18, along with overall mean titled 'organisational performance'. ANOVA of organisational performance grouped by organisation returned F(14,284) = 5.78, p < .001, so organisational performance scores (Table 7.19) were significantly different.

Table 7.18

<u>Means and standard deviation for the organisational performance factors of current performance and improving performance</u>

			Valid
Variable	Mean	Std Dev	N
Current performance	3.12	.76	185
Improving performance	3.17	.88	184
Organisational Performance	3.16	.69	190

The means (total = 3.16, current = 3.12, & improving = 3.17) are close to the mid-scale value of 3, indicating that distribution of scores about the scale mean is even. For a normal curve, *SD* would be .63, so distribution of data from all performance factors is slightly platykurtic across the scale. SPSS boxplot identified 3 outliers with the 'current' factor data, and 3 from 'improve'. These outliers were not removed because on inspection of the data, the responses seemed reasonable. Withinorganisation variance was greater than might be expected in a normal population, but in some part was due to retaining the outliers.

Table 7.19

Mean organisational performance and standard deviation score for each source organisation

		Organi	sation			
Source		Perfor	Performance			
Org.	N	Mean	StdDev			
1	22	3.24	.55			
2	5	3.02	.55			
3	4	2.31	.55			
5	9	3.65	.58			
6	2	3.94	.14			
7	15	3.71	.48			
8	7	3.41	.54			
9	4	3.62	.40			
10	8	3.05	.53			
11	7	2.72	.51			
12	33	3.09	.80			
13	35	3.03	.59			
14	4	4.06	.45			
15	2	3.17	.51			
16	34	3.23	.70			
18	1	3.71	.16			
Total	190	3.20	.69			

Replication of this study with other samples can find if the distribution reported here is typical, and if so, it may suggest that the scale be modified. No pattern was detected to suggest that there was a relationship between organisation size and performance scores, but it will be tested in Chapter 8.

# Confirmatory factor analysis of constructs

Chapters 3 to 6 have described how all constructs were developed, firstly as described by expert panels and then by interpretation of the literature, and the constructs from the two sources were very similar in suggesting two factors for Strategic Conversation. The exploratory analysis independently found the same two factors, thereby providing confirmatory support for the constructs by way of convergence of concept and data (Tinsley & Brown). This confirmatory factor analysis will provide additional support by confirming the fit of the construct to data

from a separate sample (Group B), and with the exception of Strategic Behaviour, compare that fit against an alternative single-factor form of the tested construct.

Strategic Behaviour is the exception with only one factor.

The practice for confirmatory analysis to be performed on a separate sample to that used for exploratory procedures has been challenged. This follows exploration into reports that confirmatory analyses often fail to support construct models developed by exploratory factor analysis (Tomarken & Waller, 2003; Van Prooijen & Van der Kloot, 2001). A recommendation has been made that confirmatory procedures should first be used on the same exploratory sample to demonstrate that the model can at least fit those data (Van Prooijen & Van der Kloot, 2001). A poor fit would indicate methodological errors, while a good fit to the primary sample and a poor fit to a subsequent sample, implies a poor model. A good fit to both samples suggests a good generalisable fit of the model and acceptable methodology. This study reports measures of fit for both the initial and subsequent samples for comparison.

A number of measures of fit will be reported. Chi-square ( $\chi^2$ ), NFI, CFI, TLI and RMSEA were chosen as appropriate measures of fit because they are currently highly reported in literature (Kenny, 2003). The abbreviations are used here because of their frequent appearance and acceptance in academic literature.

 $\chi^2$  is often reported but not highly regarded as a measure of fit due to its sensitivity to sample size. NFI, CFI and TLI possess respectively increasing levels of tolerance to sample size, and scores above .9 indicate good model fit. RMSEA scores near .05 indicate a good fit while above .1 indicates a poor fit (Kenny, 2003). A good fit does not, however, necessarily mean that the model is the best possible fit. Another model may be superior, or the existing model could be improved (Byrne, 2001).

### Preparing constructs for Confirmatory Factor Analysis

Prior to confirmatory analysis, the construct items were assessed for high interitem correlation that would need to be accounted for in the CFA model. A number of items were found strongly correlated and therefore were indicated in the model. For example, "We regularly discuss information from our formal external scans" was correlated with "We regularly discuss information from our formal internal scans". Similarly, "We periodically discuss the current business environment" was correlated with "We periodically discuss possible future business environments". There were four such correlations recognised for the Strategic Conversation model, four for Strategic Planning, five for Strategic Behaviour, and three for Performance. Amos confirmatory analysis software allows such items to be selected to covary. Two models of each construct were tested, one with the expected factors, and one with a single factor. Both models recognised the same inter-item correlations.

### Results of Confirmatory Factor Analysis

Table 7.20 is presented to allow comparison of 'fits' between the preferred and alternative models, and between the exploratory and confirmatory groups. The preferred models are the two-factor models for Strategic Conversation, Strategic Planning and Performance, and a one-factor model for Strategic Behaviour. The two groups are identified for each construct in columns labelled Groups A and B.

Table 7.20

Measures of fit for two models of each construct across two samples

		Strategic		Strategic		Strategic		Performance	
		Conver	sation	Plan	ning	Behavi	our		
	Group	А	В	А	В	А	В	A	В
Model 1	$\chi^2$	57	61	50	58	36	47	47	148
(Preferred)	р	.002	.001	.012	.002	.057	.004	.015	.000
	NFI	.916	.920	.921	.901	.952	.944	.938	.934
	CFI	.957	.956	.965	.943	.983	.971	.974	.970
	TLI	.921	.920	.936	.903	.984	.946	.948	.941
	RMSEA	.069	.073	.060	.069	.051	.070	.059	.061
Model 2	$\chi^2$	88	115	65	65			56	77
(Altern	р	.000	.000	.000	.000			.001	.000
ative)	NFI	.908	.849	.899	.880			.921	.893
	CFI	.869	.881	.942	.930			.958	.929
	TLI	.836	.790	.897	.876			.923	.871
	RMSEA	.099	.118	.076	.075				

Note: Group A is first (exploratory) group, and group B is second (confirmatory) group. Model 1 contained the extected factor structures, while Model 2 was a single factor construct. Strategic Behaviour expected only one factor.

#### Discussion of Confirmatory Factor Analysis

Overall, the exploratory Group A confirmed the fit of the data to the preferred model of each construct.  $\chi^2$  results were within the acceptable probability range for Strategic Behaviour of Group B, but for no other construct. However, this tendency of  $\chi^2$  to suggest a poor fit when other fit indices indicate a good fit is well known (Byrne, 2001). The remaining indices indicate acceptable fit.

Strategic Conversation fit for group A was acceptable for the preferred twofactor model but not for the alternative single-factor model. These results for the 2factor model confirm the exploratory analysis in that two factors better explain the shared variance among the measured items. Furthermore, because the data were the same as used for the EFA, the results do not indicate methodological errors.

Although "cautious, well-informed respecification of theory-relevant CFA models is not to be discouraged" (Tinsley & Brown, 2000, p. 483) there was no attempt to respecify this model. This decision was based on the intentional use of

CFA in a purely confirmatory role rather than weakening the confirmatory contribution to this research by combining CFA with EFA in an exploratory role (Tinsley & Brown, 2000).

Group B results also show better goodness-of-fit of model 1 than model 2, providing confirmatory support for the preferred model. Since both models included expected correlations by permitting covariance between specific item errors, two inferences can be made. Firstly, model 1 goodness-of-fit supports the expected covariance, and secondly that because the only difference between the two models is the number of factors in the model, the 2-factor model is supported.

The only construct that showed large differences between the fits of the two groups was Strategic Planning, although the preferred model demonstrated acceptable or better fit within both groups. The preferred model for Strategic Planning was not 'tweaked' within the confirmatory processes to try to find better agreement between groups, partly for the same arguments given for Strategic Conversation, and also because there was no theoretical basis on which to make such respecifications.

Perhaps the group difference is further indication of the problematic nature of the concept of strategic planning, given that all other constructs show close agreement between the two groups. The combination of acceptable fit indices and group differences suggest that while the present construct of Strategic Planning may be valid and reliable enough for measurement purposes, there is more work yet to do.

The alternative single-factor model of Strategic Planning did not show acceptable goodness of fit on either group, supporting the EFA finding of a two-factor construct.

There was only one model to test using CFA for Strategic Behaviour since EFA reported a one factor construct. The model showed quite high goodness-of-fit for each

group, except for the mid-range .07 RMSEA fit for Group B. This instrument had been dissected from a previous instrument and reassembled such that original complex questions were broken down into separate discrete items. The EFA and CFA results support the merit of this action, although there were no CFA results from the original instrument found to compare against the current scores, so 'fit' of the original instrument is unknown.

Bearing in mind the difficulties of constructing the performance instrument, and the reduction from the expected 3-factor construct to two factors in the EFA process, the CFA results were better than considered likely. With the exception of  $\chi^2$ , already commented on, group A indices were good. The alternative model also also demonstrated a good fits to this group, although not as good as did the preferred model. The CFA on group A therefore supported the model and methodology.

Group B indices also supported the preferred model, while the alternative model did not show acceptable fit. The preferred model performed consistently across both groups, while the alternative model did not perform reliably. The range of indice scores between models for this construct stimulated the curiosity of the researcher to test the originally expected 3-factor model and explore other plausible covariations. Although not reported here, neither the expected 3-factor model, nor removal of other restrictions, improved the fit indices. It seems that performance, in terms of current and future focus, can be reliably measured by this instrument.

#### Discussion

Relatively high within-organisation variance indicated by ANOVA analysis of strategic conversation F(14,285) = 2.789, p < .01 and strategic planning F(14,289) = 2.87, p < .001 suggests poor internal communication and goal alignment, an interpretation that supports an argument presented by Fawcett et al (1997) when they

studied relationships between strategic intent and other variables. The same interpretation supports other findings (Karpin, 1995) that management's strategic processes are in general poorly executed.

Strategic Behaviour demonstrated more between-organisation variance F(15,335) = 4.55, p < .001 than did the other derived variables. This makes sense since strategic behaviour would be more visible to participants than might be the case for activities concerning strategic conversation or strategic planing, and improved visibility could be expected to result in reduced internal variance. Furthermore, Strategic Behaviour has been linked more strongly to information, customers, and performance, than has either strategic intent or strategic planning (Fawcett et al., 1997; Andersen, 2000).

The larger between-organisation differences of behaviour seemed to happen in the presence of relatively minor deviations of strategic planning or strategic conversation. This does not imply a relationship; merely that perceptions of strategic planning and strategic conversation only differed a little, while strategic behaviour and organisational performance differed a lot. However, if there were a connection, as hypothesised, then strategic planning and strategic conversation could individually, or collectively, influence strategic behaviour. Chapter 8 reports on this possibility.

### Splitting the sample for exploratory and confirmatory tests

At the risk of the loss of statistical power by splitting the sample into two groups to separate the exploratory from the confirmatory processes, the results provided adequate scores for construct exploration and tests of instrument reliability and validity in addition to confirmatory tests of the constructs. The sample sizes at 180 were at the upper end of the minimum sample sizes of between 100 and 200 suggested by Tinslow & Brown (2000), where the difference is determined by data quality. The

constructs here seemed robust enough and data were of high enough quality to permit the relatively low sample sizes to produce statistically useful results. Exploratory analysis found the same factors expected by the expert groups and suggested by literature. Confirmatory analysis of both sub-samples showed adequate goodness of fit indices for the preferred models of constructs, allowing for anticipated covariation between selected construct items. From these results, splitting the sample was useful to support the reliability of the instrument fit of data to the construct model.

### Common methods variance

Because all the constructs were developed by the one researcher, and were contained in the one instrument, and tested at the one time, common methods variance was potentially an issue. Steps to minimise common methods variance have already been mentioned, so the present focus explains how testing for the presence of common methods variance was conducted. The single factor test for the presence of common methods variance in data (Podsakoff & Organ, 1986) assumes that if a substantial amount of common methods variance was present, then a single factor would emerge from the factor analysis, or the first factor of a multi-factor solution would account for the majority of the covariance. In this strategic conversation research, the expected constructs emerged for all tested constructs, with no single or general factor other than for strategic behaviour, as was expected. Item loadings on all items of all factors were above 0.5, cross loadings below .3, and factor correlation indicated discriminant validity. The steps to minimise common methods variance seem to have been adequate.

Social desirability, or over-reporting on admirable attitudes and behaviours, is a well known research phenomenon first studied using USA voting behaviour (Babbie, 1995) when it was found that more people claimed to have voted than did vote.

However, recent investigations challenge many alarmist social-desirability findings on methodological grounds (summarised by Krosnick, 1999). For example, a study on common method variance of perceptual measures, using the Job Descriptive Index as a validated test instrument, found that the error occurred no more than by chance at the p < .05 level (Spector, 1987). The same study reviewed previous work from the same researcher, for example spurious relationships between satisfaction and absenteeism, and came to the same finding. Spector (1987) summarised "Correlations of bias measures with instruments designed to measure constructs of interest tend to be small and rarely statistically significant" p 441.

In the absence of a uniform view on the topic, social desirability might seem to pose a large risk in this project because all IV's and both DV's were perceptual. However, there were two reasons to doubt the threat of social desirability bias. Firstly, the participants were reporting on their organisation, and not on themselves personally - they were allocating scores to the organisation as a collective entity. People who might have taken the organisation scores personally were the members of the executive group who may have been tempted to exaggerate obvious scores like organisational performance, but this was testable by comparing their scores with those of lower ranks. To test the proposition that higher ranks provided favourable impression about performance, an ANOVA analysis was conducted of each variable grouped by participant status. All *F* results had significance > .05, failed Levene's test, and failed Tuckey's HSD. Social desirability does not appear to be linked to the present data.

Another way to test for social desirability was to compare responses from those who indicated that their answers were based on evidence, against those who indicated that they had no evidence, and who were reporting wholly based only their perception.

The evidence-based responses should more closely resemble objective data and be less prone to social desirability bias than would the non-evidence-based data. The absence of differences between the groups' scores would therefore suggest the absence of the bias.

The performance questionnaire allowed this comparison with additional questions on the organisational performance instrument relating to "how certain are you?". The variable 'Certainty' collected the responses that could be 1 for [Very uncertain], 2 for Have reason], and 3 for [Have evidence]. To test the proposition that non-evidence-based data was the same as evidence-based data, an ANOVA analysis was conducted of organisational performance by the variable 'certainty'. The analysis failed the Tuckey's HSD test at the .05 level. On this test, social desirability was not evident.

# Summary of Chapter 7

The pilot study of the instruments, in a manner suggested by Floyd and Widaman (1995), was an important step in the process because it brought to attention the inadequacies of the question format of the Strategic Behaviour instrument. The instrument was reworked and tested successfully. The pilot study used three data collection methods reviewed by Krosnick (1999) as a way to minimise common method variance error.

The main study collected data from 380 people at assorted hierarchical levels within organisations of various sizes from multiple industries. Common method variance errors were minimised by spreading data collection over time, using expert panels, a validation panel and business panels, and varying the development methodology for each instrument. The sample was split into two groups to enable separate exploratory and confirmatory analyses.

Principal axis factoring with oblimin rotation was used to extract factors because PAF is more suited than principal components analysis for factor extraction (Reise et al., 2000). Oblique rotation was chosen because it was assumed that factors would not be orthogonal, and the correlation between factors is an important indicator of conceptual overlap (Garson, 2004). Factors were chosen using a combination of scree test, eigenvalue, and variance accounted for.

All analyses identified the expected factors, with the exception of performance that had expected three, but two of them combined into one, resulting in two factors overall. Strategic conversation factors were 'purpose' and 'topic'. Strategic planning factors were 'opportunity' and 'threat'. Strategic Behaviour had only one factor.

Organisational performance factors were 'current' and 'improving'. All factor analyses KMO's were above .8 and all internal consistency tests were above Cronbach's alpha = .82. Confirmatory analyses found that data fit the models, and the preferred model performed better than the alternative for each of the two sub-samples. The constructs were therefore shown to be valid and reliable.

#### CHAPTER 8 - CROSS-SECTIONAL TEST OF DERIVED VARIABLES

Study 2c - Testing the relationships between the four derived variables

This chapter reports on the relationships between the derived variables Strategic Conversation, Strategic Planning, Strategic Behaviour and Organisation Performance. If the expected relationships are found to exist, then both the concurrent validity of the scales, and the hypothesised model, will be supported.

This chapter begins by assessing potential relationships between biographical variables (viz - organisation type and size, participant status, time at current organisation, gender, and education level) and each derived variable. If a biographic variable correlates with any two derived variables, it will inflate the relationship between the derived variables. If it correlates with only one of two derived variables, it may act as a suppressor, reducing the correlation between them (Ganster, Hennessey & Luthens, 1983).

In a review of 94 research studies that assessed the relationships of organisational variables, 9 of which introduced new scales, all mentioned some biographic details of participants without offering a reason to collect such data, but presumably to facilitate replication. Only 2 of the studies included the biographic variables as covariants, and neither of those explained the reason for statistical inclusion. Yet if biographical variables do correlate with a derived variable of interest, then the derived variable may lack generalisability because each organisation would have its own unique blend of biographic characteristics. The present research intentionally collected biographic data to exclude biographics as a source of generalisable error. For example, previously discussed and implied by Hambrick and

Mason (1984) and Thompson and Donohue (1993), education might influence the relationship between some derived organisational variables. Education was therefore tested, along with all other biographic data, for correlation with derived variables.

Subsequent to the biographic analysis, the correlations between derived variables Strategic Conversation, Strategic Planning, Strategic Behaviour and Organisational Performance were examined and compared to the expectations of the model. Hypotheses 3 and 4 expected Strategic Conversation to predict Strategic Behaviour, and Operational Performance. Hypotheses 2 and 5 expected Strategic Planning to correlate with and predict Strategic Behaviour, and for the relationship to be moderated by Strategic Conversation. Hypotheses 1 and 6 expected Strategic Behaviour to correlate with and predict Organisational Performance, and to mediate between Strategic Conversation and Organisational Performance.

## Relationships between derived and biographic variables

The total sample of 380 participants described in Chapter 7 was used for this study. A correlation analysis was conducted to determine if the biographic variables described above were correlated with the derived variables Strategic Conversation, Strategic Planning, Strategic Behaviour and Organisational Performance. Any such correlation had the potential to inflate or suppress the relationship between the effected derived variable and the other derived variables, in turn reducing the generalisability of the scale because the biographic influence would differ between organisations. The only biographic variables found to correlate with derived variables were 'gender' and 'formal education level' (See Table 8.1).

Table 8.1

Relationships between biographic and derived variables

	Strategic	Strategic	Strategic	Organisation
	Conversation	Planning	Behaviour	Performance_
Gender	.188***	.171**	.088	.128*
Education	021	146**	015	104
Time at Org	.075	.038	.105	030
Industry	.028	027	033	.096
Size of Org	074	062	055	049
Status	.095	130	011	.007

Note: \*\*\* p < .001, \*\* < .01, \* < .05.

Because females reported slightly higher scores for strategic conversation,

Strategic Planning and Organisational Performance, the impact of gender on interscale correlations was checked. The small negative relationship between formal education level and Strategic Planning suggested that those individuals with higher levels of education levels gave their organisation slightly lower scores for strategic planning. In the present case it would appear that people with higher levels of education were either less aware of strategic planning, or were more critical of strategic planning activities. The latter interpretation may be more likely in light of previous findings that education level is one predictor of complex thinking (Hambrick, 1981; Thompson & Donohue, 1993).

The largest relationship, (r = .188) between Gender and Strategic Conversation, accounted for only 3% of the variance of the score for Strategic Conversation. Being a small correlation it is unlikely to detract from the strength of the inter-derived variable correlations. Overall, the general lack of association between biographic variables and the scales, the low correlations of the two exceptions (gender and formal education), and the lack of importance of organisational contexts and structures,

suggests that the scale relationships reported here, and the evolving model, should be generalisable to other organisations.

# Confidence of perceptual data

In spite of previous arguments to justify the use of perceptual data (Chapter 6), doubts about the confidence that may be placed in such data have been supported by poor correlations (r = .27, p < .07) between perceptual and objective data (Saxton, 1997). It is clearly preferable to establish some indication of the confidence that can be placed in the present perceptual data, for example by using a sample study that compares perceptual against objective data (Eisenhardt, 1989a). In the present study, objective data were not available for comparison purposes. Instead, the confidence in perception data was tested by comparing the opinion of those who indicated that their responses were based on evidence and supposedly more objective, against those who indicated one of the other two levels of certainty - representing responses that were less objective and more subjective. The three levels of certainty were [Very uncertain] (More subjective), [Have reason], and [Have evidence] (More objective). To test for differences in responses of the three levels of certainty, a one-way ANOVA was conducted with the derived variables as DV's, and three levels of certainty as factors. The ANOVA results were not significant, indicating that there were no differences between the more subjective and more objective based responses. The absence of group differences offers support for confidence in the perceptual data.

#### Analysis of relationships between construct variables

Simple relationships between derived variables Strategic Conversation, Strategic Planning, Strategic Behaviour and Organisational Performance (Table 8.2), provided early support for hypothesised relationships between derived variables. The moderate

size of inter-variable correlations supported a discrete role for each construct, and reduced the likelihood of co-linearity being problematic.

Table 8.2

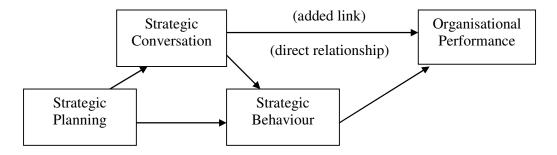
Relationships between derived variables strategic conversation, strategic planning, strategic behaviour, and organisational performance

	Strategic	Strategic	Strategic	Organisation
	Conversation	Planning	Behaviour	Performance
S.Conversation	1.000	.629	.601	.404
S.Planning	.629	1.000	.532	.343
S.Behaviour	.601	.532	1.000	.415
O.Performance	.404	.343	.415	1.000

Note: All p < .001.

In the present research, there is risk of conceptual overlap of constructs, as discussed earlier, that relate to the differences between strategic conversation, planning and behaviour. Conceptual overlap could result in construct overlap (Spector, 1987) where similar items exist in different constructs, amounting to a form of common method variance. The moderate correlations between derived variables (Table 8.2), indicates that any construct overlap is minor.

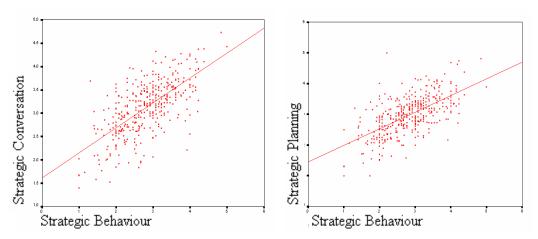
As expected, Strategic Conversation had a strong association with both Strategic Behaviour and Strategic Planning. Unexpectedly, Strategic Conversation had a similarly strong correlation with Organisational Performance as did Strategic Behaviour. This relationship prompted a change (Figure 8.1) to the evolving model.



<u>Figure 8.1</u> The original model of Figure 3.6 modified to include the direct relationship between strategic conversation and organisational performance.

# <u>Testing hypotheses 2, 3 and 5, where Strategic Behaviour is the DV</u>

In order to test for concurrent prediction of Strategic Behaviour as the DV, with Strategic Conversation and Strategic Planning as IV's, analysis with multiple regression was employed. Testing for linearity and homoscedasticity (Figure 8.2), the plots followed a linear path and clustered uniformly around the regression line. Standardised residual plots and Mahalanobis were used to identify and exclude outliers.



<u>Figure 8.2</u> Plots for linearity and homoscedasticity of strategic conversation and strategic planning, with Strategic Behaviour as the DV

H3 proposed that Strategic Conversation would correlate with and predict Strategic Behaviour. The relationship is anticipated following studies such as that by Haas and Algera (2002) who used dialogue to change behaviours needed to align goals between two groups of people in the organisation. H3 was supported when Strategic Conversation predicted Strategic Behaviour ( $R^2 = .36$ , Beta = .60, p < .05).

H2 is based on an earlier understanding of Strategic Planning as guiding, or even 'controlling', Strategic Behaviour (Anthony & Dearden, 1976). Although this is seen more recently as an oversimplification (Graetz, 2002), the relationship was

supported. Strategic Planning predicted Strategic Behaviour ( $R^2 = .28$ , Beta = .53, p < .05).

H5 proposed that strategic conversation would mediate the relationship of H2 - between strategic planning and strategic behaviour. Interactive communication was described by (Floyd & Lane, 2000) as the link between strategic planning and strategic behaviour, when discussing management role conflict in organisation-wide strategy development.

Mediation was tested using Baron and Kenny's four-step regression test (Baron & Kenny, 1986) of the three variables (Table 8.3). In this case, the four steps were: 1) Check that Strategic Planning was correlated with Strategic Behaviour. 2) Check that Strategic Planning was correlated with Strategic Conversation. 3) That Strategic Conversation affected Strategic Behaviour when controlling for Strategic Planning (see step 2 in Table 8.3). 4) If controlling for Strategic Conversation did not completely neutralise the impact of Strategic Planning on Strategic Behaviour, then the relationship only partially, rather than fully, mediated. According to the 4-step test, Strategic Conversation only partially mediated between Strategic Planning and Strategic Behaviour, because in step 2 (Table 8.3), Strategic Planning remained significant but was reduced in relationship strength.

Table 8.3

<u>Summary of Hierarchical Regression Analysis of strategic planning and strategic conversation predicting strategic behaviour</u>

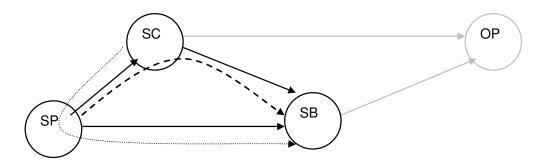
Variable	В	SE B	Beta	Т	Sig T
Step 1					
Strategic Planning	.656	.053	.539	12.283	.000
Step 2					
Strategic Planning	.330	.062	.271	5.305	.000
Strategic Conversation	.556	.066	.433	8.472	.000

Note.  $R^2 = .29$  for Step 1;  $\Delta R^2 = .12$  for Step 2 (p < .05, df = 368).

The Sobel test (Sobel, 1982) was then used to establish whether Strategic Conversation acted as a mediator between Strategic Planning and Strategic Behaviour, by testing if the indirect effect of Strategic Planning on Strategic Behaviour via Strategic Conversation was significantly different from zero (Sobel, 1982). The Sobel test is, in effect, a confidence test of the 4 step test for mediation. The process involves performing a t test based on regression coefficients and standard errors of the two paths - direct and mediated. If t exceeds  $\pm 1.96$  then the null hypothesis is rejected and the two paths are dissimilar enough to indicate that there is a mediating pathway. The Sobel test was conducted using an on-line calculator (Preacher, 2003), which gave the results of this relationship as t = 7.86, p < .001. Because t exceeded  $\pm 1.96$ , there is confidence in the report of a strong mediating pathway between Strategic Planning and Strategic Behaviour, through Strategic Conversation. In summary, Strategic Planning has a direct relationship with Strategic Behaviour, and that relationship is partially mediated by Strategic Conversation.

Although the regression results of Table 8.3 report the presence of mediation, they do not help identify the direction of mediation (whether Strategic Planning mediates Strategic Conversation, or Strategic Conversation mediates Strategic Planning). This problem is made more complex with the many theoretical roles of Strategic Conversation over a planning cycle, that is to say, that conversation may precede planning, occur during planning, and also follow planning. However, the model expects Strategic Conversation to mediate in the direction between Strategic Planning and Strategic Behaviour, and this is supported by a number of analytic observations. Firstly, strategic conversation has a marginally stronger ability to predict Strategic Behaviour ( $R^2 = .36$ , Beta = .60, P < .05) than does Strategic Planning ( $R^2 = .28$ , Beta = .53, P < .05). Secondly, when Strategic Conversation was

added to Strategic Planning as step 2 in regression, the increase in  $\mathbb{R}^2$  was 41% (.41/.29), while it was only 17% when Strategic Planning was added to Strategic Conversation. Therefore Strategic Conversation causes a larger change in  $\mathbb{R}^2$  than does Strategic Planning, and Strategic Conversation retains a stronger unique predictive association with Strategic Behaviour. This is represented diagrammatically in Figure 8.3, with Strategic Conversation being a stronger mediator between Strategic Planning and Strategic Behaviour, than Strategic Planning is between Strategic Conversation and Strategic Behaviour. On both logical and statistical grounds, it seems that Strategic Planning uses Strategic Conversation to bring about Strategic Behaviour, and Strategic Conversation demonstrates additional direct influence on Strategic Behaviour.



<u>Figure 8.3:</u> Model of relationships showing direct (solid) and mediating (broken) pathways between strategic conversation, strategic planning, and strategic behaviour.

Testing hypotheses 1, 4, and 6 - where organisational performance is the DV

The purpose of these analyses was to test for concurrent prediction of Organisational Performance as the DV, with Strategic Conversation, Strategic Planning, and Strategic Behaviour as IV's. Multiple regression analyses were performed following tests for linearity, homoscedasticity, and multivariate outliers. The score plots followed a linear path and clustered uniformly around the regression

line. Standardised residual plots and Mahalanobis were used to identify and exclude outliers.

Clifford (2001) found that dialogue was needed to align and synchronise thinking and action before there could be personal and organisational development. From this and supporting arguments, it was hypothesised (H4) that Strategic Conversation correlates with and predicts Organisational Performance. H4 was therefore supported when Strategic Conversation predicted Organisational Performance ( $R^2 = .12$ , Beta = .34, p < .05). This correlation is expected to be small to medium because of the multitude of other internal and external influences upon organisational performance.

Figure 8.3 shows the central role expected to be played by Strategic Behaviour in acting as a mediator between Strategic Conversation and Strategic Planning, and Organisational Performance. For the mediation to occur, it was hypothesised (H1) that Strategic Behaviour would correlate with, and predict, Organisational Performance. H1 was supported with by regression analysis ( $R^2 = .17$ , Beta = .42, p > .05). This finding is consistent with prior correlation ( $r^2 = .12$ ) between planning and financial performance (Andersen, 2000), and the description of the link between behaviour and outcome in a review of literature (Weick & Quinn, 1999).

H6 expected that the relationship between Strategic Conversation and Organisational Performance would be mediated by Strategic Behaviour. This is mainly a logical argument in that conversation by itself is merely noise, and becomes useful when somebody does something intended as a result of the conversation. There is little argument likely against the expectation that conversation can guide decisions that then influence behaviour, and from the behaviour, there are performance outcome consequences. The expectation that behaviour mediates the link between conversation

and outcome is reinforced by the mixed results obtained by researchers looking at the relationship between Strategic Planning and Organisational Performance (Fawcett et al., 1997). It could be argued that the mixed results to date have been partially due to the omitted influence of behaviour.

Hierarchical regression and the Sobel test were used to test this mediation hypothesis. The order of adding variables to the regression was Strategic Planning, Strategic Conversation and Strategic Behaviour - an order that suited the evolving model (Figure 3.6) and reflected the ascending order of correlations (Table 8.2). Step 1 of the regression (Table 8.4) shows that Strategic Planning predicted Organisational Performance. Step 2 of the regression shows that Strategic Conversation mediated Strategic Planning according to Baron and Kenny's (1986) four step test: Strategic Planning correlated with Organisational Performance, Strategic Planning correlated with Strategic Conversation, Strategic Conversation affected Organisational Performance when controlling for Strategic Planning (step 2 in Table 8.4). However, Strategic Conversation did not quite neutralise the impact of Strategic Planning on Organisational Performance, indicating that the relationship was only partially mediated.

While previously established that Strategic Behaviour predicted Organisational Performance (H1), step 3 of the regression to test mediation (Table 8.4) shows that Strategic Behaviour did not mediate between Strategic Behaviour and performance. In step 3,  $R^2$  changed only .05 when Strategic Behaviour was introduced. The impact of Strategic Behaviour (Beta = .27, p < .05) is only marginally greater than that for Strategic Conversation (Beta = .15, p < .05). The significant t score for Strategic Conversation further refutes the mediating role of Strategic Behaviour. Finally, the mediation failed the Sobel confidence test (p = .33). Therefore, this research did not

find that Strategic Behaviour was a mediator between Strategic Conversation and Organisational Performance. H6 was not supported

Instead, present findings indicate that Strategic Conversation had one or more additional pathways to influence performance, perhaps via other unknown mediators. Because this finding was unexpected, and not represented by an alternative hypothesis, it will be considered in the subsequent discussion.

Table 8.4

Summary of Hierarchical Regression Analysis for Variables Predicting Performance

Variable	В	SE B	Beta	Т	Sig T
Step 1					
Strategic Planning	.351	.054	.330	6.629	.000
Step 2					
Strategic Planning	.168	.066	.158	2.541	.011
Strategic Conversation	.309	.070	.275	4.414	.000
Step 3					
Strategic Planning	.093	.067	.088	1.393	.165
Strategic Conversation	.174	.075	.155	2.327	.021
Strategic Behaviour	.237	.054	.270	4.376	.000

Note.  $R^2 = .11$  for Step 1;  $\Delta R^2 = .05$  for Step 2 (p < .05, df = 358);  $\Delta R^2 = .05$  for Step 3 (p < .04, df = 357).

# Modification of model to fit present findings

The model that seems to best fit the regression data is presented in Figure 8.4.

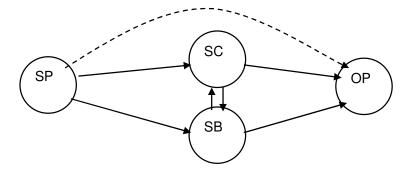
Both Strategic Conversation and Strategic Behaviour had a direct impact on

Organisational Performance. Strategic Conversation mediated the impact of Strategic

Planning on both Strategic Behaviour and Organisational Performance. Only a weak

direct link was established between Strategic Planning and Organisational

Performance.



<u>Figure 8.4</u> Revised model of strategic conversation in an organisation. .

Before summarising and discussing these results, this is an appropriate time to address a question raised at the beginning of this chapter about the influence of gender and education. Table 8.1 shows the correlations between scale variables on one side, and gender and education on the other, and these biographical variables may have confounded the results. Partial correlations were performed while controlling for gender and then formal education, and the resultant correlations were compared against bivariate correlations (See Table 8.1). The maximum scale correlation change was 4.8% (between Strategic Conversation and Organisational Performance), and the average correlation change was 1.8%. These figures suggest that any biographic influence would be minor. To test this, ANOVA analysis with Tuckey's HSD was conducted. The results showed that only one organisation was different from the others. That particular organisation had only 5 participants who were all from the executive level, and the particular organisation scored high for all construct variables. With that organisation excluded and the remainder resubmitted to ANOVA analysis, there were no significant changes of organisational derived variable relationships based on biographic variables. It was concluded, therefore, that biographic variables did not act as covariants.

# Strategic planning as a two-factor construct

Strategic planning is generally conceptualised as a single factor construct (Boyd & Reuning-Elliott, 1998; Collier et al., 2004) in contrast to the two factors, opportunity and threat, reported in the present research. To support the previous theoretical arguments for the two factors (Chapter 5), this section examines whether the two factors of planning add predictive ability to a single-factor understanding and measurement of strategic planning.

Typical single factor instruments report a narrow view of planning that corresponds with the opportunity factor of the present research. The two factors identified in this research were assessed for their individual and joint relationships to Strategic Behaviour and Organisational Performance. The correlation analysis (Table 8.5) found a moderate relationship with the derived variables, but importantly, each factor correlated to a similar extent. While this suggests a similar predictive ability, it was possible that interaction would diminish the relationship of one or both with a derived variable. A single-factor approach may miss important data.

Table 8.5

Relationship between factors of strategic planning and derived variables

Strategic		Strategic	Organisational
C	onversation	Behaviour	Performance
Opportunity	.602	.553	.322
Threat	.502	.379	.253

Note. *P* < .01

Hierarchical regression was performed to assess the interaction between opportunity planning and threat planning on Strategic Behaviour (Table 8.6) and Organisational Performance (

Table 8.7). The level of 'threat' planning did not seem to predict the level of organisational performance, or add predictive ability to the opportunity factor.

One interpretation is that planning around risks is done less often than is planning that concerns opportunity - at least in the organisations sampled. The finding that the opportunity factor was a better predictor than the threat factor raises questions regarding the strategic attention to threat management in most of the participating organisations.

Table 8.6

Regression of factors of strategic planning on Strategic Behaviour

DV = Strategic Behaviour					
Variable	В	SE B	Beta	T	Sig T
Mul R = .578					
$R^2 = .334$					
Opportunity	.661	.050	.574	10.036	.000
Threat	.089	.053	.088	1.685	.093

Note N = 349, p < .05

Table 8.7

Regression of factors of strategic planning on Organisational Performance

DV = Or	ganisational E	Performance				
	Variable	В	SE B	Beta	T	Sig T
Step 1:						
Mul R	t = .318					
$R^2$	= .096					
	Opportunity	.242	.059	.250	4.069	.000
	Threat	.088	.054	.101	1.645	.101

Note N = 358, p < .05

Alternative interpretations are that threat management is indeed unimportant, or perhaps threat planning isn't used to improve performance so much as to limit the influence of something that may otherwise result in poor performance. If the latter were true, it would support the view of those who argue that not only should threats be planned for, but turned into strategic opportunities (Chattopadhay, Glick & Huber, 2001). In this case, threat planning would move from merely checking poor performance, to improving performance - from a reactive to proactive posture. Future

research could resolve those possibilities and determine the extent to which additional attention to threat planning may reveal strategic opportunities currently missed.

This raises the possibility that superior performing organisations may be sufficiently different in their functioning so as to fit a different model. This question could be addressed in future studies by comparing high and low performing organisations.

### The relationships of Organisational Performance factors

Arguments in the present research about the need to examine efforts by the organisation to address 'future performance' in addition to current performance were supported by findings that each of the performance factors (current and improving) contributed discrete value to the performance score. Strategic Conversation and Strategic Behaviour correlate similarly with Improving Performance (r = .40 and .32 respectively, p < .01), and to Current Performance (r = .31 and r = .37, p < .01) (Table 8.8). Those relationships, whilst not anticipated, make sense not only because the model shows strategic conversation as determining strategic behaviour, but also because a 'strategic' conversation will inevitably introduce change.

Table 8.8

Relationships between the derived predictor variables and the two performance factors

	S.Conversation	S.Behaviour	S.Planning	PCURRENT
PIMPROV	E .410	.318	.361	.377
PCURREN	T .312	.372	.245	

Note: n = 358, p < .01

A clearer picture emerges with analysis by multiple regression (Table 8.9) where both 'Improving' and 'Current' performance are better predicted by Strategic Conversation than by Strategic Behaviour.

Table 8.9

<u>Strategic conversation and behaviour as predictors of performance (improving and current)</u>

Dependent Variabl	.e Per	formance	(improve	ement)	
Multiple R	.42	$R^2 = .17$	5		
Variable	В	SE B	Beta	T	Sig T
S.Behaviour	.235	.082	.181	2.88	.004
S.Conversation	.388	.086	.284	4.49	.000
Dependent Variabl	e Per	formance	(current	1)	
Multiple R	.319	$R^2 = .1$	02		
Variable	В	SE B	Beta	T	Sig T
S.Behaviour	.103	.079	.086	1.34	.191
S.Conversation	.329	.084	.257	3.93	.000
Note D OF M OFC	•	•	•		

Note. P < .05, N = 356

# Summary of results

Both the construct and concurrent predictive validity of each of the 4 instruments, Strategic Conversation, Strategic Planning, Strategic Behaviour, and Organisational Performance, were supported. With one exception, the constructs were found to relate in expected ways. As expected by hypotheses 3 and 4, Strategic Conversation correlated with and predicted Strategic Behaviour and Organisational Performance. Hypotheses 2 and 5 were supported when Strategic Planning was found to correlate with Strategic Behaviour, and the relationship was mediated by Strategic Conversation. Hypothesis 1 was supported when Strategic Behaviour was found to correlate with Organisational Performance.

The exception was the lack of support for hypothesis 6, in that Strategic

Behaviour did not moderate the relationship between Strategic Conversation and

Organisational Performance. Instead, Strategic Conversation had a direct relationship

with Organisational Performance of greater predictive ability, than did Strategic Behaviour. No explanation for the direct relationship between Strategic Conversation and organisational performance was possible from the present data.

#### Discussion

Although Strategic Conversation was the primary focus of the present research, there was a concurrent need to develop measures of selected constructs in order to investigate the conflicting reports of the nature of relationships between Strategic Planning, Strategic Behaviour and Organisational Performance. Discussion of those constructs will be limited in order to maintain the focus on Strategic Conversation.

The Strategic Conversation instrument, and its companion instruments, were all found to be generalisable across the 15 industries tested in this project, and to be insensitive to the biographical data collected. These were not comprehensive ranges of either industries or biographics, but are indicative of generalisability.

The constructs were tested for content and construct validities, scale reliability, concurrent predictive ability on Strategic Behaviour and Organisational Performance as DV's, and mediation. Only hypothesis 6, that Strategic Behaviour acted as mediator between Strategic Conversation and Organisational Performance, was not supported. The direct relationship between Strategic Conversation and Organisational Performance was not expected, and insufficient measurements were taken to facilitate explanation of that relationship. However, one might speculate that involving the beneficiaries of improved performance, that is - the customers or clients, in the organisation's strategic conversation could somehow improve performance. In itself, this is not a remarkable suggestion. Previous findings have demonstrated that business growth increases with increases in customer-based performance (Zahay & Griffin, 2004), and performance improves with more involvement by external

stakeholders (Delmas, 2001; Berman et al., 1999). The failure of Strategic Behaviour to mediate Strategic Conversation on Organisational Performance is perhaps understandable in light of the considerable literature that promotes the importance of strategic level interactions with performance beneficiaries - the stakeholders (Klebe & Weaver, 1999; Jones & Wicks, 1999), suggesting the primacy of the conversation process.

As previously discussed (See Chapter 4), the various conversation styles (viz - dialogue, debate, discuss and decide) are all useful strategic conversation tools during the transition of a topic through its strategic cycle. The important role of conversation has been discussed in relation to parts of a strategy loop, examples being strategy (Hendry, 2000), organisational knowledge (Gnyawali, 1998), task alignment (Bouwen & Steyaert, 1990), and trust in decision makers (Elsbach & Elofson, 2000). The present research looked at the big-picture role of strategic conversation, and its findings support recent opinions that promote strategic conversation as a core skill that conveys and accompanies a strategy throughout its, hopefully planned, topic life.

Hendry (2000) pulled the disparate views of strategy together with both actual and espoused behaviours around planning, in an empirically grounded conceptualisation of strategic decisions as elements of a strategic discourse. Hendry's use of the word 'discourse' was very similar to the use of 'conversation' in this current research. Further, Hendry argued that the (strategic) discourse occurred across and between organisational levels and functions, and spanned the time from idea to commitment, and then to enactment. In effect, strategic planning occurs anywhere, any time, involving any organisational actors, and discourse is the medium through which any plan takes shape, and through which enactment occurs. Hendry acknowledged that identification of whatever it was about discourse that gave it its

'strategy-ness' was beyond the scope of that paper. Present findings, in providing both a description of the 'strategy-ness' of conversation within an organisation, and a means of measurement, go some way to addressing this need.

The differences between current single-factor strategic planning measures in the literature and the presently developed two-factor measure, raises some issues regarding the measurement practices of strategic planning. Even though it is currently accepted that a strategy should include both means and ends (Bart et al., 2001), and seek to turn both threats and opportunities into advantages (Chattopadhay et al., 2001; Porter, 1980), the actual practice by managers has not followed the recommendations of researchers. Instead, executives and managers tend to busy themselves with operational matters (Karpin, 1995), and confine what few strategic conversations there are to seek and respond to opportunities, while threats to the organisation are reacted to by 'putting out fires' (Cacioppe, 1999; Sterman, 2001). Some explanation for this may be the absence of rewards for preventing fires before they happen (Repenning & Sterman, 2001). Such practices may contribute to the singular focus of instruments that measure planning on opportunity planning to the exclusion of the idea of organisational threats.

Since strategic planning is a process performed by a planning team rather than an individual (Graetz, 2002), it follows that planning engages strategic thinking, and then strategic conversation happens in concert with it. Strategic planning and strategic thinking differ cognitively in that strategic planning involves analysis while strategic thinking is about synthesis (Heracleous, 1998; Mintzberg, 1994a) - they inform one another. Strategic planning, with its focus on analysis of data and performance figures, is inadequate to produce breakthrough thinking (Bennett & Brown, 1997). The roles of strategic conversation therefore include connecting the thinking and

planning processes to each other, and then connecting the plan to the desired subsequent behaviour. This argument is supported by the present findings.

Previous research has ignored the role of conversation when studying relationships such as those between strategic intent and performance (Fawcett et al., 1997), and between strategic planning and performance (Berry, 1998; Andersen, 2000; Wilson. I., 1994). Others have acknowledged the role of conversation, but did not include it as a variable in studies of the effect on organisational performance of goal alignment (Osborne, 1998; Haas & Algera, 2002), organisational structure (Drago, 1997), or alignment of middle and senior management thinking (Clifford, 2001). In those studies of the contribution of the alignment of goals or management to performance, alignment was achieved by the use of purposeful dialogue. However, the dialogue itself was not separately described or evaluated, even though its instrumental role meant that variations in its content and implementation in various parts of the organisation would have interacted with the relationships under study. This research has demonstrated a need to measure strategic conversation in such studies. For example, when Osborne (1998) examined teams with clearly defined goals, it was noted that conversation was "less discussion" and "more strategic" in nature, but the conversation was not assessed. Osborne also reported that teams with emergent strategy opportunities (interactive management and communication tools) outperformed conventional management techniques.

The finding by Osborne (1998) regarding emergent strategies is of additional interest to the present research because emergent strategies are by nature quick to move through a strategy cycle, and the conversation style must similarly adapt rapidly to suit the various stages of the topic life-cycle. For example, style must adapt to suit such contradictory roles of conversation as that used in scanning and enquiry

following an alert of a threat or opportunity, then to the conversation style associated with dissenting and debating while forming strategic plans, followed by a conversation style that suits consensus and cooperation for enactment of the plans (Dooley & Fryxell, 1999). Emergent strategies therefore rely heavily upon strategic conversation because, by definition, they begin life as a strategic topic and receive increased intensity of attention, over a shorter cycle time.

Hendry (2000) also alluded to the differences of strategic processes that may exist between low and high performing organisations, and that traditional structural, behavioural or interpretive perspectives on strategic decisions do not readily explain those differences. Hendry argued that a discourse conception of decisions, and therefore of strategic planning, would accommodate all explanatory deficiencies of traditional perspectives because the discourse conception is unconstrained. However, an unconstrained conception of the nature of strategic planning could become so broad as to not differentiate those actions currently understood as planning, from others. Perhaps there isn't a need to have a model that explains both superior and inferior planners and performers. It is probably a safe assumption that no one wants to understand and emulate a poorly performing organisation.

However, that there may be two models brings to attention the possibility of the problem of an omitted variable. In a demonstration of this problem by (Sackett, Laczo & Lippe, 2003), recruitment decisions were found to alter when the standard battery of army tests was supplemented by just one more variable. An omitted variable is one that, if included, would alter the results. In this research, an omitted variable might relate to conversation quality or etiquette, or preconditions for conversation, such as organisational climate. Such variables could conceivably influence the impact of conversation on subsequent actions.

The present research has demonstrated concern for the omitted variable in another way. Strategic conversation does exist as a variable, and has been omitted from some previous studies – becoming itself an 'omitted variable'.

### Future research

Several topics for future research emerge from this study. Firstly, the evolving model of strategic planning, strategic conversation, strategic behaviour and organisational performance requires further testing and support. While such an endeavour is not research so much as replication, it could be extended to seek an explanation of why the simple model was not supported. The revised model placed strategic conversation as a more direct contributor to organisational success than was expected, but was unable to explain why.

Secondly, this research found that while Strategic Conversation and the companion constructs remained valid regardless of Organisational Performance differences, the relationships between them open the possibility that high performing and low performing organisations work in fundamentally different ways, agreeing with an observation made during a study of communication of management teams (Cairns et al., 2001). Furthermore, researchers have reported that high performance of organisations has been associated with deliberate pursuits other than simply profit making, such as teams and climate (Beech & Crane, 1999), transformational managers (Doyle, 1995), employee-centred management (Schuster, Morden, Bakerlan & McKay, 1997), resource management (Daniel, Lohrke, Fornaciari & Turner, 2004), and advice-seeking by CEO (Westphal, 1999). It is axiomatic that in order to pursue these topics, conversation must happen, and any such conversation will necessarily be strategic.

Finally, the present study found that the potentially important role of 'risk' when planning strategies was largely ignored in the participating organisations, and scarcely researched in the literature. Theoretically, risks should be given at least the same strategic attention as are opportunities. Future research could seek explanations for risk avoidance in planning, and explore the opportunities offered by its inclusion.

#### STUDY 3 - LONGITUDINAL STUDY OF STRATEGIC CONVERSATION

Study 3 examines the impact upon organisations of intentionally manipulating Strategic Conversation during a longitudinal study. The longitudinal study applied adult learning theory to develop a program for the acquisition (manipulation) of strategic conversation skills within participant organisations.

# CHAPTER 9 - TEST 'LEARNABILITY' AND IMPACT OF STRATEGIC CONVERSATION

# Objectives

The purpose of this study was to test three hypotheses: strategic conversation could be learned (H7); elevation of strategic conversation would cause elevation of strategic behaviour (H8); and elevation of Strategic Behaviour would elevate organisational performance (H9). In this study, we also sought to assess and describe any unexpected gains or disappointments associated with either the process or outcomes of elevating strategic conversation skills. This study was a practical application to test the expectations associated with learning and using strategic conversation.

### Overview of longitudinal study design

This study comprised two processes; elevating and monitoring the skill level of strategic conversation in a number of organisations, and measuring relevant organisational variables. The elevation of skill level was achieved by providing opportunities for CEO's or similar ranking individuals from participating organisations

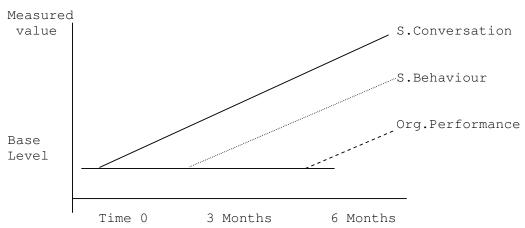
to engage in small group discussions and explore the nature and use of strategic conversation. The group members also discussed methods they could use themselves to transfer those skills into their organisation, and monitor any changes.

### Expected outcomes

To test whether strategic conversation could be learned (H7), the skills development program intentionally avoided creating a conventional training package or using a 'change template' to stimulate conversation (e.g. total quality management, SWOT, business process reengineering) that might, in stimulating change, contribute to changes that resulted more directly from strategic conversation. These dual concerns were addresses by focusing the skills development program on just one objective – increase the practice of strategic conversation throughout the organisation. The program therefore avoided the use of any direct 'change intervention' or training techniques. There was no intention to develop and test a training package.

The second and third objectives of this longitudinal study were to test the hypothesised direction of causation of the relationship between Strategic Conversation and Strategic Behaviour (H8), and also between Strategic Conversation and Organisational Performance (H9). This was accomplished by seeking to manipulate (increase) the quality and numbers of occurrences of strategic conversation within participant organisations, measuring those changes, and also associated changes in organisational behaviour and performance. Thus, this longitudinal study assessed the changing scores for Strategic Conversation, Strategic Behaviour, and Organisational Performance, at three points during the program - commencement, midpoint, and completion.

It was proposed that support for the expected direction of causation would exist if an increase of strategic conversation skills was followed, after some time delay, by an increase of strategic behaviour, and then later by organisational performance (Figure 9.1).



<u>Figure 9.1</u> Graphical representation of the timing of changes expected in strategic conversation, strategic behaviour, and performance during the skills acquisition program.

# Unexpected outcomes

The full range of organisational responses to a change in the extent of use of strategic conversation was unknown. Research recognition of the possible existence of unexpected outcomes from the study could be at one of three levels. Firstly, the possibility could be overlooked or ignored. Secondly, the possibility of unintended consequences could be acknowledged, but accepted as a limitation of the research. Finally, efforts could be made to detect and assess such influences. This research sought to detect and assess unexpected outcomes of the present research. To achieve this, an open-minded exploratory approach was adopted, and the program worked with participants as joint learners and active co-researchers rather than as passive recipients. It was assumed that unexpected outcomes could occur in any of the areas of interest - learning strategic conversation, implementing and using it, or identifying

and measuring appropriate organisational outcomes. The non-specific nature of these objectives, and the broad hypotheses in this study, reflect the basic level of understanding of this topic.

#### Research issues

This section discusses the research issues concerning the learning, implementing, and measurement of outcomes of strategic conversation, and the unique issues regarding research of these undertakings.

# Combining hypotheses with exploration

This longitudinal study included both the time-series quantitative measures required by the hypotheses (using the instrument package), and qualitative processes to detect and assess outputs or outcomes that could not be predicted. The study plan itself follows quasi-experimental procedures in that it was experimental to the extent that one variable was manipulated while measures of DV's were taken over time, and quasi because participants were not a random sample and did not contribute to a control group (Babbie, 1995).

The study was conducted as case-studies because of the small number of organisations within which the manipulations were performed. While results from small samples lack generalisability and power, Eisenhardt (1989a) has described theory building in this way as a valid approach. With strong enough and consistent results, this study could reasonably propose general statements about the hypotheses tested - that strategic conversation can be learned, and that the direction of causation is from strategic conversation to strategic behaviour and performance.

# Who's being tested - researcher or organisation?

Study 3 sought to isolate strategic conversation as the single cause of change - to establish what might happen if members of an organisation became more skilled at strategic conversation. However, change may be caused by the intervention, as intended, or by the personal interactions between researcher and organisation (Schein, 1987), or perhaps other influences altogether (e.g. environmental munificence). The study plan therefore took steps to reduce those potentially confounding influences.

To isolate the researcher, the program focussed on the acquisition of strategic conversation knowledge and skills, and avoided using frameworks or strategies that are typically used to intervene for intentional organisational change. Action learning at the program level, and adult learning principles at the task level, seemed the appropriate tools given that the project focus was on research in action in a learning setting populated by adults. Action research enabled the self-development of a variety of tools by participants to guide and assess their own progress, and provided the network for them to learn from each other (Dick, 1990b). In addition, the researcher avoided activity associated with the roles of teacher, tutor, coach, guide, consultant, or any other that might directly influence participant decisions or actions.

# Assessing effectiveness of intervention

A preferred method to assess intervention effectiveness is to compare 'before and after' measurements of the treatment group against equivalent data from a 'zero treatment' control group. A formal control group was not used for comparison in this study because this research did not compare groups with and without treatment, but instead relied on two mechanisms. Firslty, it assessed the variability of adoption and response by participants (Muthen & Curran, 1997). It was expected that organisations would respond differently to the opportunity to use strategic conversation, and that

organisations would therefore register different conversation scores by the completion of the study.

Secondly, this study took steps to account for environmental or other common influences on change. Comparative data samples were drawn from the cross-sectional study to coincide with the three interval measurements of this longitudinal study. It is argued that if there were no statistical differences between the derived variables measured for each of those cross-sectional study samples, then nothing had occurred, externally, to influence the measurements of the longitudinal study. This being the case, differences in scores between the three longitudinal measurements of participants would indicate changes that were free of environmental causes.

# Measuring organisational change

Elevation of strategic conversation skills, or the process of elevating the skills, can produce varying results: desirable or undesirable, predicted or unexpected, immediate or delayed (timing of reaction), rapid or gradual (rate of reaction), general or specific (broad or narrow), or large or small. Large, desirable, immediate, general and expected changes would be captured, as intended, by the instruments of the measurement package (viz - Strategic Conversation, Strategic Behaviour, Strategic Planning, Organisational Performance). On the other hand, unexpected, delayed, gradual, specific, and small changes would be missed by the instruments, yet may represent important opportunities or threats to the organisation. Specific steps were taken to record those changes.

### Measuring small and specific changes

Goal Attainment Scaling was selected to attempt to capture small changes. Goal attainment scaling is a system of categorising intervention outcomes into five levels varying from "less than expected" to "more than expected" success (Kumar &

Subramanian, 1997). The potential for this scaling as a suitable way of measuring organisational performance was inferred from research on goal setting (Tubbs, 1986), goal attainment (Kumar & Subramanian, 1997), goal alignment (Campbell, 2000; Sorensen, 2002), and strategic intention (Bronn & Olson, 1999) where small and specific changes needed to be detected.

A key attraction of goal attainment scaling in this project was that it provided a way to invite and include, formally, the practical expectations of the participants. This opportunity for them to shape the research should help engage their cognitive and practical involvement. However, a disadvantage is that goal attainment scaling assumes that the researcher or participants know at the outset what goals to set. However, goals that are set before the subject (in this case strategic conversation) is understood, run the risk of being sub-optimal.

# Measuring unexpected changes

Researchers in social science offer an approach for those situations when conventional assessment methods may be insensitive, restrictive or inappropriate to record the real benefits, or when unintended consequences (good or bad) may outweigh the importance of intended outcomes. The "Most-significant-change" technique (Dart & Davies, 2003) involves the regular collection and participant-interpretation of change in addition to any predetermined quantitative indicators.

Most-significant-change technique was designed to help evaluate complex, participatory development programs by surfacing important outcomes experienced by participants, especially changes that may be overlooked by the researcher. It draws meaning from actual events, rather than being based on indicators. The method systematically collects stories that are analysed for common themes or experiences,

and discussed and verified with the participants. The stories capture changes in the experiences of participants (beneficiaries), and help to identify why change happens.

The nature of the most-significant-change technique made it ideal to capture unexpected qualitative and quantitative data. Not only could participants identify unexpected changes, but could suggest meaningful ways to quantify them.

# Measuring delayed or gradual changes

Measurement timing was of concern because response to change stimuli may be delayed or gradual, and also because of the need for interval measurements to help investigate the 'strategic conversation - organisational performance' cause-effect relationship (Mitchell & James, 2001). It was unknown how long it might take participants to learn and apply strategic conversation, how long before strategic conversation impacted strategic behaviour, and how long before changes would be measurable. In attempting to address these concerns, quantitative measurements of Strategic Conversation, Strategic Behaviour and Organisational Performance were taken on three occasions - program start, 3 month mid-point, and following completion. It was expected that comparing the results from the three times could help identify delay of changes, rate of changes, and sequence of changes.

Other temporal uncertainties for this research included participant attrition (Pettigrew, Woodman & Cameron, 2001), timing of availability of relevant data compared to timing of readiness to collect it (George & Jones, 2000), and timing of the collection of data (most-significant-change) for unexpected outcomes (too early risked missing the capture of delayed influences (Das, 1987)).

This study therefore used all 3 measurement methods 1) instrument package measures of strategic conversation skill, strategic planning, Strategic Behaviour and

organisational performance, (2) Goal attainment scaling, and 3) Most-significantchange.

# Impact of organisational budget cycle on research timing

Because of the cyclic nature of strategic planning in organisations, the timing of the longitudinal measurements by this research was critical if interference from other development programs was to be minimised. The majority of today's organisations, prompted by budgetary habits that promote the short-term annual view, undertake the periodic planning process annually (Mintzberg, 1994a);(Sheehan, 1999; Rheault, 2003); Sheehan, 1999). In other words, organisational development efforts typically target only the current year. Therefore, in order to limit the influence of other development plans, it was prudent for the current longitudinal project to be completed within the one financial year. In Australia, the accounting cycle is from July to June, so the program had to start between July and October for each participant, in order to finish between April and June.

### <u>Issues with sample size</u>

While 'bigger is usually better' for sample size of cross-sectional studies, intervention-based studies impose practical limitations. The sample size for a classical control group experiment with before and after measures that target the recommended .8 level of power (Cohen, 1992; Ferguson & Ketchen, 1999) for *F* tests at alpha of .05 over three readings, needs a sample size of about 52 for medium effects or 21 for large effects (Cohen, 1992).

In terms of statistical power of the quantitative data from study 3, it will be well below the preferred 80%, locating this research with so many others that have been criticised for low power (Ferguson & Ketchen, 1999). However, the quantitative

findings gain more confidence where there is convergence between the findings of multiple measurement strategies.

# Conceptual support for targeting executives

Conceptual support for the project to target executive development as a way to introduce strategic conversation into an organisation derives from recent observations that firstly, executive development is an urgent requirement (Jackson, Farndale & Kakabadse, 2003) and secondly, organisational development via executive development is on the increase (Olesen, 1996). Although coaching was not used in this research, the increased use of coaching indicates its usefulness in organisational development (Levinsky, 2000).

There is some evidence for the relative efficacy of coaching of executives.

Personnel Decisions Inc survey in 1999 reported that executive coaching was twice as effective as behaviour modeling, and three times more effective than multi-technique programs (training) (Eggers & Clark, 2000). A survey in 1998 by International Coaching Federation reported that the top 5 benefits for most people were: higher level of self-awareness (68%), smarter goal setting (62%), more balanced life (60%), reduced stress (57%) and more self confidence (52%) (Levinsky, 2000).

While these surveys may lack scientific rigour, the figures are what executives read and hear, and influence their decisions. In other words, the chosen processes for change increasingly use purposeful activation of executives to become change agents and role-models of change, rather than pushers or dictators of change. This research adopted that 'change-agent' view of executives' active role in change.

### Program outline development

# Practitioner-based influence

Topics for strategic conversation during the skills development program was sourced from practitioner literature where strategic conversation had been manipulated in some way (Abraham, 2003; Manning, 2002; Ratcliffe, 2002)

Collectively, practitioners who have stimulated strategic conversation have espoused the need for diverse opinion of participants, and diverse sources of information on multiple topics. Their diversity of information sources and conversation topics was therefore duplicated in the skills development program of this study. The topics selected for the program are described in the section 'Program content development'.

### Theoretical influence

Academic work on strategic conversation (van der Heijden, 1996; Heracleous & Barrett, 2001) was not particularly informative regarding the practical issues in this longitudinal study. However, theoretical understandings of learning were pivotal to the design of the program. Adult learning theory was used in the design to explain and negotiate the multiple roles of participants as learner in the groups, and teacher, and coach within their organisations.

### Adult learning

Argyris (1976) described a hierarchy of learning levels, where lower level (single loop) learning involved redesigning and rearranging elements of organisation. Single loop organisational learning has also been described as a refinement of the prevailing mental model, and a modification of rules that regulate behaviour (Hayes & Allison, 1998). Higher level learning (double loop) is a more advanced level of meta learning that requires re-thinking assumptions and principles (Lundberg, 1989). Third-order learning involves improving the learning potential of the contexts within

which the other two types of learning take place (Mullen & Lyles, 1993). This has been referred to as meta-learning, where the term 'meta' refers to a higher level of conversation about a topic, examples being 'research on research' (Ulrich, 2001) or 'learning about learning' and 'theorizing about theorizing' (Elsbach, Sutton & Whetten, 1999). This study employed the three learning levels.

Levels of learning have also been used to describe levels of the organisation in which different forms of learning occurs (Table 9.1) (Redding, 1997). If organisation-wide learning and behavioural change is to occur, any intervention program should be more successful through intentional and balanced influence of all levels. In this project, research contact was at individual (executive) level, so the program had to use those executives as teachers and facilitators within their organisations, to reach the other levels.

Table 9.1

<u>Different learning activities that occur at different levels of the organisation</u>

Level of Learning	Elements of initiatives
Individual	self-directed learning
	individual learning plans
	continuous learning
	processes
Team	dialogue
	action-reflection learning
Organisational	strategic-action learning
	project debriefings
	capturing lessons
	(100 <b>=</b> )

Note: Adapted from Redding (1997)

# Conditions for learning.

Early learning theories, such as observational learning, that reflect upon outcomes of the actions of others (Bandura, 1977), and behavioural reinforcing of appropriate behaviour (Skinner, 1974), still remain valid when designing a learning

program. More recent adult learning theory has shown that adult learning mostly occurs when we 'reflect' about the outcomes of our own actions - especially failures or significant events (Lengnick-Hall & Wolff, 1999). They found that people learn less if it 'went to plan' because there is nothing to challenge the original thinking that brought about the action in the first place. By contrast, disappointment can lead to reflection which in turn leads to a better understanding and thoughtful re-try. This is the basis of the 4-component Kolb cycle: 1) concrete experience and observation, 2) reflection on that experience, 3) synthesis and abstract conceptualisation, and 4) testing of the new concepts in new situations (Kolb, 1984). When the cycle is repeated with reflection feeding the next synthesis, it is like a spiral of linked sequential circles (Carr & Kemmis, 1986). Other component names that have been suggested are: plan, act, observe, and reflect (Kemmis, 1988). Within the action research understanding, the adult-learning participants of this project, as coresearchers, could intentionally apply the learning cycle to the elevation of their own strategic conversation skills.

To achieve this in the present program, knowledge acqisition and skills development intentionally relied more on the learning design, than on the researcher as teacher or coach. As part of that design, participants took over the role of session facilitator after the first 4 to 8 sessions. This longitudinal study therefore introduced many challenges for participants, and many opportunities for things to go wrong. On the other hand, it moved their learning to a higher meta level because part of their facilitation brief required them to explain 'why' the session was run the way it was. Each session therefore comprised both normal and meta learning, and reviewed the learning at both levels.

# Participant influence

In keeping with action research principles, participants were encouraged to become co-researchers, a role that sometimes introduced conflict of role between self as participant, as co-researcher, and as researcher (Ellis & Kiely, 2000). As co-researchers, they influenced both choice of content and process of knowledge acquisition. The conflicts themselves provided excellent opportunities for strategic conversation and exercise of decision processes. Examples of *content* change occurred when all groups elected to take longer clarifying organisational purpose and goals (extending from 1 session to as many as 4 sessions), and again when all groups repeated the single session on the 'psychology of decision-making'. *Process* examples of program change were firstly when no group undertook the daily phone contact schedule, although some groups replaced that with email communication, and secondly when several groups redesigned their session timetable so they could preview the session material themselves, and then spend the entire session interacting.

### Program content development

#### Program content selection criterion

Criteria for the selection of content for the skills acquisition program were that each session <u>must</u> concern the nature or quality of strategic conversation, <u>or</u> provide a tool or topic to enhance the practice of strategic conversation. Furthermore, each session had to generate useful practice tasks for participants to apply. However, content must not provide a framework for change, nor present a model for initiating or managing change. This became a challenge when 'change' was itself the topic of interest, but it was managed by focusing on sub-topics such as readiness to change, why change fails, and why change succeeds.

### Session-level content

The skills-acquisition program acknowledged the content (topics) recommendations of authors who had manipulated strategic conversation and/or studied its impact in terms of strategic conversation macro views (Chesley & Wenger, 1999; Heracleous, 2002; Manning, 2002) and micro view (Von Krogh & Ros, 1995). Without exception, they and others (Haas & Algera, 2002; Clifford, 2001; Osborne, 1998; Gnyawali, 1998; Zhang & Fitzsimons, 1999; Bart et al., 2001) referred to the need to expand the knowledge base in multiple ways, but especially through intentional diversity of information sources and topics.

Ideas for topics were extracted from literature relating to strategic organisational development – meaning development specifically related to organisational effectiveness and efficiency. Topic areas such as decision making, risk, capability planning, alignment and systems are examples. The program therefore provided the opportunity for participants to explore a wide range of strategically relevant topics from micro (conversation) to macro (strategy origins). The specific topics selected follow the practices of prior researchers and are listed in Appendix 9

# Program-level content

In order to help participants understand and use adult learning principles and practices, and to help them transfer this into their organisations, the beginning sessions focused on communication, conversation and decision-making. With these basics in place, the nature of strategic conversation could be more effectively explored.

It is argued that strategic conversation starts with, and always involves, strategic thinking (Bonn, 2001; Eisenhardt, 1990; Graetz, 2002; Liedtka, 1998; Mason, 1986), so strategic thinking and conversation were simultaneously explored and encouraged

within each session. Thus, by the time participants explicitly learned about strategic conversation, they had already been practicing it.

There were no management, administrative, compliance or technical topics (See Appendix 7).

# Session processes

Action Research should perhaps be written as Action  $\Leftrightarrow$  Research because the two words interact - the action drives the research that drives the action. Action influences research through the process of reflection that encourages insights and changes to the actions. In this program, reflection was included in the processes, and the timetable scheduled the practice of reflection, ultimately allowing reflection about reflection. Intentional participant learning was therefore not so much from the material itself, as from group conversation about each topic, and reflection on that content and process. The facilitator provided some initial structure and material, but did not function as teacher, tutor or coach. The facilitator more managed the process and acted as a source of information.

In accord with adult learning principles, the learning cycles were arranged hierarchically - session, day, week, mid-way, overall. Each session was designed as a loop that contained opportunity to report/reflect on outcomes of previous week, to discuss new topic loops, options of how to apply new material, and how to assess results for reporting back. The program called for a brief phone contact with any other group member each working day, to keep the project 'in their face'. Each week they were to self-preview new material prior to session, apply new material, assess it for reflection, and assess the weekly learning process.

The ongoing opportunities for participants as co-researchers to assess and reflect on both content and process resulted in several adjustments to the program. For example, they universally rejected the daily phone call, claiming it was impractical.

The beginning sessions followed a routine (Appendix 8) to introduce the program and concepts of action learning. The routine was gradually altered in later sessions by each group as part of its own action learning flexibility. The template session began with an overview of the session, a review of the previous session and feedback, the new material and discussion, and planning how to test or use the new material. The final task per session was a review of the session processes for the purpose of improving them. The researcher, when acting as facilitator for the first month or so, did not participate in discussions, but did respond to questions and stimulate conversation with questions. The plan for the first two sessions is shown in Appendix 8.

#### Method

#### **Participants**

Small to medium organisations from all sectors were invited to participate. The smaller organisation size was preferred because changes due to strategic conversation would be more easily detected than in larger organisations, and there would be less likelihood of finding active organisational development projects that might confound results. The preference for multiple sectors was partly for generalisation of results, and partly in response to the pursuit of diversity of group membership. These organisations were contacted at CEO level, or equivalent, by phone. Organisations were excluded where existing development programs could have influenced assessment of changes induced by the strategic conversation program.

With 70 organisations represented by a CEO, senior executive or similar decision-maker, 9 groups of 5 to 11 people were formed and started meeting. It was possible to manage participation of 70 organisations because participant members met as 9 groups, allowing easy weekly contact by the researcher with each of the organisations. A high attrition rate was experienced over the program (Figure 9.2), and of the 9 groups that commenced the program, 11 people within 2 groups completed it.

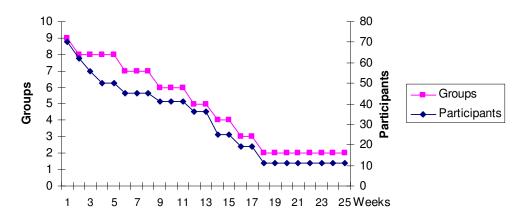


Figure 9.2: Attrition of participants during the six month program

Data were collected from as many as possible of those who left before completion, partly to seek motivation for departure, and also to assess both gains and disappointment with the program. Of those who left the program, only one person commented overtly that the program did not apply to his organisation. Two groups (11 people) didn't manage to start properly, 27 participants left due to work pressure, and 21 were from groups that were closed because membership became too small (n < 5) for the group to function. Most-significant-change data were not collected from these organisations.

Eleven participants are adequate for case study purposes. Even for quantitative studies, a small sample is adequate if the results are better than can be achieved by chance, and the effect is large enough and consistent. "A sample size of 10 may be

judged adequate for certain kinds of homogeneous or critical case sampling" (Sandelowski, 1995, p.179).

Participants from the cross-sectional study (Chapter 7) also played a role in this study. Data from the first 70 of the 380 participants of the cross-sectional study were made available as a time-1 reference group, and data from middle 70 and the final 70 were available as time-2 and time-3 references respectively. The timing of the first 70 and last 70 coincided with the beginning and end of the longitudinal study. It is argued that if there were no statistical differences between the derived variables measured for each of those cross-sectional study samples, then nothing in common had occurred that needed to be accounted for in this longitudinal study. The reference measurement, if unchanged, would mean that any measured changes in the longitudinal participants would be unique to those organisations.

## **Materials**

Materials included the strategic conversation instrument package (Appendix 4 & 5), Goal attainment scaling form (Appendix 6), program plan (Appendix 7), session plan (Appendix 8), and relevant CD. Research and production of the CD contents took 12 months to complete, and was financed privately. The CD Index is attached as Appendix 9. A copy of CD1 is available, upon request, from the author.

Each member received a copy of a CD that contained all the units of that part of the program. Members were free to peruse CD material at any time. Each CD unit contained topic-related questions that invited exploration intended to make the topic relevant to their organisation.

## Self-learning program delivery

The self-learning content of the program was assembled as 33 units supplied as PowerPoint presentations on computer CD with voice and graphics, and printable

notes. CD delivery ensured uniformity of delivered content and style, and more easily confined material to topics relevant to strategic conversation skill development. At a more practical level, the CD delivery format meant that on the very few occasions when the researcher could not attend, the session continued.

Content deliberately avoided a textbook 'look and feel', and provided only a basic review of the topic before introducing recent research findings, especially if controversial, and prompted thoughtful debate with questions. Opportunities for discussion were therefore scattered within each unit of CD material.

The CD material was organised into 4 parts, supplied as 1 CD per part. Part 1 comprised topics on communication (introduction, conversation, strategic conversation) and decision making (introduction, psychology of, in conditions of certainty, in conditions of ambiguity). Part 2 stimulated conversation on change, future (scenario planning), risk (assessment, management, systems), strategic topics (origins, SWOT, intent, planning), stress, and systems (thinking, integrating). Parts 3 and 4 covered topics like negotiation, project management, organisational capabilities and capacities, but were not used because participants chose to focus on CD1 and 2.

#### Procedure

The project was explained to potential participants by email and phone contact before the starting date. 'Meeting' topics followed the program plan, and the first few session processes followed the session plan (Appendix 8). The 6-month program involved a weekly meeting of one hour for each group, held at a time that suited group members, and at the business premises of one of the group members. Accounting for holidays, the completing groups met between 21 and 23 times. Each session suggested homework relating to their application of the topic to their place of work, and the expectation to report back on the experience. The main learning experience

occurred from the application and reflection of the material, not from discussing the topic at the sessions. The use of such multi-level learning for strategic outcomes has been strongly promoted as an essential ingredient in organisational learning (Senge, 1991; Gephart et al., 1996).

CD 1 (communication and decision-making) was covered first, after which participants could select the next CD that the group considered most relevant. The process of making that choice became an exercise in strategic conversation and decision processes. Without exception, each group opted for Part 2 after completing Part 1.

## Data collection - instrument package

It became evident early that Goal Attainment Scaling was unsuitable because the set goals became obsolete, inappropriate, or were reached far too early. An example of an obsolete goal was an alliance venture that failed when disturbing details of the potential alliance partner became known. An inappropriate goal was demonstrated when the initial goal set specific outcome targets, but it was realised that it was more important to focus internally on staffing and 'people-development' issues. As a final example, an ambitious goal by a primary industry organisation was achieved in 6 weeks instead of 6 months. The program hadn't made it happen, but because of the thinking and discussions during the program, the organisation was more sensitive to the changing market conditions, detected 'change' signs sooner, and responded more quickly.

With Goal Attainment Scaling abandoned, participant interest focused on development and measurement of Most-significant-change items. As the program progressed, participants collated their comments about 'what was happening' to compile the list of most-significant-change (unexpected) items. During the program's

final sessions, specific discussions were held to select and prioritise the most-significant-change items, decide how many to assess, and how to assess them. From this, the Most-significant-change instrument with 13 items was assembled (Table 9.3).

Most-significant-change data were collected by phone interview during a period from 3 months to 6 months after completion of the program. The delay of 3 months was to minimise distortion due to loyalty to the researcher or the group, and because outcomes would more likely show signs of progress or failure - the delayed influence effect (Das, 1987). Each interview, of one hour duration, was guided by a template (Appendix 10) that provided opportunities for participant choice of topic. Open questions included: 1) Do you expect the strategic conversation knowledge and skills to have a lasting impact? [In what way?]. 2) Do you have intentions? 3) Do you have a plan? 4) How long before profits/productivity will be effected, 5) Is that 'the' main benefit to come from the program? In completing each phone contact, each participant was asked: 1) what are you doing with this tool? 2) Is it a valuable tool?

3) What are you doing to keep it sharp? These questions were structured to provide optimal opportunities for participants to "think out loud".

# The most-significant-change topics chosen by participants

While the most-significant-change measurement items were generated qualitatively, the most-significant-change data were quantitative (Table 9.3) and assessed on a scale from 1 (nil) to 10. Participants were asked to respond to each question and refer to 3 different time points: - 'your score before starting strategic conversation program', 'your score upon completion of the program', and 'your expected score 24 months after the program'. The 1 to 10 scale was described by phone as 1 = nil impact (no gain), 5 = knowledgeable and can do OK, and 10 represents the maximum you believe possible. It was not considered necessary to be

able to record negative scores, since these items were of their own choosing, and not negative in meaning.

Participants were also asked about: - 'the importance of the role of strategic conversation in this question' (the topic being asked), 'importance of this topic to you personally', and 'importance of this topic to the organisation'. These questions also used the 1 to 10 scale, where 1 was nil, 5 was valued/desirable, and 10 meant 'crucial - essential'. These questions participants' opinions about the role of strategic conversation in current and near-future performance improvements.

#### Results

Data were collected from the three sources: three periodic 'reference samples' from the cross study, three periodic samples from the instrument package, and 'most significant change' data.

#### Reference samples

One-way ANOVA tests were used to compare the means of the three reference groups. There were no significant differences between results at the three reference times, meaning that the inter- and intra-organisational variances were no different than would be found by chance. Therefore, over the period of interest, organisations not part of the longitudinal study reported that there were no changes of Strategic Conversation, Strategic Planning, Strategic Behaviour, or Organisational Performance that needed to be accounted for. Changes reported by organisations of study 3 could be attributed with a degree of certainty to the influence of the intervention.

# Quantitative results from periodic measures of Strategic Conversation

The means of the quantitative measures at three time intervals are presented in Table 9.2. The 'change' figures, prefixed with delta ( $\Delta$ ), were calculated as the change

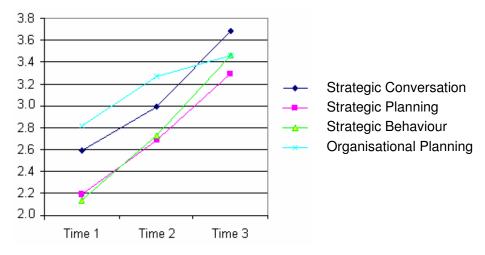
of the mean rather than the mean of the changes. The same data are also shown graphically in Figure 9.3 to enable comparison against the desired graph shown in Figure 9.1.

Table 9.2

<u>Strategic conversation, strategic behaviour, and performance measures taken at commencement, mid-point, and termination of the program.</u>

Strategic Conversation		Strategic Planning		Strategic Behaviour		Organisation Performance		
		$\Delta SC$		ΔSP		$\Delta SB$		ΔΟΡ
Commence	2.59		2.19		2.14		2.82	
Change		.39		.50		.60		.45
Mid-point	2.99		2.69		2.73		3.27	
Change		.70		.61		.73		.19
Terminate	3.69		3.30		3.46		3.46	·
Δtotal	•	1.09	•	1.11	•	1.32	•	0.64
% change		42%		51%		62%		23%

<u>Note.</u>  $\Delta$  = change (therefore  $\Delta$ SC = change in Strategic Conversation),



<u>Figure 9.3:</u> Key variables measured at beginning, mid-point, and completion.

<sup>%</sup> change = change overall,

## Most-significant-change data

The most-significant-change results are presented (Table 9.3) to show comparisons between 'before' the program, 'after' or upon completion, and also a projected expectation of where they will be 24 months after completion of the program. There are two considerations when interpreting these data. Firstly, the data were collected from 3 to 6 months after completion, so the participants had distanced themselves from the researcher and the process. Secondly, in the time between completion and data collection, participants had already experienced an improvement or otherwise in the practice of strategic conversation. Therefore, they were reasonably well equipped to comment on the status in the future year, based on their experiences of the previous 3 to 6 months. To facilitate comparison, the data are presented in Table 9.3 in both absolute form, and as percentage improvement.

Table 9.3

"Most-significant-change" feedback from participants of 6-month skills-development in Strategic Conversation

in otrategic conversation	Strength	Estimated improvement				Importance of this topic		
	of Role of	Before	After		In 24		to	to
Activity assessed	SC	SC	SC	As %	Mths	As %	You	Org
Efficiency of meetings	8.0	4.2	6.2	48%	8.0	92%	8.3	9.0
Effectiveness of meetings	7.7	3.7	5.5	50%	7.5	105%	7.8	7.8
Conduct of meetings	7.0	4.0	5.7	42%	7.3	83%	8.2	7.8
Transparency of meetings	7.7	5.2	5.8	13%	7.7	48%	8.7	8.2
Clarity of purpose & goals of organisation	7.8	3.8	5.5	43%	7.7	100%	8.8	8.7
Management professionalism	7.7	3.3	5.7	70%	7.5	125%	8.2	8.5
Employee development in strategic awareness	7.2	3.2	5.2	63%	7.3	132%	7.5	7.3
Skills at giving instructions	7.0	5.5	6.5	18%	7.7	39%	7.5	7.8
Strategic Risk awareness & process	7.3	5.0	6.3	27%	8.0	60%	8.3	8.0
SWOT skills & practice	7.6	3.8	5.8	53%	7.4	95%	6.6	7.4
Strategic planning skills	7.7	5.0	6.3	27%	8.0	60%	7.3	7.7
Management 'change' programs	7.4	4.2	6.2	48%	7.2	71%	7.4	7.4
Org. 'system(s)' awareness	7.5	3.5	6.5	86%	8.0	129%	9.0	7.5
Average:	7.5	4.2	5.9	45%	7.6	88%	8.0	7.9

Note: All scores are 1 = nil to 10 = maximum. SC = 'Strategic Conversation'

Some of the activities assessed were discussed during the program, for example employee development was encouraged (63% improvement), and 'systems thinking' was explored (53%). However, other activities listed in Table 9.3 were not explored. An example is the highest scoring improvement, that of management professionalism (70%). Interestingly, management professionalism was their description for the changes that were happening in the processes and outcomes of organisational meetings.

#### Analysis

## Quantitative analysis

During the course of the three measurement events, at least some participants exercised their right to anonymity, so that although there were three distinct sets of measurements, the linkages between events for each participant were not known. In light of the friendly relationships between participants and researcher, this exercise of the right for anonymity was unexpected, otherwise coding methods would have been used to link events per participants.

Being unable to identify individual participants in the sequential measures of Strategic Conversation, Strategic Planning, Strategic Behaviour and Organisational Performance was unfortunate because it meant that the changes could not be tested for correlation with the initial measure - an indicator of the suitability of simple difference as a measure of change (Bergh & Fairbank, 2002). However, the risk of suffering error due to regressing to the mean in change measurements was reduced in this study by the presence of the third measurement. While all variables changed towards the mean of 3.0 between time 1 and 2 (Table 9.2), thereby risking a reliability error due to regression towards the mean (see Bergh and Fairbank, 2002, for discussion on this

topic), the final scores moved away from the mean, continuing the linear 'change growth curve'. This is presented graphically in Figure 9.1.

As far as the accuracy of the figures was concerned, the linkages were important because it made no difference calculating the mean of the changes (as could be done if identities were known) or the change of the means. This is illustrated by the randomly selected numbers in descending order in Table 9.4 where the lower figures calculate the differences and then the mean of the differences, while the figures to the right calculate means and then the differences of these means. In other words, not knowing the identity of participants to connect their responses sequentially, made no differences to the groups' final change figures in Table 9.2. It does not, however, rule out the possibility of considerable variance of benefits between participants. This is unlikely because of the modest standard deviations reported in Table 9.3.

Table 9.4

Random matrix of numbers to demonstrate that the difference of means is the same as the means of differences.

	Random descending numbers					Mean		
Reading 1	7	9	6	7	9	7.6		
Reading 2 Reading 3	5	6	5	4	7	5.4	2.2	difference1
	2	4	2	3	3	2.8	2.6	difference2
							2.4	difference of means
difference1	2	3	1	3	2	2.2		
difference2	3	2	3	1	4	2.6		
Mean	2.5	2.5	2	2	3	2.4	mean	of differences

The steady elevation of strategic conversation between measures (Table 9.2) therefore supports the hypothesis (H7) that strategic conversation can be learned. The finding that elevation of Strategic Behaviour and Organisational Performance occurred when only Strategic Conversation had been manipulated in this field-experimental project, supports hypotheses 8 and 9. It is illogical that Strategic Conversation would change Organisational Performance that could then change

Strategic Behaviour, or that Organisational Performance could change Strategic Conversation, other than as feedback information.

## Most-significant-change data analysis

The most-significant-change data from the 11 completing organisations are presented in Table 9.3. The most-significant-change topics were reported by participants to be strategically relevant to the organisation (mean = 7.9/10, sd = .52), personally valuable (mean = 8.0, sd = .69), and they claimed that strategic conversation had a key role in those improvements (mean = 7.5, sd = .31). Participants expected, on average, an 88% overall improvement in targeted performances by 24 months from termination of the program. In spite of the 45% overall improvement of scores at the time of survey, the targeted performance seems optimistic.

From additional questions during data collection, nearly all participants had commenced coaching, teaching, or using other ways to develop strategic conversation skills within their organisation, and were already 3 to 6 months into those programs. The lifting of strategic awareness in employees received the largest improvement score (132%) expected at the 24 month mark - an ambitious target that reflects the importance they place on this activity.

# Discussion and conclusions

#### Discussion

Three issues threatened the efficacy of the program. Firstly, the effectiveness of ths skills acquisition program, secondly the abandonment of goal attainment as a source of data, and finally the high attrition rate of the participants. Skills acquisition was successfull as evidenced by the increase in Strategic Conversation scores. The wisdom of using people in upper positions to acquire the skills and transfer them

throughout the organisation was also validated. It would be more problematic for someone at a lower organisational level to spread the skill and practice. The process of facilitating self-learning was also supported by the results. Perhaps this creates greater ownership of responsibility for transfering the skill set than if an outsider were given the task.

The loss of goal attainment scores reduced the statistical impact of converging from 3 sources to 2 sources, with some attendant loss of confidence in results. Since goal attainment scaling was itself exploratory as a supportive methodology for this study, its loss alone was not significant, and two convergent data sources remained. However, the lesson is that for goals to be firmly identified and used, individuals must have adequate knowledge about goal-setting. This experience supports comments and findings of others that organisational 'purpose' and direction must be clear before goals can be set (Clampitt, DeKoch & Cashman, 2000; Knight et al., 2001). The participating organisations struggled during the first few weeks to define their business.

The high attrition rate of participants was anticipated, and prompted the study plan to regard the interventions as case studies. Eisenhardt (1989a) argues that study of a single case can be used for building theory, and that additional confidence is attached to research that compares different kinds of data (e.g. objective and perceptual, or qualitative and quantitative), or increases the number of studies. In this study, the scores that recorded the perceptions by participants of unexpected consequences (mean of 45% improvement) converged with results of the instrument package (mean of 51.6% improvement).

Sandelowski (1995) argues that a small sample is acceptable if the results are better than can be achieved by chance, and if the effect is large enough and consistent.

In this case, all participants reported large results, with small between-participant variance. The standard deviation between participants for 'Efficiency of meetings', on the scale range of 1 to 10, was 1.17 before the program and 0.75 after. Standard deviations of scores for the remaining 12 activities were similarly low. It can be argued, therefore, that the results are large and consistent enough to be regarded with some confidence.

#### Conclusions

Two conclusions are possible from the most-significant-change report. Firstly, the most-significant-change technique did what it was meant to do - identify and report on changes that would have been missed by more conventional measures and procedures. The findings support most-significant-change as a valid technique, as evidenced by the importance the participants gave those items. Secondly, strategic conversation has been shown to impact behaviours at the operational level (e.g. meeting conduct), where those behaviours will have subsequent impact on strategic behaviours. The role of strategic conversation in those behavioural and performance improvements was rated highly, agreeing with the cross-sectional relationships found between Strategic Conversation, Strategic Behaviour, and Organisational Performance.

Because the participants represented varied types and sizes of organisations, the generalisability of the findings is encouraging, but the range of types and sizes was not large enough to support a strong claim of generalisability.

When asked to explain the differences in instrument scores between times 1 and 2, participants suggested two possibilities. The first possibility was that the change measurements were genuine. A second possibility was that the time-2 scores may have been conservative because participants' additional familiarity with the material

and heightened expectations may have caused them to mark the instrument harder at times 2 and 3. There were both favourable and unfavourable implications of this. The favourable possibility was that if time-2 data were conservative, then strategic conversation development may have been more effective than suggested by these data. The unfavourable possibility was that the instrument was sensitive to familiarity of the topic by participants, something that would always change as learning occurred.

Two important concerns emerge from the latter point. Firstly, instrument sensitivity to respondent familiarity with material would jeopardise interorganisational comparisons. Secondly, strategic conversation awareness would change as learning occurred, so there would be doubts about the accuracy of the three time comparisons. In other words, the instrument could be unsuitable for both interorganisational comparisons, and for monitoring strategic conversation learning and outcomes.

These concerns were allayed when the Strategic Conversation findings were supported by the most-significant-change data. The total estimated improvement score of 45% measured by the most-significant-change 3 to 6 months after program end compares well with the Strategic Conversation measure of 42% improvement. In other words, the differences in the quantitative data from the theory-based key variables over the three time periods were congruent with the qualitatively acquired most-significant-change data. Together, they supported the merit of increasing strategic conversation within an organisation and the reliability of the instrument.

While the most-significant-change figures seem large for measurements typically reported in organisational research, they do not represent overall organisational performance gains, only the perceived specific gains of strategic conversation and most-significant-change topics. Additionally, the most-significant-

change figures were all obtained from small to medium organisations where small changes are more noticeable. The organisational performance results were more modest and typical. It remains for future research to assess the impact of strategic conversation skills manipulation on larger enterprises, and more closely examine the links between strategic conversation and other organisational measures.

# Theoretical application

This study has demonstrated that strategic conversation can be learned, manipulated, and monitored. This established capacity to measure and 'control for' strategic conversation will facilitate future research where strategic conversation can be an IV or co-variant while studying other organisational variables. Some previous studies may have been even more informative if Strategic Conversation had been included. Examples are a study of follower development in predicting transformational leadership (Dvir & Shamir, 2003) where communication and cultural influences were acknowledged, and a study on readiness for change (Cunningham et al., 2002) where an active dialogical approach to job problem-solving was one of the best predictors of participation in organisational change. In each of these studies, strategic conversation probably changed, and in so doing may have behaved as an omitted variable and influenced the relationship being studied.

Finally, this study has supported the hypothesis (9) that the direction of causation is from strategic conversation to organisational performance, partially mediated by strategic behaviour. Although the expected delays between elevation of Strategic Conversation and the DV's, were not found, it does not mean that delays did not exist. It is possible that the delays were of a shorter duration than expected. Support for hypothesised direction of causation is derived from the design of the

study, in that only Strategic Conversation was the focus of the intervention, and steps had been taken to limit direct impacts upon the DV's.

# Practical application

For practitioners and organisations, strategic conversation represents another tool that permits and monitors manipulation with potentially far reaching intervention effects for the management of organisation change. Being able to measure strategic conversation means that progress of learning, and applying strategic conversation, can be monitored as can its impact on targeted behaviours and outcomes. This longitudinal study demonstrated that reachable milestones of behaviours and outcomes are plentiful and flexible enough for incorporation into a performance management program. Flexibility was demonstrated by the most-significant-change program with its items determined by the organisational participants. They could have elected to target other variables.

# Learning strategic conversation

The program for learning strategic conversation was followed, and it provided considerable flexibility to participants over content and process. The program pursued the three levels of learning described by Argyris (1976), and the three levels described by Redding (1997). The Argyris model of single, double and triple loop learning were achieved by exploring some strategically relevant topic in each session. Double loop learning challenged the facts and assumptions (e.g. 'why is this topic strategic and not operational?'). Triple loop learning was stimulated by reflecting on the learning processes themselves (e.g. the participants became 'teachers' at work, and facilitators at the sessions, modifying their processes according to success of the experience).

Redding's (1997) model, when applied, resulted in specific attention to the self learning nature of content delivery (individual level), quality and success of dialogue

when the group met (group level), and transference of skills to their organisations (organisation level). Attention was paid to each of the three levels in each model.

The planned cycles of reflection, however, did not go to plan. The plan called for learning cycles at session, daily, weekly, and quarterly periods. The daily cycle, requiring a brief telephone call to any one of the other group members to report progress and 'keep the project up front', was aborted. The daily plan was universally rejected as impractical due to daily work demands. The weekly cycle, involving review and application of the previous session and preparation for the next session, was poorly executed. Participant attention to the weekly cycle varied according to other pressures. Many participants admitted to last-minute 'cramming' before a session.

Explanations for the poor adherence to the review cycles need go no further than the busy-ness of these participants in their normal working week. This project was less important than their other responsibilities, so they allocated time accordingly. It was also commented, that because the project was research, rather than something they sensed that they needed and paid for, other demands easily took priority. It seems possible, therefore, that the poor adoption of learning cycles was more a result of the research status of the project, than the difficulty of the program.

In spite of the poor adherence to those cycles, learning did occur, and transference of knowledge and skills into the organisation was achieved and measured. Before the program of learning cycles is discredited and discarded, it, or some variant of it, could be tested in an organisation whose members chose to develop strategic conversation skills as part of a development program.

#### Limitations of longitudinal study

## Participant geography

Participation in the longitudinal program was restricted to small to medium entities within easy transport distance of the researcher, implying questions of generalisability with regard to culture, size, and local business environments. An attempt was made to minimise the impact of the restriction by seeking a variety of sizes of organisations, and varying the location of groups to all points of the compass from the city centre. The two surviving groups represented 11 different industries, markets and geographic clientele from north and south of the city.

# Sample size

The sample size of 11 is considered too small to extract quantitative data with adequate power (Cohen, 1992). The sample size of 11 is adequate, however, for field-experimental case studies (Eisenhardt, 1989a; Sandelowski, 1995) and is helped if the component variables of change measurements have high reliability (Bergh & Fairbank, 2002), which was true in this study (Cronbach's alpha for strategic conversation = .82, strategic planning = .87, Strategic Behaviour = .91, organisational performance = .89). The results were also supported by the rigour afforded by triangulation of qualitative and quantitative data (Lee et al., 1999), and the use of a pseudo control group. A strong feature of study 3 was high realism due to the field manipulation of the IV (Scandura & Williams, 2000).

## Unique participants

Participants in this research voluntarily attended a program with unclear outcomes, but sounded interesting. These participants may therefore represent a small 'innovator' or explorer group in the overall business community - a unique group that responds to curiosity, intrigue, and challenge. If participants did represent such a

group, the marketing science equivalent for consumer groups refers to 'readiness to adopt', and provides some population category numbers. Innovators, who respond to curiosity, intrigue and challenge, represent only 2.5% of the marketplace (McKoll-Kennedy et al., 1994). Perhaps the strategic conversation project participants represented only 2.5% of the business world. Fortunately, if the participants were innovators in the sense of the model used by marketers to explain adoption of new products, then the relationships found between changing variables remain true, but perhaps strategic conversation is unlikely to be pursued by the majority of executives until the subject is better known, and taken up by early adopters, early followers, and the other groups.

## Generalisability

The adoption-rate groups, mentioned in the previous paragraph, may impact generalisation. If the adoption curve applies to learning and using strategic conversation, then development of strategic conversation would not apply to the majority of organisations yet, because so few organisations are 'innovators' or 'early adopters'. It is very early in life-cycle of strategic conversation.

This argument introduces the possibility that the idea of 'generalisation' itself has a temporal component. A literature search on both generalisation and temporal issues did not find explicit mention of this possibility, although the phenomenon was implied in many articles, such as those that researched or discussed 'readiness' for things like change or transformation (Hanpachern, Morgan & Griego, 1998; Cunningham et al., 2002; Armenakis & Harris, 2002). The understanding of generalisation may therefore need re-examining to consider the influence of a temporal life cycle and the adoption rates of some attitudes or behaviours by organisations.

This apparently poor outlook for strategic conversation's temporal generalisability, due to varied adoption rates, is brightened by the increasing use of coaches as deliverers of targeted learning throughout a widening range of organisations. A survey by the Industrial Society (U.K.) found that 70% of leading UK employers now use business coaching in the workplace (Coleman, 2000), and a 1998 survey by the International Coaching Federation (USA) found that the numbers of people coaching had doubled each year over the previous three years, and that 98.5% of organisations that use coaching said it was well worth the money (Levinsky, 2000). Executive coaching is growing and changing as the needs of the executive change, and is uniquely placed to bring about change incrementally and without disruption normally associated with change "It's like rewiring your house with the electricity still on" (Olesen, 1996). Strategic conversation could well suit delivery by such mechanisms, since that's essentially what executive coaches do - cultivate strategic thinking and engage in strategic conversation.

#### High attrition rate

Being a longitudinal study with a requirement for hard work by the participants, there was high attrition of participants, prompting the question about who left and how did the lack of their data distort the results. In this research, it probably doesn't matter who left, because the objectives don't assume that every business is ready for change. On the other hand, when a business is ready for change, and prepared to put in the effort, will strategic conversation work for it? The evidence shown here is that it will.

#### <u>Assumption of skill transference</u>

The longitudinal program assumed, and required, that participants use and practice strategic conversation, and cause its use to spread throughout the organisation. Ideally this would have been measured. However, it was impractical to

obtain such measures for this research from the 70 commencing organisations of such varied sizes. It may have been possible to collect finishing scores from the 11 who persisted, but even that would have been difficult, and may have stretched their commitment too far.

This deficiency may not matter too much when it is considered that for strategic conversation to occur, the participants have to talk to someone. Furthermore, part of the conversation of each session focused on transference of those skills to the rest of the organisation. That was regarded as a highly strategic topic.

Finally, there were substantial improvements recorded in Strategic Behaviour and Performance, and these improvements could not occur in the absence of conversation. Without skills transfer having occurred, improvement would be due to the impact of a solitary person – the participant. The likelihood of environmental or other common influences had been reduced by the use of three groups of data from the cross study. It therefore seems reasonable to accept that some skills transfer did occur.

#### Limited support for causation

Support for the expected direction of causation is limited to the logic associated with field-experimental manipulation of the IV while measuring the DV. A more closely scheduled measurement program may have detected differences between onset of changes in the IV's and DV's.

## CHAPTER 10 - DISCUSSION AND CONCLUSIONS

#### Discussion

This chapter summarises findings, considers limitations, draws conclusions, and considers the 'statistical conclusion validity' (Scandura & Williams, 2000) of the research.

# Summary of findings

This program of research achieved three objectives: 1) Developing a model and construct of Strategic Conversation. 2) Developing and testing an instrument to measure relevant aspects of strategic conversation, and testing hypotheses that Strategic Conversation predicted Strategic Behaviour and Organisational Performance, that Strategic Planning predicted Strategic Behaviour and was mediated by Strategic Conversation, and that Strategic Behaviour predicted Organisational Performance and mediated the relationship between Strategic Conversation and Organisational Performance. 3) Developing a program to enhance the strategic conversation skills of managers, and testing the hypothesis that strategic conversation is a learnable skill that impacts organisational outcomes. When the level of Strategic Conversation was successfully manipulated as an independent variable within participating organisations, hypotheses that expected that increasing the skill in, and practice of, strategic conversation would result in an increase in performance were supported. Also supported was the expectation that the direction of causation would be from strategic conversation to performance,.

All hypotheses were supported except that Strategic Behaviour only partially mediated between Strategic Conversation and Organisational Performance, and instead, Strategic Conversation demonstrated a strong direct relationship with Organisational Performance.

While Strategic Conversation was the focus of development and testing, the project also explored and developed constructs for the three related variables (viz., Strategic Planning, Strategic Behaviour, and Organisational Performance) with which Strategic Conversation was hypothesised to relate. The Strategic Behaviour instrument was adapted from an instrument intended for strategic planning, and Strategic Planning was developed simultaneously with the Strategic Conversation construct and instrument. Organisational Performance was developed from the considerable literature on the topic, with an emphasis on generalisability and temporal accommodation regarding organisational attention to the balance of current and future performance.

Transfer of strategic conversation skills was demonstrated during the longitudinal study, and its participants provided three forms of data. Quantitative data were obtained from the instrument package comprising Strategic Conversation, Strategic Planning, Strategic behaviour, and Organisational Performance, on three occasions to record changes over the duration of the program. Qualitative processes were used to develop items for use in an instrument ('Most-significant-change') to detect and identify important unexpected results. The Most-significant-change instrument then allowed participants to quantify their perceived value of those unexpected results. Only positive outcomes were detected by participants, in spite of preparations to sense and assess negative results. The two sources of quantitative data (viz: instrument package and Most-significant-change) provided comparable change

results. Instrument measurement reported that strategic conversation score had improved by 42% and organisational performance by 23%. The 'Most-significant-change' data reported an average estimated improvement over the thirteen assessed items, of 45%.

## **Discussion**

This section discusses the generation of each derived variable, and some additional issues that surfaced during the study.

## Strategic planning

This research argued, on theoretical grounds, in favour of a narrow scope construct for planning. From that perspective, strategic planning is a single and important component in a loop of strategic processes, and when viewed this way, it is conceptually distinct from, but related to, strategic behaviour and organisational performance. Using an instrument developed on this conceptualisation, it was demonstrated that the previously reported variability of findings in the relationship between Strategic Planning and Strategic Behaviour (Miller et al., 2004) is partially accounted for by the variable Strategic Conversation. Prior research into strategic planning had not made allowance for the influence of either strategic conversation or strategic behaviour, on its relationship with organisational performance.

## Strategic Behaviour

A precise definition of Strategic Behaviour was developed that allowed simpler identification and differentiation of strategic behaviours from the many other kinds of behaviours of an organisation's members. Strategic Behaviour was shown to have the expected strong relationship with Strategic Planning, the traditional 'control' mechanism for strategic behaviour. However, Strategic Behaviour had a stronger relationship with Strategic Conversation than with planning, to the extent that

Strategic Conversation mediated between Strategic Planning and Strategic Behaviour.

Therefore, Strategic Conversation would appear to be a superior predictor of Strategic Behaviour, than is Strategic Planning.

Strategic Behaviour demonstrated the expected link with Organisational Performance, but it was equalled in strength by the direct relationship between Strategic Conversation and Organisational Performance. This is a key finding of this research, because it seems to double the potential leverage of decision-makers on their influence of performance. To date, all change programs have focused on changing and managing internal behaviours, making strategic behaviours the channel through which all change is initiated. This research shows that a slightly stronger path exists through strategic conversation. In addition, strategic conversation influences strategic behaviour, so its impact on performance is both direct and indirect.

In summary, strategic behaviour remains as important as it has always been, but researchers and managers have an additional way to influence and monitor it.

## Organisational Performance

In developing a measure of organisational performance, a contribution has been made to the work on generic performance (Duquette & Stowe, 1993; McGivern & Tvorik, 1998; Andersen, 2000; Cobb et al., 1998; Fiegenbaum et al., 1996).

Arguments in the present research about the need to examine efforts by the organisation to address 'future performance' in addition to current performance, were themselves supported by findings that each of the performance factors (current and improving) contributed discrete value to the performance score. The relative contributions were not predicted, but do make sense. Strategic Conversation demonstrated a stronger relationship with 'improving performance' than did Strategic Behaviour, but Strategic Behaviour had the stronger association with 'current

behaviour'. Mostly, the 'sense' comes from the expectation that 'strategic' conversation will inevitably concern change.

The same findings extended to the role of strategic planning, and it had a stronger link with improving performance than with current performance. In other words, each of the performance factors (current and improving) makes discrete and important contributions to the overall understanding of organisational performance.

# Using the link between Conversation and Performance

The direct link found between Strategic Conversation and Organisational Performance provides an entirely new set of options for managing performance. Just as managers currently manage strategic behaviour in order to manage performance, this research shows that strategic conversation is at least equally as effective in influencing performance. However, as a performance management tool, strategic conversation may not be popular because this research also shows that strategic conversation is more effective when it occurs throughout the organisation - both vertically and horizontally. Some executives and managers may be uncomfortable with the 'feeling' of re-distributing (losing) power as they seek to broaden and diversify participation in strategic conversation (Dent & Galloway, 1999; Weick & Quinn, 1999). This research tested the importance of diverse participation by selecting and comparing cross-sectional study participants across all hierarchical levels of participant organisations.

An organisation with poorly informed lower hierarchies would probably achieve lower scores on strategic conversation. Since the relationship between Strategic Conversation and other variables was unaffected by hierarchy, and the lower the score for Strategic Conversation - the lower the Organisational Performance, then it follows

that it is advantageous to enhance strategic conversation at all levels of the organisation.

It also proved advantageous to identify unintended consequences. In the case of this research, it provided awareness of skills to further develop, and more ways to assess the gains of strategic conversation. Identification of unintended consequences of performance was achieved using a simple qualitative process. The identified consequences were translated into items of the 'Most-significant-change' instrument, which subsequently permitted quantitative assessment. The unintended consequences were not negative, as typically cited (Lewis, 2000; Campbell, 2000), but were positive to a similar extent as were the predicted performance improvements.

The similarity of results from the two organisational performance measurement processes ('expected' from the instrument package and 'unexpected' from the Most-significant-change process) provided convergent support for each other. The similarity also demonstrates the need for both researchers and practitioners to attend to both expected and unexpected consequences with equal rigour. With enough data from multiple reports over time, patterns of unintended consequences may emerge, and new performance priorities be considered.

#### Strategic Conversation

The two-factor Strategic Conversation construct (viz., purpose and topic) was validated, and the hypothesised relationships with Strategic Planning, Strategic Behaviour, and Organisational Performance supported. Relationship strengths were at levels that identify Strategic Conversation as an important organisational variable that deserves considered attention from both academic and organisational communities.

Strategic Conversation data from non-managers were found to be the same as data from executives. There were no group differences of Strategic Conversation

scores based on status in organisation, education level, or other biographic variables. Thus, it can be argued that the instrument assessed the organisation and not the respondent. This is important because the instrument is attempting to assess organisational levels of the variables tested, not the skills or knowledge of the individual respondent. To be reliable and valid, the instrument must report predictably between uses, regardless of sampling differences.

# Acquisition of skills in strategic conversation

Acquisition of strategic conversation skills was demonstrated without resort to conversation frameworks that stimulate such dialogue (e.g. business process engineering and total quality management). The skill development program was like 'facilitating participants to learn to fish', whereas conversation frameworks provide the fish to eat. Application of adult learning theory within the organisational context succeeded in achieving measurable (42%) improvement in levels of strategic conversation in participating organisations over the period of the longitudinal study. The skills-development program intentionally avoided directly addressing the content of the instrument, thus the training did not specifically cultivate participants to achieve better scores on subsequent tests. Such an artificial inflation of scores would have been unhelpful because a key objective was to link elevated levels of strategic conversation with improved organisational performance, and artificial levels of strategic conversation scores would have reduced the strength of any such relationship.

Learning was achieved by acquiring new knowledge, applying the new knowledge, evaluating the results, and using the evaluation as new knowledge. This multi-loop learning process was relatively uncomplicated to execute within an

organisation, and the improved levels of measured strategic conversation attest to its effectiveness.

## Connecting with previous research

This research has reported that conversation has a relationship with, and influences the relationships between, the three other studied organisational variables. Because of the possible role of these variables in so many other organisational relationships, Strategic Conversation may explain some of the variance reported in previous research; examples being strategic planning (Fawcett et al., 1997) and the impact of the mission statement on commitment (Bart et al., 2001). Intuitively, conversation plays a role in planning, and in designing and using mission statements.

Some research is explicitly supported by the relationships found for strategic conversation. Examples include the findings that conversation helped align goals (Haas & Algera, 2002), improved decision making (Kuhberger, 1998), and influenced performance outcomes (Tvorik & McGivern, 1997).

# Research rigour

This section discusses the outcome of the steps described to provide adequate research rigour.

## Research plan

The research plan responded to the call for useful work (Mohrman et al., 2001) while maintaining research rigour (Scandura & Williams, 2000). The plan embraced 9-steps that were derived from arguments within reviews on current research methodology (Mumford et al., 1996; Krosnick, 1999; Scandura & Williams, 2000; Schriesheim et al., 1993). The steps were: - clarify purpose of construct; collect information about construct from multiple sources and generate model and hypotheses; design theory-based and practitioner-based constructs separately for

convergence; select construct items to generate instrument; pilot test; cross-study for concurrent psychometrics (exploratory and confirmatory); and test predictive performance.

The research plan sought to go beyond developing and testing both construct and instrument, by establishing if it was "worth finding out about". This meant testing its 'worth' in functioning organisations. Thus the longitudinal study was conducted. In doing so, this plan also responded to a call to researchers who investigate sources of sustainable competitive advantage, to impose rigour by including studies <u>in</u> the organisations (Rouse & Daellenbach, 1999) rather than just <u>on</u> them. The wisdom of this choice became evident when the longitudinal study both supported the findings of the cross-sectional study, and supported the hypothesised direction of causation from strategic conversation towards organisational performance, and verified the merit of addressing unexpected consequences (all of which were 'good').

#### Construct development

Strategic Conversation, as the construct of focus, received detailed attention to research rigour. Constructs and instruments for Strategic Planning, Strategic Behaviour, and Organisation Performance were developed simultaneously with Strategic Conversation. Development of each construct used a different combination of practitioner literature, academic literature, two independent expert panels, a validation panel, a business panel, a pilot study, a cross-sectional study, and a longitudinal study. The different combinations of processes were chosen to both provide sufficient rigour to the development of each construct, and minimise common method variance errors.

## **Generalisability**

The following indicators of generalisability (Mumford et al., 1996) are demonstrated by the present research: the items of all four instruments are explicitly based on theoretically meaningful constructs with stable characteristics, the items have undergone a process for refinement, and the measures have demonstrated predictive ability linked to the underlying theory.

While field studies are regarded as having low generalisability, they can be improved by the use of triangulation (Scandura & Williams, 2000), and the use of more cases and obtaining data from diverse interests (Harrison & Freeman, 1999). The present study used quantitative processes and larger data numbers to improve generalisability of the construct and instrument, while the case study provided additional information about cause and effect direction. The convergence of results provided the triangulation.

Limits to generalisability acknowledged for this research concern the limited geography and culture of the research participants, and the limited size of organisations tested.

#### **Psychometrics**

The self-report instruments of the present research sought perceptual evidence of activities, rather than opinions or attitudes. The 'perceptual evidence' data were found valid and reliable, and analysis reported the expected relationships. It has been argued elsewhere that achieving accurate prediction provides sufficient support the underlying theoretical processes (Broder & Schiffer, 2003). In this case, the theoretical processes relate to the development of the constructs, and also to the use of perceptual data. In other words, the results justify the use of perceptual data for these instruments.

The data provided by the instruments were initially subjected to factor analysis, which, as a process, can destroy content adequacy. A situation may occur where a component may be theoretically necessary for the construct to be adequate, but it doesn't load as desired (Schriesheim et al., 1993). There were a number of items removed from each construct based on the conventional practice of judging the most suitable items for factor analysis. However, such a process is not necessarily correct. In this research, although the decision to exclude those items was supported by finding the hypothesised relationships, a theoretically more complete construct may have retained all items. Future research may perhaps investigate this. Confirmatory analysis supported the constructs.

Another statistical practice that attracts debate and draws some criticism is that of dropping outliers from data, and concentrating instead on typical cases.

Eliminating the margins from so much of the work on constructs may help promote and maintain an overly homogenous social science (Kilduff & Mehra, 1997). This debate about statistically induced 'Groupthink' may also apply to the previously discussed practice of excluding non-loading or cross-loading items from factor analyses. Tests involving factor analyses and multiple regressions were therefore repeated with outliers retained. The results demonstrated improved relationships between all four derived variables, adding fuel to that debate. Which set of figures is correct? For the present study the outliers were removed to conform to current statistical practice, and because with so few participants (380), the impact of outliers was significant. Perhaps with a larger sample, outliers could be included as important contributors to the overall picture.

#### Temporal consequences in the context of this research

The general lack of recognition of temporal aspects in organisational research has received criticism (Ancona et al., 2001) - in terms of different experiences of organisational time (George & Jones, 2000), and using time or ignoring time in arguments about causation in relationships (Mitchell & James, 2001). In study 2 (viz., testing the relationships), the measurements for Strategic Conversation, Strategic Behaviour, and Organisational Performance were made simultaneously. However, current Strategic Behaviour will be a response to previous conversation, and current performance will be a result of previous strategic behaviour. These represent two sequential opportunities for time delays that threaten erroneous reporting of these 'snapshot' relationships. However, if we can assume that past behaviour predicts future behaviour, and since organisations are resistant to change, then current outcomes are just as likely to be correlated with current behaviours, as they are to the past behaviours that caused the outcomes. Acceptance of these assumptions was supported by the similarity of relationship between Strategic Behaviour and each of the performance factors (current and improve).

In study 3, time was expected to play an important part because a delay between IV manipulation and DV response was predicted, and the delay would help establish the direction of causation.

# Cause and effect

While it was relatively easy to find that Strategic Conversation was associated with Organisational Change, it was not so easy to produce convincing evidence of cause and effect. Two options to establish valid cause and effect relationships are to carry out large-sample studies over enough time to eliminate possible cause-effect pathways until only one remains, or conduct longitudinal case studies to compare

changes in processes, strategies, and performance levels (Pettigrew et al., 2001). The longitudinal option suited the present study.

The longitudinal study of this research used a novel approach for a control group, in that it did not test a single control group that represented a 'no treatment' comparison, but in effect used cross sectional studies at three intervals to test typical 'untreated' organisations. This process had a number of operational advantages, and avoided a placebo effect of a control group. Done this way, it was found that there were no changes of any of the derived variables between the three groups (times), meaning that there were no environment-influenced changes. All measured changes within the longitudinal study participant organisations were therefore due to changes in the organisations, which in the absence of other efforts to effect change, were most likely due to the heightened levels of strategic conversation.

# Research model issues

The simple cause and effect model developed in this research ignored one component that had the potential to alter the strengths of the model's relationships, and that was feedback from the organisational outcomes.

## Adding feedback to the model

While it was expected that strategic conversation would impact behaviours and therefore also the outcomes, the reverse was also possible. For examples, behaviours (Cruise O'Brien, 1995) and outcomes (Hamel & Prahalad, 1989) provide valuable information that can be used by those who are engaged in strategic conversation. Some of that information may come from wider environments (e.g. political or economic (Marsh, 2001; Analoui & Karami, 2000), from the marketplace (Legare, 1998; McKee et al., 1989), and as feedback concerning organisational internal process

matters (e.g. 'hard' feedback such as production and quality metrics, 'soft' feedback such as climate surveys and exit interviews).

Feedback in this case refers to information about the reactions to, and outcomes from, previous decisions of the executive team (Hollenbeck et al., 1998). There will necessarily be reactions by clients or competitors to those strategies (Rindova & Kotha, 2001; Fahey, 1999), and internal reactions by staff members to almost every managerial decision. Monitoring of feedback therefore allows analysis of the effectiveness of previous decisions and strategies - part of organisational learning.

It is necessary, however, to differentiate between 'negative feedback' and 'feedback that is negative'. The first is part of system theory, while the second describes a response that suggests that something didn't work very well. Negative feedback always applies corrective forces in the opposite direction to an applied force, and may therefore be positive or negative depending upon the applied force.

However, feedback that is positive or negative is independent of an applied force. An organisation may apply equal energy to actions A and B, and one may receive positive feedback (be well received) while the other does not. Both forms of feedback (viz., negative/positive feedback, and feedback that is positive/negative) are arguably relevant to organisational management of performance. Neither form will be considered here for practical and theoretical reasons. The reasons for excluding systems feedback will be described, while the reason for excluding 'feedback that is positive/negative' is excluded simply because such feedback is merely one source of information (e.g. marketing research and customer satisfaction) that is used by organisations during strategic conversation.

### Ignoring 'system' feedback - a practical basis

Feedback has been extensively explored, both from external sources (Chattopadhay et al., 2001; McGrath, 2001) and internal (Dutton et al., 2001; Dutton & Ashford, 1993). While the term strategic conversation has not been used in those or similar studies on systems feedback, it is implied because the senior management team is compelled to talk strategically when discussing such feedback. However, it can be argued that inclusion of feedback in this study was not needed, and also that there are good reasons to exclude it.

Including feedback at this exploratory stage of understanding strategic conversation would add little to the desired understanding, partly because feedback is simply another source of conversation topic and easily accounted for in that light, and secondly because it risks complicating the focus on the primary links between the derived variables.

## <u>Ignoring feedback - a theoretical basis</u>

A theoretical basis for discounting feedback is that if the strategic system is perfect, feedback would be very small due to the self-correcting nature and purpose of feedback in a system (Haas & Kleingeld, 1999; Osborne, 1998; Zemke, 2001; Fertuck, 1992). Systems seek a state of homeostasis (equilibrium) (Napier & Gershenfeld, 1993) where feedback amounts to only minor corrections because the rest of the system is maintained in balance for effectiveness and efficiency (Hammond, 2002). Negative feedback should ideally trigger executive decisions that lead to corrections to return feedback to a neutral state. In other words, in places where there is optimal strategic conversation, the impact of feedback will be very small, and may even be non-significant and buried in system noise (Napier & Gershenfeld, 1993), meaning there would be great difficulty in isolating it.

Feedback would be worth examining in future because it is a source of strategic topics. While feedback does not normally change the basic relationships of components in a system, it could be valuable to know how to measure it, and consider ways to use it effectively.

#### Implications of this research

This study has both theoretical and practical implications. This section will consider examples pertaining to each aspect.

# <u>Implications for theory</u>

The theoretical implications of this research relate to findings concerning each derived variable individually (viz., Strategic Conversation, Strategic Planning, Strategic Behaviour, and Organisational Performance), the relationships of each with the others, and the prominence of the unintended consequences.

# Perceptual measurement of derived variables in research

In the absence of direct observations, the instruments sought data relating to behaviours rather than attitudes, ideas, impressions or any data that could not be answered based on evidence. Feldman and Pentland (2003), when considering the same kind of problem, proposed that organisational routines consist of ostensive and performative aspects, where ostensive is the idea of the routine, and performative refers to the actions. They speculated that survey measures tap into the ostensive aspect, while behavioural observations are indicators of the performative aspect. Feldman and Pentland (2003) found that standard survey measures of task variety could produce opposite results from measures based on observed sequences of behaviour.

Feldman and Pentland (2003) suggested that people who are looking from outside of the routine, may be more likely to describe the ostensive aspect of the

routine, while people engaged in the routine describe what they do (the performative aspect). However, this current research presents an exception. There were no group differences reported between hierarchical layers, suggesting that those who did not do the planning responded similarly to those who did. Since the questions were crafted to attract responses concerning evidentiary behaviours rather than ideas, and since it is unlikely that those engaged in the routine would describe an ostensive response to a behavioural question about their activities, the conclusion can be safely made that responses described the performative aspect. It can be argued, by extension, that all instruments have captured the behavioural aspects of the constructs.

An implication of this argument is that it might be possible, in future, to test whether perceptual responses are ostensive or performative, by using questions of a known domain to compare responses of people within the domain, against those external to the domain.

# <u>Implications regarding Strategic Planning and Strategic Behaviour</u>

New instruments have been developed to assess each of these variables. The definition of each has been narrowed to suit their performative roles in the organisational strategic loop. The revised conceptualisations and instruments may help future research efforts that involve these variables.

# <u>Implications regarding Generic performance</u>

A generic construct was developed that is generalisable across organisational industries and sizes. Performance was shown to have two components - current and improving. The 'current' aspect resembles traditional assessment of performance, while 'improving' is a new component. The two components are related (r = .38), each accounting for 14.5% of the variance of the other. That relationship, and the similarity of relationship of performance components with the other variables, lends

support to the conclusion that the 'improving' aspect is a separate component that is just as important in generic performance assessment as the traditional 'current' view.

#### Strategic conversation as a measure in other research

With the present development of a Strategic Conversation instrument, future researchers are not restricted to the use of conversation stimulant frameworks like Balanced Score Card © that will invariably introduce biases. Research that necessarily includes, or even focuses on, the use of a framework, should include strategic conversation as an important variable (Chesley & Wenger, 1999).

Logically, research into the impact of any independent organisational variable that involves human behaviour should probably consider the influence of strategic conversation, regardless of the choice of DV. Conversation that is strategic in nature and intent does have an impact on organisational outcome, and relates strongly to the derived variables of Strategic Planning, Strategic Behaviour, and Performance. It follows, therefore, that any research that includes any of these variables will be impacted by the interactions of those variables with strategic conversation - whether it is measured or not.

# <u>Unintended consequences</u>

Unintended consequences are typically ignored in research involving manipulation of an IV (Miller, 1994). Just as researchers are advised to seek both confirming and disconfirming evidence (Kiesler & Sproull, 1982), there is an equivalent argument relating to intended and unintended outcomes (Barry & Bateman, 1996). These two realms differ in that confirming and disconfirming evidence both relate to the intended (identified) consequences, while unintended consequences are those that were not predicted.

For example, although downsizing has been an accepted practice with identified and desired organisational outcomes (cost reductions), there are reports that discuss and examine numerous failures of organisations to reach the desired outcome (Lecky, 1998; McKinley, 1992), and others describing unfavourable outcomes that were unexpected (e.g. confrontation and sabotage) (Folger & Skarlicki, 1998; Offerman & Gowing, 1990). In other words, outcomes other than those intended, are a significant possibility, and typically ignored in research.

The 'Most-significant-change' technique (Dart & Davies, 2003) was designed to identify such changes, positive or negative, from the perspective of the participant. It was effective in the current research in finding thirteen unexpected ways that the manipulation of strategic conversation had impacted the participant organisations. Although participants were encouraged to consider both kinds of unintended consequences, only positive consequences were reported by them. The scoring of these unexpected consequences provided additional and convergent data on the impact of strategic conversation on organisational performance.

# <u>Implications for practice</u>

Organisational personnel and consultants are likely to be interested in strategic conversation to the extent that it helps the organisation achieve its goals, distribute the available resources, and anticipate the probable costs and benefits of doing so.

# Benefits of strategic conversation for an organisation

In strategic conversation, organisational decision-makers have another tool for understanding and influencing performance. Apart from potential benefits already mentioned, adoption of a program to elevate strategic conversation is likely to place considerably less stress on organisational resources (time and funds) than most other

ways to effect change. Furthermore, progress can be readily, regularly, and inexpensively, monitored.

The most significant 'unintended' benefits reported by participants related to the effectiveness and efficiencies of the conduct of organisational meetings. These, and all identified unintended consequences, were beneficial. There were no reported negative consequences reported to learning and applying strategic conversation.

# Strategic conversation throughout an organisation

Support for the idea of having strategic conversation occurring throughout an organisation already exists in literature. For example, a theory that team members create new and useful ideas through dialogue and discussion, and extend organisational knowledge (Nonaka, 1994), implied by the qualification 'new and useful' that team dialogue was strategic in its effect. Another example is a study on antecedents of effective knowledge management (Janz & Prasarnphanich, 2003) which found that climate influenced effective cooperative learning, and that cooperative learning subsequently had a positive influence on work performance. In this study, the qualifier is the word 'effective', where effective organisational learning is regarded as that which improves organisational behaviours (actions) through better knowledge and understanding (Fiol & Lyles, 1985). Improved organisational behaviours are those that represent the application of organisational knowledge to realise superior organisational outcomes (Janz & Prasarnphanich, 2003). In other words, team members can engage in strategic conversation to improve team performance, which ultimately reflects on organisational outcomes. This argument applies to any team or group in any level or part of the organisation.

## Strategic conversation as a core competency and capability

The term 'skill' is used here to describe a specific ability that has been acquired by training or practice (e.g. typing), and may include an ability to solve problems in a specific domain. 'Competency' refers to the application and integration of individual or organisational skills for a useful and repetitive purpose (e.g. compile the reports). Different combinations of skills and knowledge that are taken from the same pool of skills and knowledge, represent different competencies. 'Capability' is used to describe a person or organisation having the necessary resources to execute the relevant competencies. 'Capacity' refers to the amount of a capability that can be delivered - how much can be done (Jackson et al., 2003).

Based on these definitions, strategic conversation is considered a competency because it involves the combination of different kinds of knowledge and skills, and is just one competency of all the competencies that might be needed in order for the organisation to have a strategic capability. Furthermore, for an organisation to elevate the effectiveness of its strategic conversation, measured as evidence of it occurring, the organisation must also elevate the companion competencies. In other words, increase all the skill levels that make up the competency bundle for 'being strategic', and provide the necessary resources that develop the ability to apply those competencies. In such an environment, strategic conversation becomes a core competency.

A core competency is regarded as a significant source of competitive differentiation that is hard for competitors to imitate (Prahalad, 1993). It represents an unusual blend of skills and/or beneficial behaviours not observed in competitive firms (Leonard-Barton, 1992). Core competencies are those that permit the firm to make the best response to market opportunities (Kogut & Kulatilaka, 2001). Organisational

core strategies that emerge from such competencies, seek to optimise the balance between such things as flexibility, adaptability, speed, and capabilities (Kogut & Kulatilaka, 2001).

Technology-based core competencies provide short-term advantage because they are easy to copy. Organisational core competencies are longer term and difficult to copy. Strategic conversation, being an organisational competency, therefore has the potential to not only become a 'key' core competency, but also to lead to strategic selection of companion core competencies. By nature, strategic conversation in each organisation will be unique, simply because no two organisations will have identical discussions. With the strong link between strategic conversation and performance established by this research, an argument for strategic conversation to be regarded as a key core competency has a convincing start.

## **Executives**

In discussing the slide of business leadership from USA to Japan, Prahalad (1993) concluded that US top managers need to "energise the whole organisation - all people, at all levels, in all functions, and in all geographies ... a shared mindset and shared goals, and developing strategies for acquiring competency" p 43.

A similar conclusion was made following a study on new product development (Schilling & Hill, 1998). It was found that companies often depend on products introduced within the last 5 years for more than 50% of their income, even though most new product ideas fail, and about half the new products fail to generate an economic return. The authors concluded that improving the success rate required improving communication to a form that, when described, matched the characteristics of strategic conversation. The actions included intense customer contact and involvement to clarify and articulate the company's strategic intent, along with

habitual articulation of the strategic implications of each commercial idea. These actions are initiated by executives during strategic planning processes.

Risk was another area shown by this research to warrant attention.

Organisations have a choice - they can decide to proactively exploit risk, or just absorb it (Kogut & Kulatilaka, 2001). This research demonstrated that strategic attention to risk (pro-activity) was missing from planning, possibly indicating a performance opportunity.

## **Managers**

Strategic conversation was shown to be relevant to management at all levels of an organisation, thus supporting conclusions about management in other research. Two studies in Ireland (Cullen et al., 2004) found that the biggest challenges for management were reducing costs, improving profits, managing change, retaining customer, retaining key staff, and engaging employees in the vision and values. The authors found that to meet these challenges, the most used tools and techniques were key performance indicators, management by objectives, teams, strategic planning, and performance management. However, managers indicated dissatisfaction with those tools, other than with key performance indicators. Respectively, they scored satisfaction positions at 1<sup>st</sup>, 6<sup>th</sup>, 11<sup>th</sup>, 19<sup>th</sup>, and 27<sup>th</sup> when rated against all the common tools and techniques. The most satisfactory (not the most popular or the most effective) management tools were key performance indicators, supply chain integration, share ownership plans, pay for performance, and world class manufacturing.

In using tools such as these, heuristics help solve strategic problems (Busenitz, 1999), but there is a tendency to apply the same heuristic, inappropriately, to all new problems (Cohen & Bacdayan, 1994). Thus, unthoughtful selection of the tool, and

routine application of favourite heuristics within those tools, can result in less than optimal management decisions and practice.

Strategic conversation, by its nature, firstly challenges the selection process for the most appropriate management tool, especially the decision-making procedures, and secondly, is subsequently useful within the framework of the selected tool.

Therefore, strategic conversation is as much suited to management level decision responsibilities as it is to executive level.

## Learning strategic conversation

Some of the options for elevation of skills are training, education, or opportunistic (on the job) development via coaching. Training is attractive because it represents systematic and specific development where there is a benefit to the business (Jackson et al., 2003). Education is less expensive, but tends to be broad and less applicable to a specific organisation. Coaching is an increasingly used option that fits well with the idea of starting development of strategic conversation from the top. A combination of coaching and opportunity was the approach generally adopted by participants to transfer skills into their organisations.

#### Limitations

#### Limitations of the research plan

A major limitation of this research is the scope that was necessary in order to design and test the instrument for Strategic Conversation. As this research project began and the primary focus was on Strategic Conversation, the need to develop the other three instruments was gradually exposed. The extra tasks became evident as the program progressed and instruments could not be found for strategic behaviour, strategic planning or generic organisational performance. The risk with such breadth

is limiting the depth. To limit such an impact, and give each instrument the rigorous attention it needed, additional time and research was invested in the project.

Secondly, an ideal research plan may have included objective data to compare the accuracy of the self-report data. However, the arguments given for using subjective data for analysis would still prevail in the presence of objective data, but the quality of self-report data could have been checked. In this case, it was not feasible for the researcher to collect objective data from the relatively large number of participating organisations, public and private. Self reporting about 'evidence' was selected as the data source, along with self assessment of 'certainty'. Certainty showed that 'more objective' data were gave the same results as 'more subjective' datano more . The resultant instrument is probably more practical for future use than one using objective data.

A third limitation with the plan of this research was the use of just one person to design and conduct the research, with the attendant vulnerabilities to common method variance. Efforts were made within each study to minimise this, and tests for common method variance did not detect its presence.

# <u>Limitations</u>: of construct development

The definitions used as a basis for the development of the strategic conversation construct are new. Strategic Conversation is at the beginning of its developmental journey. There might be other ways to collect evidence of the presence and proper use of strategic conversation without using items that, on face value, seem to describe both strategic planning and strategic behaviour. This similarity is understandable given the theoretical proximity and relatedness of the constructs. For this research, the concern for conceptual overlap was discussed and tested, and the clustered items were shown to produce distinct variables.

### <u>Limitations imposed by cross-sectional study sample</u>

The construct development process made use of worldwide literature, but was restricted by availability of geographically small expert groups. It would benefit from attention by experts in other cultures. The question wording was formed and tested within only one culture, and may suffer misinterpretation and ambiguity elsewhere.

Participant sampling could be criticised for over-representativeness of the manufacturing industry. The significance of having a balanced membership was considered crucial until recently (Babbie, 1995). This statistical assumption has been challenged over the past decade by the argument that those who elect to participate are more likely to provide quality data than those who are pressured to respond (Krosnick, 1999). Based on this argument, the sample diversity of this research was adequate.

#### Future research

Many possibilities for future research emerged during this study and many have been mentioned where appropriate. This section will describe the most interesting possibilities, present them in an order that begins with those of academic interest, and move progressively towards those of practitioner or organisational interest.

First, the evolving model of Strategic Planning, Strategic Conversation,

Strategic Behaviour and Organisational Performance would now benefit from

confirmatory analysis. Ideally, such an endeavour would be extended to seek an

explanation of why the simple model was not supported. The revised model of the

current research placed strategic conversation as a more direct contributor to

organisational success than was expected, but was unable to explain why.

Second, the evidence seemed to suggest a non-linear relationship between

Strategic Conversation and Organisational Performance. This research found that

while Strategic Conversation and the companion constructs remained valid regardless

of Organisational Performance differences, the relationships between them changed to the extent that high performing and low performing organisations seemed to work in fundamentally different ways, agreeing with an observation made during a study of communication of management teams (Cairns et al., 2001). Furthermore, researchers have reported that high performance of organisations has been associated with deliberate pursuits other than simply profit making. Examples are: teams and climate (Beech & Crane, 1999), transformational managers (Doyle, 1995), employee-centred management (Schuster et al., 1997), resource management (Daniel et al., 2004), and advice-seeking by CEO (Westphal, 1999). Perhaps these behaviours also need to be assessed to score Strategic Conversation.

Third, future research could look at why the post-formal education, hierarchy, time at organisation, or education steps did not relate in any meaningful way to any key variable. The lack of a link between an individual's score on strategic conversation and post-formal education was unexpected. It suggests that members, pursuing further education, do not accrue positive outcomes for the organisation. While unimportant to the current research, such a conclusion is unrealistic and questionable.

Fourth, work is needed to understand the impact of strategic conversation skills manipulation on larger enterprises, the extent of gains, and time before gains would be measurable. A study on larger organisations may also facilitate testing links between Strategic Conversation and other organisational measures.

Fifth, much of the previous research that either mentioned strategic conversation, or made assumptions about the role of conversation, could present fresh insights if repeated with Strategic Conversation as a variable. The ability to understand and manipulate strategic conversation opens possibilities where the

interest is in examining the direction of causation. For example, authors and researchers have argued or reported the importance of communication in climate (Moran & Volkwein, 1992), culture (Cable et al., 2000), commitment (Lok & Crawford, 2004), intention to quit (Tepper, 2000), selling upwards (Dutton et al., 2001), organisational learning (Hayes & Allison, 1998) and others, but they were unable to put a 'numerical value' on communication attributes. The role of conversation could bring a new understanding of those and similar topics.

Sixth, future research could test if participants use the [Don't Know] option in evidentiary-based questions differently than in attitude surveys. It could also be of interest to assess any relationship of [Don't know] frequency to individual or organisational scores of strategic conversation, strategic behaviour, or organisational performance. Is the use of [Don't know] driven by aspects of the organisation, or the individual?

The seventh possibility relates to feedback and its relationship to the strategic loop in which strategic conversation is a part. Feedback is a source of strategic topics for an organisation, and while feedback is unlikely to change the basic functioning of a system, it could be valuable to know how to measure it, and ways to use it effectively.

Eight, is the finding that the potentially important role of 'risk' when planning strategies was largely ignored in the participating organisations, and scarcely researched in the literature. Theoretically, assuming that strategic planning is concerned with both opportunities and risks, and that a risk can become a strategic opportunity, then risks should be given at least the same strategic attention as are opportunities. Future research could seek explanations for risk inattention in planning, and explore the opportunities offered by its inclusion.

The ninth opportunity for future research is of interest to practitioners and organisations, because it refers to the intentional inclusion of strategic conversation within any other development program. Perhaps strategic conversation has potential value in the way it may accelerate the rate, or improve the outcome, of other change programs.

Tenth and final, are the challenges associated with the optimal way to transfer skills in strategic conversation. Strategic conversation skills include micro-skills at the counselling level (Ivey, 1994), a macro-view of strategic topics, and facilitation skills for conversation management and topic management (Anderson & Balzer, 1991; Dick, 1991; Lizzio & Wilson, 1986). These skills may not be readily evidenced within organisations. Future researchers seeking to manipulate strategic conversation, will face this problem.

#### Conclusions

This research has found in favour of the notion of strategic conversation. A construct developed from the literature and converged with one developed by expert panels was used to develop an instrument to measure the existence and comparative use of strategic conversation in organisations.

It was demonstrated that strategic conversation results from the exercise of a competency in conversation that is strategic in form, thus requiring skills in both conversation and strategic thinking. Strategic conversation is learnable, as demonstrated by successive scores for strategic conversation during the skills development program, and its presence impacts strategic performance and organisational performance. The strength of its direct and indirect relationships with organisational performance support arguments by Bonn (2001) and Manning (2002) that strategic conversation should be a core competency.

Perhaps the two most interesting findings have been firstly, that strategic conversation has a stronger relationship to performance than does strategic behaviour, and secondly that performance can be thought of as comprising two components - current performance and improving performance - reflecting success in 'current' and 'future' thinking.

In conclusion, this research has attended to issues concerning 'statistical conclusion validity'. In a review on this topic, Scandura and William (2000) described statistical conclusion validity in terms of requirements needed before conclusions can be drawn from statistical evidence. Firstly, covariation is a necessary, but not sufficient, precondition for causation. In this research, causation was argued based on covariation achieved in a longitudinal design where logic indicated the direction of causation. Secondly, statistical conclusion validity requires the use of appropriate tests. This research argued for the selection and sequence of specific tests, especially bypassing 'model fit' tests in favour of the longitudinal study. The longitudinal study supported the sought-after conclusions of 'learnability' and causation. Thirdly, recognition and management of any sources of statistical error. This research has identified potential sources of error unique to each study, as well as common sources of error such as researcher bias and other forms of common method error. The use of panels of experts and academics, and the involvement of participants as co-researchers helped reduce the potential for such common errors. Fourthly, that statistical power is adequate for the research undertaken. The cross-sectional study was conducted with adequate power, and the longitudinal study provided results that were argued as being consistent and strong enough for the conclusions concerning direction of causation, and that strategic conversation could be learned. Finally, statistical conclusion validity requires that underlying assumptions do not limit the applicability of results or conclusions. This research was based not on using assumptions, but on testing the assumption that conversation attributes could be ignored when examining relationships between variables such as strategic planning, strategic behaviour, and organisational performance. Where other assumptions were detected, such as the exclusion of feedback from the model, they were explored and, in the case of feedback, discussed.

Based on this evidence, this research has demonstrated statistical conclusion validity.

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### Appendix 1 - Information about Strategic Conversation - sent to panel members



# **Griffith University School of Applied Psychology**

# Strategic Conversation project (Ph.D. research)

Three studies cover:- 1) generation of the SC and Performance instruments; 2) application of the instruments and an intervention program to encourage elevation of SC skills in some entities, and; 3) finally a second (longitudinal) measure of SC and performance to seek changes over time, and analysis of all results.

## Aims of research:

- To develop a construct for 'strategic conversation'
- To develop and test an instrument to measure the relevant properties of strategic conversation
- To demonstrate a relationship between business performance (whatever that may mean to the organisation) and the quality and/or quantity of strategic conversation between stakeholders.
- To demonstrate that the relationship within varying sized organisations.
- To show that the skills, knowledge, and abilities concerning 'strategic thinking' and 'strategic conversation' can be learned by decision-makers while on the job by way of self-development material on the topic of strategic conversation, and provision of diverse topics to stimulate such conversation.

# Strategic Conversation

The ongoing effort to understand the mechanisms to improve organisational performance has increasingly focused on topics with 'strategic' as a prefix. They include strategic planning, strategic intent, strategic thinking, strategic management, and strategic capabilities alignment and strategic adaptability.

Recently, interest in things strategic has included strategic dialogue and strategic conversation and its contribution to organisational change and performance. Little contribution has been demonstrated in psychological journals. A database search for papers directly or indirectly involving strategic conversation or strategic dialogue revealed approximately 2.4% from HR related journals, 4.8% from psychology related, and the remaining 92.8% from management and strategy focused publications with a practitioner bias. Practitioners, managers and researchers seem more interested in using SC than measuring it (no literature found) or understanding it.

The attraction of SC seems to be its logical good sense as evidenced by the supportive stories and case examples. Even without empirical support, SC is appealing enough that practitioners and managers design programs to train organisational members, even regarding it as a core competency. Part of the reason for the lack of empirical support for SC is the absence of any way to measure it.

Researchers have approached the problem of lack of a measure of SC in a number of ways. SC can be regarded as a conduit between the IV and the DV, in which case it is simply assumed that SC works. SC can be part of an intervention where the proof is in the difference

between the before and after measures of performance. Researchers may ignore the role of SC such as in transfer of strategic knowledge from tacit to organisational or organisation's response to environmental changes. Even when researchers do acknowledge it, there is no consensus as to whether SC is a variable, moderator or mediator. Indeed, there isn't even discussion yet, just assumptions. The lack of uniform appreciation of the role of SC in research on strategic topics may perhaps account for some of the reported variability in organisational performance reports. However, even without resorting to theoretical argument, logic dictates that the quality and quantity of conversation will play a big part in those relationships.

I also faced the same problem of the lack of measurement instrument when formulating my original Ph.D. research plans. I initially intended to focus on the strategic design, implementation and management of organisational climate. That study relied on being able to assess the quality and quantity of strategic conversation - hypothesised as essential for strategic climate manipulation. In the absence of a measure for SC, and with the work and rigour involved in developing such a measure, the SC instrument became the focus of the Ph.D. project. Such an instrument may provide a useful tool to help diagnose under-performing organisations, and assist managers appraise SC performance as a strategic choice

# Strategic Conversation project - expert panel

# **Objectives:**

- To arrive at acceptable definition of strategic conversation
- To arrive at consensus of components and/or properties of S.C.
- Arrive at a suggested construct of S.C. [Sort components/properties]
- Arrive at a suggested construct of strategic planning [Component: An artifact that is one of the individual parts of which a composite entity is made up; especially a part that can be separated from or attached to a system][What's in it]

[Properties: A basic or essential attribute shared by all members of a class; A construct whereby objects or individuals can be distinguished; quality ascribed to][What it does - how it behaves]

# Participants:

Participation is sought from individuals who currently hold or have recently held decision-making positions that required strategic skills, and where those strategic processes are/were used to guide the actions of others in the organisation. We hope to attract CEO's, executives and similarly experienced individuals from public and private sectors.

# **Program:**

A summary (not analysis or opinion) of the limited material on these topics will be provided to group members prior to the focus group meeting. The material will include research to date and opinions of others. The material does not attempt to guide the group discussion. Argument is sought. The researcher has no bonding to any existing opinion, and hopes for open exploration before shaping the material and opinions into a construct.

- Intro panel members topic & objectives
- Accept/debate assumptions
- Dialogue open list all possible components / properties
- Debate refine and clarify list
- Discuss how to accept, sort and prioritise items
- Decide 'construct' sort components and/or SC properties
- Discuss/decide strategic planning
- Summary

# **Assumptions:**

• An initial definition: "Conversation that is strategic"

# **Hypotheses:**

• S.C. is desirable (usually essential) in strategic planning

- S.C. may enhance strategy execution (S.C. within operational conversation)
  An <u>understanding</u> of S.C. may help improve performance in it & thence of it.

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#### Appendix 3 - Summary of notes from expert panels

#### **Expert Panel 1 - summary of notes**

The panel considered it essential to agree on what is meant by 'strategic' and 'conversation' before agreeing to the definition of strategic conversations as being conversation that is strategic - for the purpose of the panel.

- Some conversations in the hallway are assessed as strategic identified by key words.
- A CEO can 'just tell' if the conversation is valuable (strategic) or waffle or operational
- Bit blurry between operational and strategic where both may concern improved performance.

Agreed with the assumptions.

Discussed strategy, accepted the definition derived via literature.

Discussed conversation, accepted definition converged from literature

Started out with facilitator-suggested groupings of Preconditions, Component, Attribute. Changed Attribute to 'consequence'. This simple change provided a temporal sequence: before - during - after. In other words, conditions for strategic conversation to occur, the conversation itself, and expected consequences/outcomes.

Later, two more groups were added: Effectiveness, and Transaction. Essential items did not fit elsewhere.

Note from Ian to panel member.

Could you look at the following summary of notes from the panel session, and reply to me by email indicating which items in your opinion are absolutely "Essential" versus important but "Optional" for S.C. Just delete the lines that are 'optional', leave those that are an 'essential' part of any S.C. I won't dismiss the "optionals", but treat them with a lower priority.

The panel session summary:

#### Pre-conditions:

- Initiated by a problem, or opportunity, or cyclic schedule (Purpose?)
- Participants must understand requirements
- Requires organisational knowledge of: risk profile, competitors, other environmental influences, self, tech changes. In terms of quality and quantity. Assessed by effectiveness (accuracy) and efficiency (resource waste time-cost, people etc).
- Requires trust in organisation (safety to participate openly), empowerment/encouragement. Assessed in conduct during formal and informal opportunities to strategically converse. Bonding.
- Organisational climate No fear. Requires respect, non-judgmental, mistakes OK (op. to learn)
- Appropriate people attend as either direct participants or as observers/learners. (Sometimes it's valuable for operational people to attend even though they may seem to contribute nothing at the time. The value is felt later perhaps in the form of strategic implementation rather than robotic implementation)

#### Components of S.C.

• Topic

- {Strategic} goals
- Based on "what if?"
- Method/process
  - Include acknowledgement
  - Open dialogue
- Knowledge
  - Use of key words (some are unique to org. and some have universal appeal.

Attribute/consequence (intended, and with expectation of action)

- with reference to strategies, capabilities or performance measures: decision to a) kill one, b) continue, c) adjust/change/extend/shorten on, d) add a new one.
- document actions, processes and outcomes to facilitate organisational learning needed as information for next strategic assessment.

#### Transaction level of conversation

- Moving knowledge, skills, abilities from implicit to explicit (from tacit to expressed)
- Quality of conversation
- Equality within conversation reciprocity equal contributions and risks.

Effectiveness of conversation (chances of getting it right) [May not be efficient]

- Experience as a group in group functioning
- Knowledge, skills and abilities in: topic, strategic conversation
- Number of people (too many? too few?)
- Diversity of membership positions (risks position-lock)

Efficiency of conversation (low waste of conversation time/people resources) [May not be effective]

- Experience as a group in group functioning
- Low diversity of membership positions (risks groupthink)

#### **Expert Panel 2 - summary of**

The panel considered the definitions of conversation and strategic, having received notes on those prior to the meeting. It was agreed that conversation comprises (packages) other forms of exchange - dialogue, debate, discuss, & decide. It was proposed to use the term 'discourse' in place of conversation, however it was considered that in regard to a 'strategic' use of conversation that discourse was too cold, harsh and negative. By comparison conversation was regarded as warm, open and positive. Root origins of 'dis' and 'con' supported the use of conversation - the bringing together. Conversation shapes perceptive reality. Nothing is fixed, and there is a temporal aspect (which led into thinking about things strategic).

We did not consider non-verbal possibilities of conversation.

Discussion about things 'strategic' occurred whilst within conversation. It was considered that to be strategic it must be part of a loop rather than some linear process, and will relate to issues at present or possible futures. We lightly addressed the question "Is it strategic conversation if participants know that there is no chance of action - that the strategic loop is open?". Without covering it in depth, the panel indicated that intended outcomes must be part of the 'intent'

We discussed risk as an influence on the conversation, as a result of the conversation (outcome), and as a topic of the conversation. We mentioned risk relating to soft and hard issues (E.g. people versus economic)

For a while, potential components of S.C. were listed under 'Intent', but it was later adjusted that all the items under 'intent' were listed under 'attributes', along with intent as a component rather than a category.

#### **Attributes**

intent

focus/topic (what-if / options) [relate to scanning & information in Context]

purpose - opportunity / threat (or constraint)

goal - means / ends

risk - person / team (or Org.) | intentional / unintentional [E.g. innovation vs. disaster in Context]

individual capabilities

diversity of opinions, race, age, gender etc.

facilitation skills

roving leadership

#### **Assumptions & Context**

psychological attributes or person psychological attributes of organisation scanning - information sources alignment of capabilities with environment constraints (implicit -> explicit) impact of 'innovation' on risk

#### **Prerequisites**

climate of safety

all relevant information

group ground rules (implicit -> explicit safety) [ relate to assumptions; constraints]

dynamics management

leadership - the big L - the boss who WILL make the hard calls

choice of strategic model (E.g. Bomb-scare may require unique different strategic conversation )

official and unofficial information channels for S.C. (with the same safety etc)

#### Post-session reflection.

In the calm and quiet following the session, some of the items seem to belong elsewhere. For example, in attributes we have items that don't reflect so much that the conversation is strategic, but the quality of that conversation.

What are your thoughts on the following?

#### Attributes of S.C.

intent (to be strategic)
focus/topic (what-if / options) [relate to scanning & information in Context]
purpose(/trigger) of conversation - opportunity / threat (or constraint)
goal - means / ends
risk - person / team (or Org.) | intentional / unintentional [E.g. innovation vs. disaster in Context]

#### Quality of S.C.

individual capabilities diversity of opinions, race, age, gender etc. facilitation skills group skills (E.g. roving leadership)

## Appendix 4 - Instruments

Strategic Conversation	Strongly Disagree	ee Neithe	er Agree	Strongly Agree	Don't know
We regularly discuss information from our formal	_		ı		
<ul><li>external scans.</li><li>We regularly discuss information from our formal</li></ul>			l	l	
internal scans					
<ul> <li>We periodically discuss the current business environment</li> </ul>			l		
<ul> <li>We periodically discuss the possible future environments</li> </ul>			l		
<ul> <li>Our discussions always include a comprehensive description of how we will execute our response</li> </ul>					
We regularly have conversations that focus on a				l	
strategic question (not operational, administrative etc)					
<ul> <li>We have regular strategic planning sessions (e.g. annual)</li> </ul>			l	l	
<ul> <li>Informal conversation about goals is actively encouraged</li> </ul>					
Every completed plan is reviewed to learn about what we do best			l	l	
• Every completed plan is reviewed to find what we need			ı		
<ul><li>to improve</li><li>Each and every topic leads to a decision (e.g. to</li></ul>			l		
commence action, to NOT commence, or to cease					
current actions)			l	l	
We are systematic in the progression of each strategic topic (E.g. from question - through action - to follow-			ı	1	
<ul><li>up)</li><li>Every strategic topic includes consideration of external</li></ul>			l		
risks.					
Every strategic topic includes consideration of			l	l	
unintended outcomes of achieving the goal. [The destination may cause damage]					
<ul> <li>Every strategic topic includes consideration of</li> </ul>			ı		
unintended consequences of pursuing the goal (E.g. Resource conflict). [The journey may cause damage]			l	l	
Resource connict). [The journey may cause damage]					
•			ı	1	
·			l	l	
• .			l	l	
•					
•			l	l	
•					
-					
•			l	l	

Strategic Planning	Strongly Disagree Ne Disagree	ither Agree	Strongly Agree	Don't
Each strategic topic is assessed for its impact on other strategies before implementation commences.  We have regular strategic planning sessions (E.g. annual)  We always set performance goals to check for expected progress  We always set indicators to warn of threats to our plans.				
• We actively scan inside the firm for strategic topics		<u> </u>	1	ı
We systematically seek external strategic information We have specific triggers looking externally to initiate impromptu strategy meetings We use a formal "quick-strategy" process to evaluate and handle We assess the strategic relevance of every strategy topic. We score and record the strategic priority of every strategy topic. We perform risk analysis before commencing new strategic actions We perform risk analysis of not doing suggested new strategic actions unexpected information With problems, we always conduct risk analysis of favoured alternative strategy With problems, we always seek and assess		   	     	 
contingency plans			l	I
•		 		     
• .		l	l	

Strategic Behaviour	Strongly Disagree	Disagr	ee Neither	Agree	Strongly Agree	Don't know
Mission statement						
<ul> <li>We have a mission statement that is brief and is known and understood by all relevant stakeholders - employees, customers etc.</li> </ul>						
<ul> <li>Strategic plans and operational decisions are always</li> </ul>			.	l		
<ul> <li>made with constant referral to the mission statement</li> <li>Personal performance goals are set in a way to align</li> </ul>						
with organisational goals.				I		
Trend analysis .						
<ul> <li>We monitor products, services, our environment, and our performance to show trends</li> </ul>				l		
<ul> <li>We use this information in our strategic planning process</li> </ul>						
Competitor analysis						
We know our competitors and seek as much			1	1		
information as possible as clues to their processes and intentions.			I -	I	I	
			1			
contribute to this effort.			_	I		
Long-term goals						
<ul> <li>We understand that the future is not known, but we</li> </ul>						
have long term goals that are flexible enough to allow us to adapt to a range of possible and 'unthinkable'						
scenarios						
Annual Goals						
<ul> <li>Our annual goals are not just about budgets, but concern every part of our performance model</li> </ul>			I			
Each performance goal is objectively set and						
appropriately monitored.						
The connection with goals are documented for each						
and every short-term action plan						
Short-term action plans				l		
We have specific action plans to support our goals						
Decisions are always shown to relate to goals			ı	ı		
<ul> <li>These plans are transparent and understood by everyone</li> </ul>						
Ongoing evaluation			1	ı		
<ul> <li>We monitor and improve our processes to set, plan,</li> </ul>				I		
implement and monitor our goals.						
implement and monitor our goals.			1	ı		
				I	I	
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	Your	assessme	Your assessment of performance	rmance		How C	How certain are you.	you.
Performance in the marketplace	Strongly Disagree	e Neither	Agree	Strongly Agree	Don't know	Very uncertain	Have reason	Have evidence
Over the past year, our financial performance has been outstanding.								
Over the past year, our performance has exceeded our competitors'.								
Over the past year, our sales growth has been outstanding*								
Over the past year, we have been more profitable than our competitors								
Over the past year, our sales growth has exceeded our competitors.								
	Strongly	F		Strongly	Don't	Verv	Have	Have
Performance in terms of stakeholder outcomes.	Disagree Disagree	e Neither	Agree	Agree	know	uncertain	reason	evidence
Over the past year our investors/owners regard our performance as outstanding.								
Over the past year our clients/customers regard our performance as outstanding								
Over the past year our employees regard our performance as outstanding								
Over the past year our executives regard our efficiency as outstanding								
Over the last year our suppliers regard our performance as outstanding								
Over the last year our local community regards our performance as outstanding								
Performance in terms of previous performance	Strongly Disagree	se Neither	Agree	Strongly Agree	Don't know	Very uncertain	Have reason	Have evidence
Over the past 6 months our productivity has improved greatly								
Over the past 6 months our quality of services / products has improved greatly								
Over the past 6 months our organisational climate has improved greatly								
Over the past 6 months our efficiency has improved greatly								
Over the last 6 months our participation in community and environmental issues has improved greatly								
* Outstanding - when all things are considered							}	
** Value per client = value "of" client to us or value of us "to" client	One tic	k in these col	One tick in these columns - for each question	ch question		And one ti	And one tick in these columns	columns

Performance Assessment

#### Appendix 5 - Instructions, Consent, and Information

#### **Consent Form**

Testing of an instrument for measurement of organisational strategic conversation.

Chief Investigator: Ian Johnson

School: Griffith University, School of Psychology

Contact details: Ph 3348-5161

Signatures:

This research project is intended to test an instrument that has been developed to measure the amount and other aspects of strategic conversation in a business or other organisation. We intend to examine the expected link between certain aspects of conversation and various types of business performance. You can help us by describing aspects of conversation in your organisation, and providing a few details about performance. This is achieved by responding to the questions of the questionnaire. The time required should not exceed 15 minutes.

Please note that confidentiality of your information is maintained in two ways. You may elect to remain completely anonymous and provide no identifying information. Alternatively, if you wish to receive a report based on your responses and provide an email address, the researcher alone has access to your email identification sheet, and it is destroyed immediately your report is sent. Final reports will not enable identification of participants or their organisation.

I have read the information sheet and the consent form. I agree to participate in the Part 1: Development and testing of an instrument for measurement of organisational of strategic conversation project, and give my consent freely. I understand that the project will be carried out as described in the information statement, a copy of which I have retained. I understand that I am not required to participate in this research project if I do not wish to do so. I can withdraw from the study at any time without needing to explain my reasons for withdrawing. No loss of benefit will occur as a result of my withdrawal. I have had all questions answered to my satisfaction.

Participant	Date	

Instructions

This questionnaire is under development and therefore of untested value. It asks about conversation within your organisation. Some questions refer to conversations within official strategy meetings, and some refer to general organisational strategy-related conversations.

If your organisation is too small to assemble people to form a strategy group, perhaps you meet with external people as a strategic 'thinking' group with responsibilities to each other's entities. Perhaps you assemble other stakeholders as a collaborative strategy group. To whom do you talk or think aloud, when discussing your business? These questions refer to those conversations that you have, and overhear.

If you have no such group, either internal or external, then you are unable to conduct strategic conversations, so respond with [Strongly Disagree] to questions about strategy meetings.

If you are unsure of the meaning of a question, or are in doubt about the terminology used, tick the box [Don't Know].

It is important to answer frankly, because part of the purpose of the strategic conversation project is to clarify the tactics and terminology used by expert strategic thinkers and planners.

Access to your data is restricted to yourself and the researcher (Ian Johnson).

This document intended for use within the Strategic Conversation project being run by Ian Johnson through Griffith University School of Psychology. This instrument is not ready for business diagnostic or development purposes

#### (Please keep this.)

#### **Information Sheet**

#### Develop and test an instrument for measuring organisational strategic conversation.

Chief Investigator: Alf Lizzio Ass Investigator: Ian Johnson

School: Griffith University, School of Psychology

Contact details: Ph 3348-5161

Ian Johnson is conducting this research as part of the requirements for his Ph.D. qualification. Ian has previously held positions of manager, state manager and national manager. His areas of experience have been technological, medical and psychological. The topic of this research is his present interest.

The project is supervised by Dr Alf Lizzio, Griffith University School of Psychology, Ph 3875-3376. Dr Lizzio has worked extensively across public, private and community sectors as both educator and consultant on organisational change and executive development.

Many organisational development consultants and practitioners assume that with more strategic conversation there will be more strategic approaches to gaining business improvements. That assumption has never been tested. This research project is intended to develop and test an instrument to measure the amount and other aspects of strategic conversation in a business or other organisation. The data you provide will allow Ian to test the expected link between certain aspects of conversation and various types of business performance. With better understanding of the link, it may be possible to more accurately describe how a business may improve, or explain why some performance improvement programs, like TQM or Business Process Reengineering, work in some organisations and not in others. Perhaps it has as much to do with 'how' people talk to each other, as 'what' they choose to talk about.

You can help by answering a questionnaire about aspects of conversation in your organisation, and providing a few details about performance. The time required should not exceed 15 minutes.

Confidentiality of your information is at two levels. First, you may elect to remain completely anonymous and provide no identifying information. Alternatively, if you wish to receive a report based on your responses, you can provide an email address to which the researcher alone has access, and it is destroyed immediately your report is sent. Final research reports will not enable identification of participants or their organisation.

Upon your receipt of that report, Ian invites you to contact him (3348-5161) to answer any final queries you have about the questionnaire, process, or results in the report.

You are free to withdraw from participation at any time, without giving reason, and without loss of benefit from participation. Should you have any complaint concerning the manner in which this research project is conducted you may contact the researcher (3348 5161) or the supervisor (3875 3376). If you prefer to contact an independent person regarding a complaint, call the University's Research Ethics Officer, Office for Research, Bray Centre, Griffith University, Kessels Road, Nathan, Qld 4111, telephone (07) 3875 6618; or the Pro Vice-Chancellor (Administration), Bray Centre, Griffith University, Kessels Road, Nathan, Qld 4111, telephone (07) 3875 7343

The university and the researcher thank you for your participation

## Appendix 6 - Goal attainment scale

Business entity	/ Code/Name	

Instructions for calculating the figures in the Goal Attainment Scale

Goal Scale Calculation Steps		And then do this
<b>Step 1:</b> In relation to this goal, what is the current performance	A	Use the units of performance. E.g. number of, dollars,
level?		time, peopleetc
Step 2: If you did nothing special, what would be the	В	Put this figure in Goal Attainment Scale line marked as
performance in 6 months. The change in performance would		[-1 As expected without goals]
be due to economy, competition, actions you have already		
taken or are in the process of doing etc.		
Step 3: Now assume you will set a goal and take strategic	С	Put this figure in Goal Attainment Scale:
action to achieve the goal. Make the goal a challenge, but it		[-0 As expected with goal]
must be within reach according to your plan. What will the		
performance be in # months		
<b>Step 4:</b> What is the difference between C & D. This is the	D	Put this figure in Goal Attainment Scale:
increase due to your strategic plan, over and above what will		[ Reference Gap ]
happen anyhow.		
This is the <b>Reference Gap</b>		
Step 5: Calculate B - D	E	Put this figure in Goal Attainment Scale:
		[ -2 Worse than without goal ]
Step 6: Calculate C + D	F	Put this figure in Goal Attainment Scale:
		[+1 Better than expected]
Step 7: Calculate F + D	G	Put this figure in Goal Attainment Scale:
		[ +2 Much better than expected ]

Goal	
------	--

Scale range & description	Calculated scale	Gap score	Gap description	Actual performance
	From G above			
+2 Much better than expected	_		This difference copies the reference gap	
	From F above		S-F	
+1 Better than expected			This difference copies the	
	From C above		reference gap	
0 As expected by goal	Trom C above			
o his expected by goar	_	1		1
	From B above	From D above	The difference here is the Reference gap	
-1 As expected without goal	_			
	From E above	*	This difference copies the reference gap	
-2 Worse than without goal	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			

What are the units of performance? \_\_\_\_\_ (number of, dollars, time, people...)

#### Appendix 7 - Program plan - skills transference

The program drew heavily from adult learning and actione research principles. The following description of the lerarning loops is an excerpt from documentation supplied to the longitudinal participants. It describes the multiple loops used to enhance uptake of the skill.

#### The program forms one big loop:

- Plan (by me progressively alterable by you)
- Do (strategic groups)
- Measure
- Analyse/reflect (me with statistics, you with feedback)
- Plan (by you if you continue after the project formally ends)

#### Each week is a loop

- Learn new material information (CD materials, session discussions)
- Do (Session exercises and weekly objectives)
- Measure (Check how things are going
- Reflect (Think/discuss the outcomes)
- Learn from reflection and new material

#### Each session is a loop

- Learn from previous week reflection, and new CD material
- Do session exercises and discussion. Some resources are developed
- Measure by opinion towards end of session
- Reflect on delivery of material, and on content of material
- Loop back to learn

#### Appendix 8 - Session plan - skills transference

All sessions were individually planned, initially per topic, but then modified for each group according to their contributions to the plan design. The following illustrates the content of the first two sessions, the only ones that were unchanged.

#### Session 1 program

Topic	Transaction	Time
Introductions - all those present 1 minute	Information shared	0:10
Purpose of project - my view (link conversation with outcomes)	Information to you	0:05
Purpose of project - your view (improve outcomes via program)	Information from you	0:10
Common goals - interdependency	Discussion	0:10
Action research - overview	Information + discussion	0:10
Overall program (measure - do - measure)	Information + discussion	0:05
Life after the program	Suggestions to you	0:05
Distribute Instruments	Resource	0:05
Arrange subsequent meeting(s)	Activity	:10
	Total:	1:10

#### Session 1 take-away

Topic	Transaction	Time
Measuring performance	Information	0:05
Measuring strategic conversation	Information	0:05
Measure performance & SC	Activity	0:20
Goal-setting (ready for next session)[start your own goal/s]	Information & variable activity	?:??
	Total:	> 0:30

#### Session 2 program

Topic	Transaction	Time
Collect instruments - discuss issues	Information shared	0:10
Discuss parts of the program in more detail	Inform + discuss	0:10
(goal set, measure, plan, do, measure, analyse/improve, plan)		
Goal-setting individually & group understanding	Activity	0:30
Individual preferences options in program content / sequence	Information & they plan	0:10
Arrange subsequent meetings - distribute CD(s)	Resource	:10
	Total:	1:10

<u>Comment:</u> Participants were interested in both topic and process, and evening sessions tended to run overtime. Morning sessions tended to end on time because of subsequent appointments. The researcher always 'hung around' outside after the morning appointments for anyone not in a hurry, and perhaps wanted to discuss a particular topic.

#### Appendix 9 - CD index

#### Overview

To help cultivate improved quantity and quality or strategic conversation within your organisation, and between it and other entities, this program relies on weekly meetings of 'strategic support' groups. Group members engage in exploring a fresh complex topic each week, where the CD material provides enough raw material to provide opportunities for discussion based on individual experience and knowledge. The first block of 7 topics is universal to all groups, and will provide the material (and questions) that help make subsequent selections. Those first 7 topics are regarded as crucial in the order given.

The remaining clusters of units are shown as they apply to kinds of business/organisation activity. The units within the clusters are shown in suggested order for probable maximum effectiveness. However, each business has different needs and opportunities, so the units sequence is suggested - not rigid.

#### <u>CD 1 - Universal Strategic Conversation</u> Elements

- 1. Communication Introduction
- 2. Conversation
- 3. Strategic conversation
- 4. Decision making introduction
- 5. Decision making psychology
- 6. Decision making in certainty
- 7. Decision making in ambiguity

# CD 2 - Average to high risk dynamic (changing) and competitive environ

- 1. Strategy origins
- 2. SWOT
- 3. Org problems & options
- 4. Strategic intent
- 5. Why change fails
- 6. Stress
- 7. Risk assessments
- 8. Risk management
- 9. Strategic planning
- 10. Scenario planning
- 11. Systems thinking
- 12. Risk systems
- 13. Systems integration

## <u>CD 3 - Intensive negotiation - professional</u> rather than service or sales orientation

- 1. Negotiation language
- 2. Negotiation Tactics
- 3. Project management intro
- 4. PM developments

#### CD 4 - Suit organisations with more than

### 100 permanent employees

- 1. Capabilities intro 1
- 2. Capabilities intro 2
- 3. Capabilities efficiency
- 4. Capabilities effectiveness
- 5. Capabilities wastage
- 6. Capabilities alignment system
- 7. Outsource alignment
- 8. Climate introduction
- 9. Climate context

#### Appendix 10 - Most Significant Change - phone interview template

The 6 month S.C. program may have helped you a lot, a little, or not at all. Perhaps it made things worse. I am interested in your assessment on the following parameters, partly to gauge whether numbers can be extracted for research purposes, but also because these were the 'changes' that were reported to be significant by the participants. To what extent was it worth doing? The following questions may help that assessment, by comparing before SC with after SC, and ponder the impact on the future (24 months). The questions emerge from our summaries. This 24 months was chosen because of comments made by our SC members who think that some period like 18 to 24 months will pass before the benefits can be reasonably felt. It's only perceptual, but imagine that 0 is the same as nil, and that 10 represents total wisdom and skill, and best imaginable outcomes.

The absolute number is not as important as the relationship. For example, if you score yourself as 3 before the program and 6 after SC, it suggests that your knowledge/skill/application has doubled. Also, the scores between items can be compared. If something else went from 3 to 4, then SC was not as impactful.

It is, of course, important to put aside embellishment and any 'don't want to hurt anyone's feelings' tendency. The vital concern is that your response reflects your true opinion. This data comes back to you, and you need it to be 'honest'.

1. Efficiency of meetings - there is no wasted time (only the right people attend, each participant is fully prepared, takes no longer than needed, at a time that least impacts other responsibilities etc)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

2. Effectiveness of meetings (there is clear purpose - agreed purpose - actionable outcomes - meeting performance is measured - outcome decisions are measured)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

3. Conduct of meetings [inter-organisational / intra-organisational] (no groupthink - no private agendas - topic remains on track - all opinions sought and acknowledged - excellent communication practices)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

## 4. Transparency of decision processes (members can see decision processes and agree with the fairness of it)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

## 5. Clarity of purpose and goals or organisation (All relevant stakeholders know and agree with purpose/goals)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

# 6. Management professionalism (versus operational efficiency/expertise) (Time is spent on improving professional performance in management - reading - studies - courses etc. I see myself as a professional manager)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

# 7. Employee development in strategic awareness (Employees are not just developed in technology and trade etc, but also in strategic topics. The org has many brains thinking for it - not just the executives/owners)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

## 8. Skills at giving instructions/instructions (You accept full responsibility for effective communication and the responses you elicit)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

9. Alliance partner development/exploration in strategic awareness (Partners are a resource and you function in a way that demonstrates that their improved strategic performance is to your advantage. You work 'with' them)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

10. Strategic risk awareness and process (Risk is more than finance - it's strategic & operational, it's hard & soft etc)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

## 11. SWOT skills and practice (SWOT is used as part of planning, and is separately applicable to many decisions.)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

12. Strategic planning skills (It's more than the annual farce. It's about ends and means that will be assessed and adjusted, it's about internal & external, hard & soft, and is part of a learning loop.)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

13. Management of 'change' programs (You know and are skilled in what can cause failure of behavioural change in people - how to approach those risks)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

14. Organisation system(s) efficiencies <u>awareness</u> (Each system [not just a list of actions] - there are dozens of them - official and unofficial, prompt people to behave in the way they do - to make decisions etc [what gets rewarded?]. They are formalised and efficient. They are aligned with org purpose and goals. **How aware am I?**)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

15. Organisation systems alignment (The different systems support each other, and together support the purpose & goals. **I ensure this**)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

16. Organisation systems synchronisation (The different systems support each other in a time-critical way - call it 'just in time' systems. **I manage this**)

Your score before starting SC program	1 = nil
Your score upon completion of SC program	5 = Knowledgeable - can do OK
Your expected score in 24 months	10= Wisdom - high skill - teacher of
Strength of role of SC in this question	1 = Nil
Importance of this topic to you personally	5 = Valued / Desirable
Importance of this topic to the organisation/enterprise	10= Crucial - Essential

Finally,

[huge]

2) Do you believe that the increasing improvement in SC will ultimately impact the bottom line?

4) Are you intentionally passing on 'strategic conversation' to others in your organisation