

Leading knowledge management strategies in Australia and New Zealand: a comparative study of public and private sector organisations

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Abstract

This paper draws on preliminary empirical quantitative research into an understanding of the status of knowledge management in the Australian and New Zealand environments. The relevant literature is surveyed on the role of leadership in knowledge management strategies and techniques. This is set against research findings on the roles allocated to lead the knowledge management task. In particular findings within the government sector and the non-government sectors are compared. The paper concludes by presenting a preliminary evaluation of the role of knowledge management leadership within the organisation and suggests that the external influences also play a role

Keywords

Australia, New Zealand, Knowledge Management, Chief Knowledge Officer, Leadership

INTRODUCTION

The need for knowledge management (KM) leadership has been identified as one of the critical success factors for a KM programme (Skyrme and Amidon, p.33). However, the need for a Chief Knowledge Officer (CKO) has been questioned (Earl and Scott, 1999, Herschel and Nemati, 2000). A contrasting view was documented by TFPL in 2001. TFPL is a United Kingdom corporate information consultancy agency that has conducted CKO summits annually from 1999 onwards. In 2001 they note that in contrast to previous years CKOs no longer see their role as a transient one, but as a key player in the strategic leadership of an organization.

Similarly, the role of the Chief Information Officer (CIO) and need for that position have also been debated (Stephens et al., 1992, Earl and Feeny, 1994, Maruca, 2000). Recently the CIO has been urged to move beyond the traditional boundaries of information systems and technology and become involved in information management from a much broader perspective (Doesburg, 2002).

This paper considers comparative analysis of findings of the role of leadership in KM strategies. These findings are derived from a survey of public and private sector organizations in Australia and New Zealand. We believe that this study provides useful data about the situation in KM in the developed countries of the Asia-Pacific region. In light of the increased current focus on utilisation of intellectual assets for sustainable development of organisations, consideration of the results is essential for information systems research and practice.

WHAT IS KNOWLEDGE MANAGEMENT

Knowledge management is a business-focused approach to the processes that govern the creation, dissemination, and utilisation of knowledge to fulfil organisational objectives thereby adding value to and increasing the productivity of the organisation (Murray et al, 1998). Information systems research seeks to establish the development of methods, tools and applications of systems processes that govern the creation, dissemination, and utilisation of information in its explicit form. Knowledge management is therefore a distinct and separate facet of information systems research. KM is a tool to facilitate the sustainable transfer of knowledge and its flow in explicit, implicit and tacit forms. The understanding of the flow of knowledge, the capacity to manage the flow and leverage the capacity of the organisation to create and innovate and the place of technology in this schema is an essential focus in the exploding information age. KM issues include the development, implementation and maintenance of appropriate organisational and technical infrastructures to

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enable knowledge sharing (Nonaka and Takeuchi, 1995, Owens, Wilson and Abel, 1996, Davenport, and Prusak, 1998, Probst, Raub and Romhardt, 1999; Dixon, 2000).

Leadership

Leadership is acknowledged widely as being instrumental in the effective deployment of a KM strategy in an organisation. (Davenport and Prusak 1998, Nonaka and Takeuchi, 1995, O'Dell et. al., 1998, Probst et. al., 2000). Within the KM literature there appears to be a differentiation in the roles played in the leadership of a KM strategy. Knowledge leadership can operate on two levels. There is the leadership of an organisation that will act to promote the sharing of knowledge through the creation of an appropriate organisational culture. The culture of an organisation is influenced by the structure and by the attitude of management, and is developed by the example of management. Krogh et. al., (2000) describe how effective management and support of knowledge creation depends on the physical, virtual and emotional context in which it is manifest. An organisation with a strong commitment at the level of executive management to change organisational culture it is usually able to begin to create the values that lead to knowledge sharing across boundaries (O'Dell, Grayson and Essaides 1998, Hackett 2000). Hackett comments that "CEO commitment is essential in the absence of that commitment, even well executed and conceived practices may remain locked within a single organisational unit for the duration of the project." (Hackett, 2000 p.36). Accordingly to achieve an overall change in organisational attitude there needs to be explicit management commitment to follow through and the example of 'follow me' leadership.

The role of the leader of the KM strategy is however different. At this senior level a KM leader has the following functions in the implementation of such a strategy. A leader will investigate the need, align it with the organisational strategy, plan, and execute the plan to manage knowledge to support the value proposition and mission of the organisation. A KM leader has a role of a 'knowledge leader', who may not actually create the vision of the future but has the responsibility to create the framework within which the knowledge stakeholders will be able and be enabled to create that vision. It is the process of vision creation that is managed by the knowledge leader. It is also the responsibility of the leader to see the articulation of that vision both within and outside the organisation.

THE AUSTRALIAN AND NEW ZEALAND ENVIRONMENT

Australia is a vast and geographically diverse country. The majority of the relatively small population of just less than 20 million live on the eastern seaboard and is centred in capital cities. The economy has been transformed from an economy that one century ago was based on agriculture and manufacturing to one that is now primarily based in tertiary education and services industries. Australia is highly developed in its use of information technology and digital communication. In part this is as a consequence of geographic necessity, however, high levels of education, knowledge-based industrialisation, and the globalised economy are also active factors.

Since 1999 Australia has heard the call for and of the "Knowledge Nation" from the current Commonwealth Government, current and previous State Governments and their Oppositions. However, there is little evidence to show that this has had much if any effect on Australia as a whole. Furthermore, a report to the Chifley Institute comparing the performance of Australia against other OECD countries as a knowledge nation concluded, "Australia is falling well behind most of the major developed nations in investing in knowledge. As a result Australia is putting its future position in a knowledge-based world seriously at risk". (Considine et al., 2001, p.2).

In contrast, New Zealand is a country with a much smaller population (4 million). Watson and Myers (2002) compare it to Finland in terms of economic growth capabilities. The creation of a knowledge economy has been identified as a national KM challenge (Knowledge Wave, 2003). In terms of global competitiveness, a 2002 survey showed that New Zealand scores relatively poorly in areas relating to innovation, but suggests that '... New Zealand has the potential to advance to an innovation-driven high-income economy over the next decade' (Deutsche Bank, 2003, p. 2).

Both central and local government have launched e-government strategies. The goal of the central government strategy is that by 2004 the public sector in New Zealand will be working like a single, integrated operation (e-government in New Zealand, 2003). This has critical implications for management of knowledge and information in this sector.

METHODOLOGY

The research derives from research that overviewed the understandings and uptake levels of KM in the Australian Corporate sector (Zyngier, 2001). The original research used a population of 1000 organisations to

examine the relevance of knowledge issues, techniques for the exploitation of knowledge, how knowledge is managed as an asset, the cultural aspects of knowledge management, intentions for knowledge use in the future, and obstacles to KM in Australia. The current data sets were achieved through sectoral analysis. The survey instrument used in this project is grounded in the theoretical KM literature and was adapted with permission from an instrument developed in 1998 by the School of Management, Cranfield University, UK (Murray, 1998).

For the Australian study the population of 1000 organisations comprised 'blue chip' companies, medium sized enterprises, government bodies and tertiary educational institutions (Zyngier, 2001). These organisations were identified using a list purchased from a commercial list provider. The survey was accompanied by an explanatory cover letter and reply paid envelope. In each organisation survey questionnaires were addressed to the Chief Executive Officer, to the Chief Information Officer, and to the Director of Human Resources. The explanatory cover letter also allowed delegation of the task of completing the survey to another company officer.

Of the initial population, 27 organisations responded that they were unable to respond due to organisational policy and 34 survey forms were returned as incorrectly addressed. It was not possible to send reminder or follow up letters to this population. The final response rate was 15.2% of completed surveys that were returned. The demographic data indicated that the responses were an indicative representation by state and by industry sector. Therefore the researcher was satisfied that the survey data was statistically valid. The statistical distribution of organisations by industry in Australia is shown in Figure 1 below.

Bearing in mind future comparative analysis, the target population selected for the New Zealand survey was as similar as possible to that selected for the Australian study. A total of 410 surveys were distributed to private and public sector organizations. Private sector bodies were those included in the New Zealand Management December 2001 listing of the top 200 companies and top 30 financial institutions. These are the major New Zealand corporations in terms of financial performance. All central government ministries and departments, local government bodies, polytechnics and universities, healthcare administrative organizations and Crown Research Institutes were identified via the New Zealand government portal (see www.govt.nz) and included in the survey population.

In order to maximize response, the surveys were mailed to a named individual where possible with an accompanying letter and reply paid envelope. Here the methodology differed from the Australian survey. It was decided not to send 3 surveys to each organisation because of the relative smaller size of New Zealand organisations and the consequently high chance of a single individual receiving all 3 questionnaires. Determining who the survey was addressed to was prioritised according to the following strategy:

First choice was a chief knowledge officer (CKO) or chief information officer (CIO) where a name could be identified. The second choice was a named chief executive officer (CEO). In the absence of a named individual being identified for any of the above positions, the survey was addressed to the position title 'Chief Executive Officer'.

Of the initial population, 35 organizations responded that they were unable to reply for various reasons, including organizational policy. A further 2 surveys were returned as incorrectly addressed. The initial positive response rate was about 18%. After the deadline for the return of the survey had passed, a follow-up telephone call was made to non-respondents, and the final positive response rate was 28.78%.

In Australia, the return of surveys was roughly 65% from the private sector, and 35% from the government sector. It is pertinent to mention that Australia has, over the last eight years experienced substantial privatisation of government services, resulting in many water, electricity and transport organisation transferring from the public to the private sector. Organisations in the public sector in this survey included the three tiers of government across Federal, State and local government spheres. It also includes government funded but autonomous institutions such as tertiary education institutions, healthcare institutions and scientific research institutions.

Figure 1 shows the breakdown of respondents by industry sector. It is interesting to note that some government departments and instrumentalities assigned themselves not to government but to other sectors – those in Finance, Banking and Insurance being a prime example.

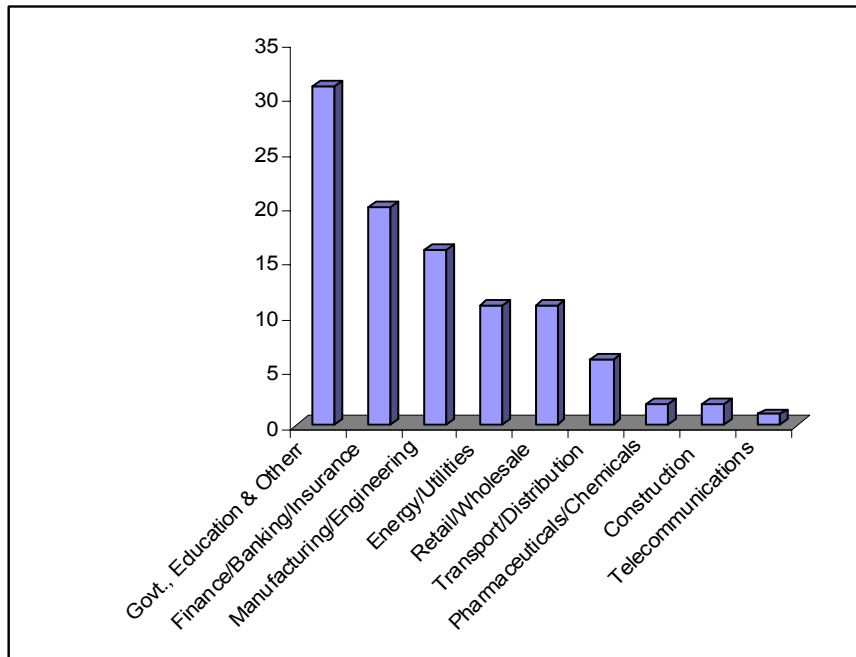


Figure 1: Distribution of respondents by industry sector Australia

In New Zealand, the overall distribution of surveys was roughly 50% to the private sector, and 50% to the public sector. Organisations in the public sector targeted in our survey included central government agencies, local government bodies (councils), tertiary education institutions (universities and polytechnics), healthcare administrative bodies and scientific research institutions. In New Zealand there are two branches of government: central and local. The local government branch is made up of 12 regional councils, 15 city councils and 59 district councils. Councils were subject to wide-reaching reform in 1989, and were reduced in number from 675 to 86. (see www.lgnz.co.nz/localgovt/) Many councils are therefore likely to have faced significant challenges in terms of managing access to information inherited as a result of this restructuring. Consequently it is perhaps to be expected that local authorities should be aware of the need for robust systems to support knowledge management.

Figure 2 shows distribution of responses by industry sector in the New Zealand study. A substantially greater proportion of responses to the KM survey was received from the public sector, accounting for about 70% overall. These included 15.9% from central government and 27.6% from local government.

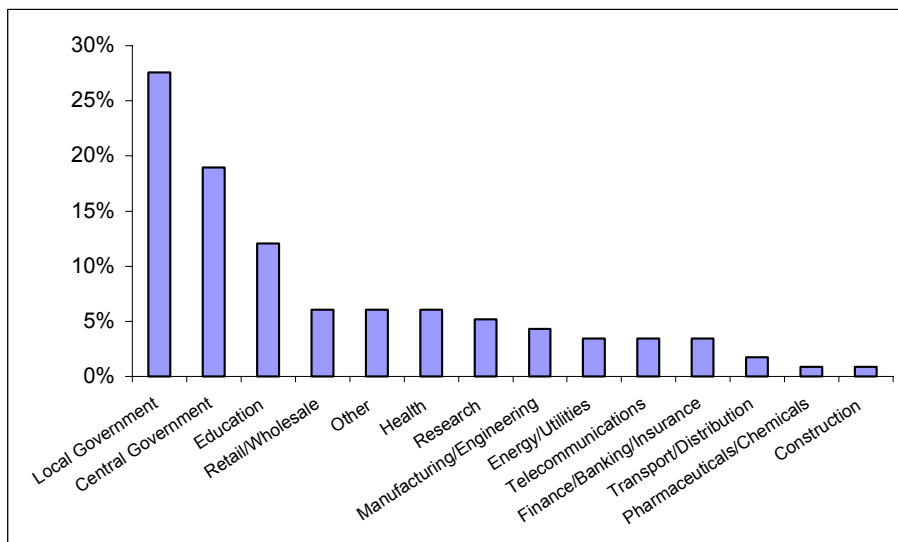


Figure 2: Distribution of responses by Industry Sector - New Zealand

Numbers of Knowledge Workers

Respondents in Australia were asked about the relative numbers of knowledge workers in their organisation over the last 5 years. Respondents were not given any guidelines as to what constitutes a knowledge worker, but were asked to quantify the number of people “who you would class as knowledge workers”. In the government and non-government sectors there is evidence of widespread growth in the number of knowledge workers. Of the Government sector, 21% had remained the same while a smaller than general decrease in knowledge workers was experienced than in the non-government sector in Australia

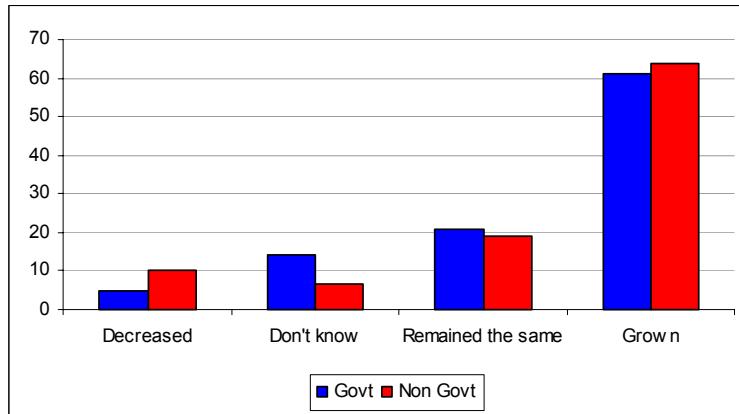


Figure 3: Relative movement in employment of knowledge workers in Australia

In New Zealand, 65% of organisations across all sectors said that the number of knowledge workers, relative to total employee numbers, had increased during the last 5-10 years. 30.8% believed that there had been no change in the percentage of knowledge workers in the organisation over the last 5-10 years, while only 0.9% believed that the number of knowledge workers had decreased..

In both regions therefore there has been a marked increase in the number of knowledge workers. The issue then must be to maximise the value derived by the employer organisation. We suggest that the effective management of organisational knowledge is the best strategy to achieve this end.

Who is responsible?

Respondents were asked who was responsible for the management of organisational knowledge. The Australian survey found that there were some differences recorded between the government and non-government sectors. (figure 4). In the government sector 40% of organisations had allocated the responsibility to an individual or group of individuals while the non-government sector were more active in allocating this specific responsibility in 49% of respondents.

This still leaves 60% of organisations in the Australian government sector with no formal role or by implication no position description or where the responsibility is generically seen as being “everyone’s job”.

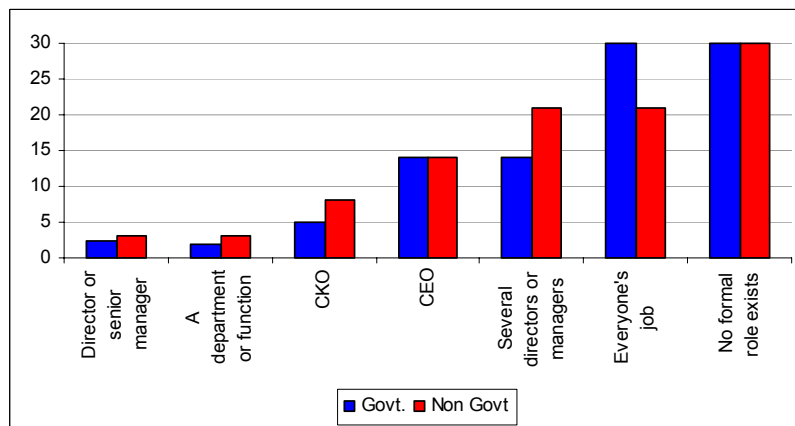


Figure 4: Responsibility for KM - Australia

The Australian government sector data shows that fewer organisations had allocated the responsibility to a dedicated position than in the non-government sector. This Australian data is also comparable with research Burstein, Zyngier, McCullough, Oliver, Symonds, Brown (Paper #244)

conducted in the UK of 18 participants in the CKO Summit (TFPL, 2002). Few of these participants actually had Chief Knowledge Officer as their title but all lead the strategy to implement a KM strategy in their organisation.

Given the attention paid to the role of leadership and organisational culture, it is necessary to understand if the leadership of a KM strategy impacts on its development in Australia. It is also essential to establish how organisational culture is manifested and the extent to which it is an obstacle in the implementation of a KM strategy in Australia. Comparisons can then be drawn in the extent of uptake and implementation of KM strategies between an Australian study and those overseas. The issues of the measure of leadership in KM in Australia and New Zealand requires further qualitative research and cannot be measured or extrapolated from these results.

In New Zealand, very few organisations had established a dedicated position at executive level with responsibility for knowledge management (figure 5). Only 10 Chief Knowledge Officer (CKO) positions were identified, just 8.6% of respondents. What was remarkable here was that just one was from the private sector (manufacturing/engineering), the remainder were from public sector organizations.

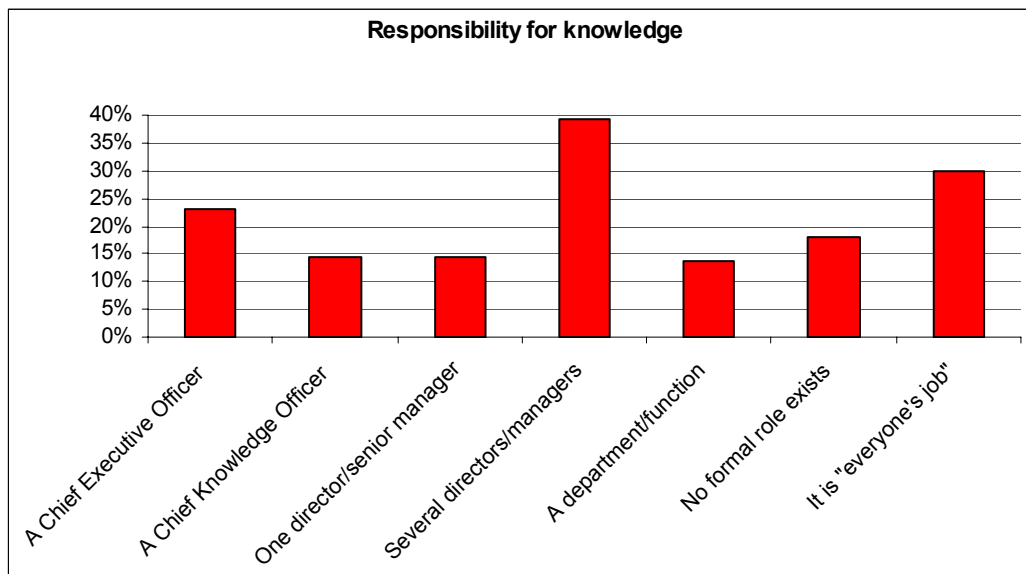


Figure 5: Responsibility for KM - New Zealand

Patterns emerging from responses indicate that the private sector appears to be mostly relying on groups of managers. Local government responses indicated that formal leadership was not likely to be assigned, and that KM was likely to be 'everyone's job'. In contrast, central government is more likely than other sectors to have assigned responsibility to a single director or senior manager.

Areas of responsibility

Where responsibility had been explicitly assigned in organisations for knowledge management, respondents were asked to specify what tasks those individuals were engaged in. In the Australian context, where there is a defined KM task it is multi-faceted as reflected in most organisations indicating more than a single task. The most common tasks in the government sector were to gather in the knowledge (in 42%) of organisations and to disseminate the knowledge (in 40 %) of organisations. Although still important, defining a strategy or route map to transfer knowledge in the organisation was recorded by just 30% and learning from the knowledge within the organisation was recorded by 37%. The task of ensuring that knowledge is being used was recorded by only 26% of government respondents indicating that metrics on the efficacy of KM strategies are not available.

A similar situation exists in New Zealand, but with fifty-three per cent indicating that the dissemination of knowledge was being undertaken, and just under half (45.3%) collecting and gathering knowledge. Much smaller percentages reported that tasks involving knowledge usage were formally assigned.

Respondents were asked whether they had formal systems in place for KM related activities. Almost all (95.7%) indicated that formal mechanisms were in place for making knowledge available to relevant parts of the business, while slightly less (92.2%) reported that they had systems in place for capturing knowledge.

Interestingly, however, the percentage replying that these systems (to capture and make knowledge available) applied to the organisation as a whole were much smaller.

Only 60.3% said that formal systems to protect knowledge were in place in their organisations, and almost half (48.6%) had no formal procedures in place for licensing or selling knowledge. This could reflect the nature of the organisations responding to the survey, with a high proportion of respondents coming from the public sector.

Key organizational priorities

Productivity gain through the implementation of a KM strategy is a constant theme in KM literature. The Australian research affirms that this is the strongly held view for 43% of organisations overall and is ranked as the highest priority. However when this is broken down in government and non-government sectors a different picture emerges as 31% of the non-government sector ranked competitive advantage first when considering the importance of knowledge in its contribution to the achievement of business goals from a possible eleven choices. In strong, but not surprising, contrast only 12% of the government sector ranked competitive advantage as being the most important motivating factor for KM in their business. Simultaneously the overall totals ranking for success (32%) and improving efficiency (36%) again shows different emphasis by each sector as presented in figure 6 below.

The government sector environment that is described through ranking the importance and uses of knowledge in the Australian survey data suggests that the Australian market seems to be less concerned with product development and innovation than with responding to market needs more efficiently and more effectively than their current performance. In particular, while the Australian non-government sector is pursuing competition, the government is pursuing efficiency in their operations.

This confirms Peter Drucker's (1964) view who, in his discussion of the contribution that knowledge makes to an organisation commented that what makes "a business distinct and what is its peculiar resource, is its ability to use knowledge of all kinds - from scientific and technical knowledge to social, economic and managerial knowledge" (Drucker 1964, p.5).

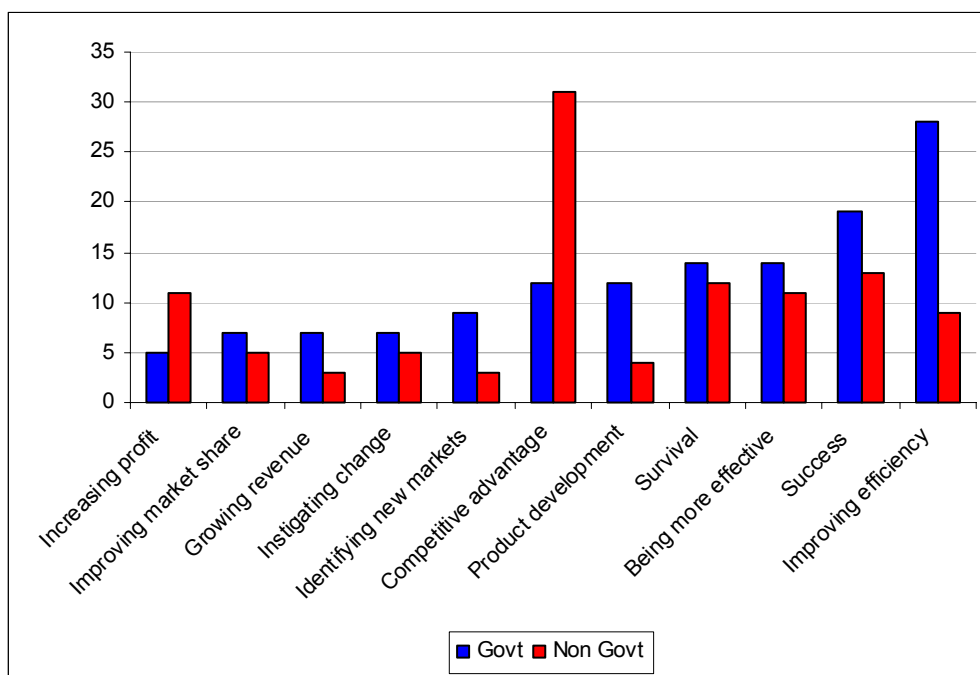


Figure 6: Importance of knowledge to business goals in Australia

New Zealand responses to this issue are shown in Figure 7. Nearly 40% of respondents indicated that KM was of high importance to their organisation's success, while only about 13% considered it important to the survival of their organisation. Overall, rankings given by both central and local government indicated recognition of the need for KM in order to survive. Responses from the private sector however did not demonstrate this recognition, and 'surviving' was ranked the area where knowledge is of least importance.

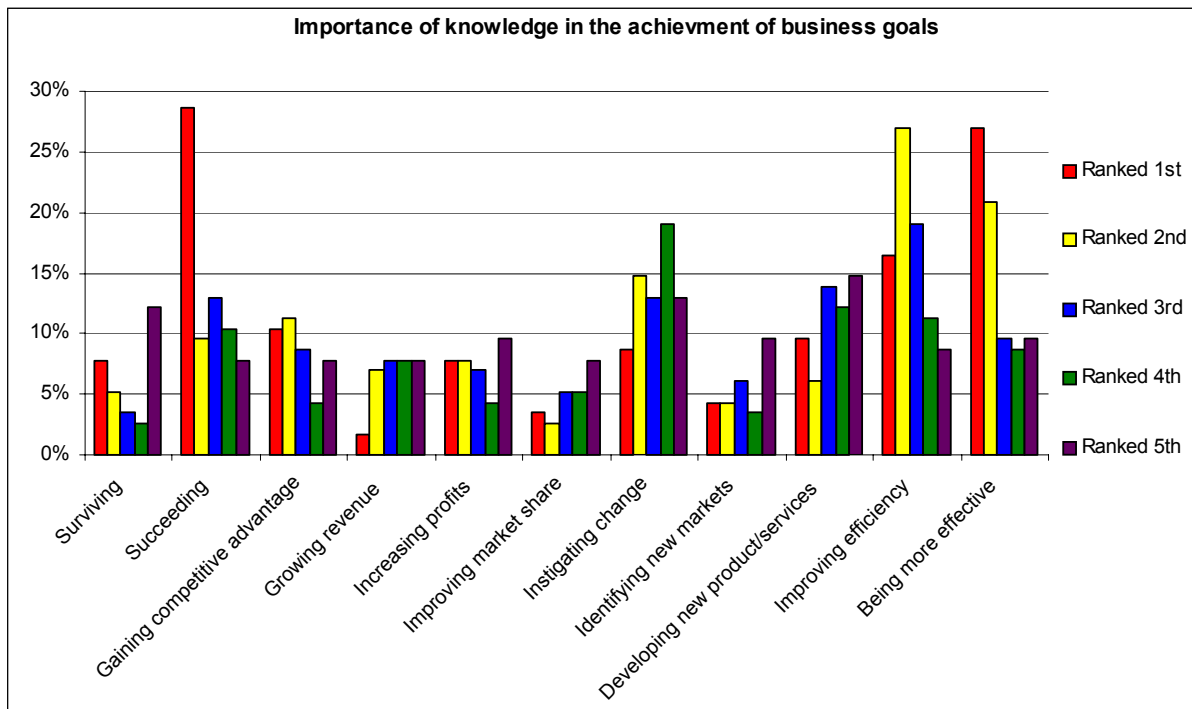


Figure 7: Importance of knowledge to business goals in New Zealand

Almost 65% of respondents considered that KM was of high importance in regards to financial goals (growing revenue, improving market share; increasing profits and improving efficiency).

CONCLUSIONS AND FUTURE RESEARCH

The high response rate from the government sector in New Zealand of 70% of the total compared to a response rate of 35% in Australia suggests several explanations. The higher response rate by government organisations in New Zealand may be attributable to the positive impact that government policies have had on their own sector in stimulating organisational interest in strategies to manage knowledge. It may be also attributable to additional funding by government to stimulate organisational interest in strategies to manage knowledge. Conversely it may be that these same organisations felt disproportionately obliged to respond due to these same factors compared to the response rates from the non-government sector when contrasted with the response rates by industry sector in Australia.

There has been a marked increase in the overall numbers of knowledge workers in the workforces over the last five years in Australia as well as in New Zealand. While in New Zealand the government has acted to lead the movement to manage knowledge as part of the initiative to strengthening the country's competitive economic role this is not the case in Australia. In this context, it could be suggested that the New Zealand government is acting as a knowledge leader in the same way as executive management to sponsor and actively promote this activity. Australian governments are paying lip service to this same attribute but not acting to lead the movement. It can be implied that where the responsibility belongs to everyone but there is no direct leadership, the ongoing development of a strategy may be severely compromised. The statistics data that show in so many entities KM as everyone's job or that no formal role exists and the implication of this arrangements in all industry sectors in Australia and New Zealand requires further research.

A positive link between innovation and KM has been suggested by Nonaka and Takeuchi (1995); Darroch and McNaughton (2002) and others (Owens, Wilson and Abel, 1996; Prusak and Davenport, 1997; Probst, Raub and Romhardt, 1999; Dixon, 2000). However, only just over 15% of respondents in the New Zealand survey ranked the relationship of KM to 'developing new products and services' as being of high importance. Similarly the Australian respondents do not rank product development or innovation as being a high priority in relation to knowledge use. It is of particular note when other case studies and theoretical literature describe the role of KM as an effective management tool in the transfer of knowledge to support product development, increase efficiencies, identification of new market opportunities and hence growing revenue (Owens, Wilson and Abel, 1996; Prusak and Davenport, 1998; Dixon, 2000). The respondent group in either Australia or in New Zealand did not indicate this. This is a result that requires further research, given the fact that New Zealand businesses have been criticised as lacking innovation (Clark, 2002).

The preliminary findings of this research indicate that there is a high level of interest and activity in KM in Australia and in New Zealand. While there are some differences, there are a greater number of similarities. Thus this comparative work will provide a creditable source of future collaboration and research.

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