



The State of Competitive Intelligence within New Zealand Private and Public Sector Organisations

*A comparison study of Competitive Intelligence
within New Zealand in 2009*

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Preface

I would like to acknowledge and thank G S (Sean) Trengrove and J B Vryenhoek for their 1997 New Zealand Competitive Intelligence study.

I would like to acknowledge and thank my supervisor, William Yu Chung Wang PhD

All the information relating to competitive intelligence in this research report was referenced from sources available in the public domain.

I certify that except as noted above, this report has been created by Tony Skerrett.



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Abstract

Globalisation and rapid technology advancements are having a profound change on the competitiveness of local and global markets, and shaping the New Zealand marketplace.

New Zealand companies are not just competing against other New Zealand companies, but are also competing against global companies. Competitive intelligence is critical for informing vital business decisions and potentially for the viability of a company.

The purpose of this study was to research the state of competitive intelligence within the New Zealand private and public sectors and benchmark them against a similar study by Trengrove and Vryenhoek (1997).

This research report further explores the relationship between knowledge management and competitive intelligence by examining the culture of competitive intelligence in an information (knowledge) economy through the analysis of competitive intelligence attitudes (Rouach and Santi 2001), 'Strategic Protection Factors (Rothberg and Erickson, 2005), value and mindset of managing knowledge, and competitive intelligence within New Zealand companies.

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The aim of this research project is to compare and benchmark the current state of competitive intelligence within New Zealand's private and public sectors environment against Trengrove and Vryenhoek study (1997) using explorative research.

Trengrove's and Vryenhoek's study (1997) identified a number of key findings:

- New Zealand companies and local government believed that their competitive environment was very challenging and that in 1997, believed that it would be more challenging in the future.
- The average expenditure on competitive intelligence by companies with revenues of New Zealand \$ 20 million or more was less than 0.05%.
- The prominent source of gaining competitive information was word of mouth and personal contacts. A general failure to use all sources of information in a comprehensive and co-ordinated manner was detected.
- In 1997, forty-six percent of the respondents indicated that they had plans to improve their competitive intelligence processes.
- Very few organisations understood the need and importance of protecting their strategic information by using counterintelligence methods.

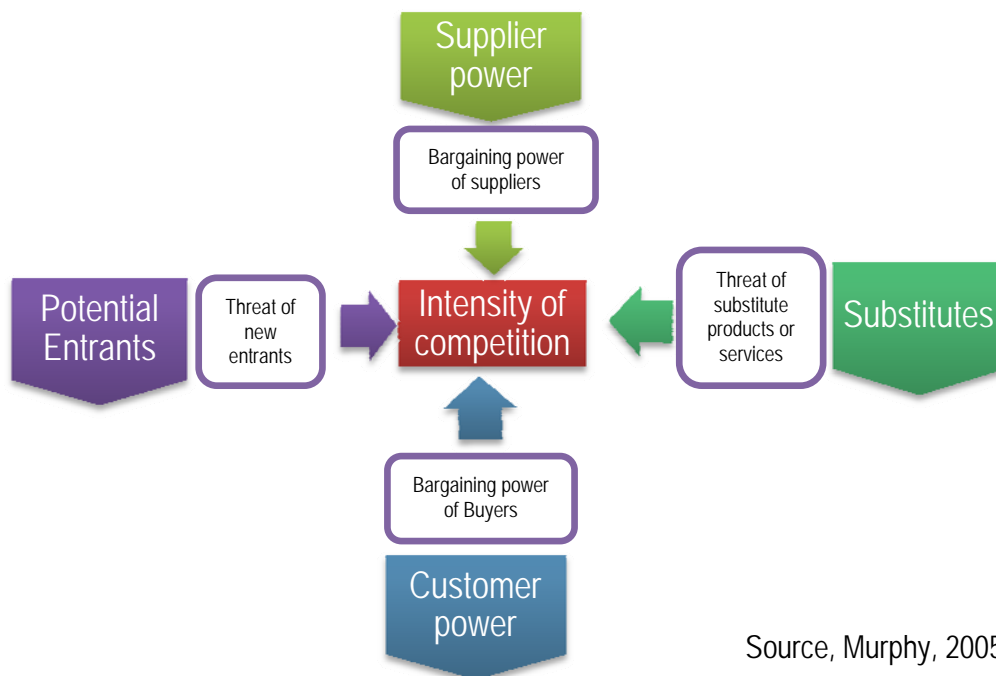
As the business and economic environment has changed to what is now defined as the 'Information Age', this research examines the above findings to determine if these trends still exist and to provide a comparison to Trengrove's and Vryenhoek's competitive intelligence study (1997).

The role of Competitive Intelligence

While competitive intelligence has its origins based on Military Intelligence, in a corporate context, good or bad intelligence may not result in a 'life or death' situation in a time of war, but will determine if a company or organisation is successful and affluent. Murphy believes that for a company to maintain its success, it needs intelligence to find suppliers, source and raise capital, win customers and fend off rivals (2005).

To understand these values, Professor Porter's 'five forces' model have informed the analysis of the industry and the players (i.e. companies and customers), and how they operate in a competitive environment (Murphy, 2005). Porter's model (Figure 1.0) provides a good insight into this environment by reducing the myriad of factors and provides a model which can be easily followed and can enable businesses and competitive intelligence practitioners to quickly view their competitive landscape.

Figure 1.0 Porter's Five Forces



Source, Murphy, 2005, pg 23

Further expansion of these factors has been provided in the 'Internal & External Business Drivers' section of this report.

Sambamurthy and Subramani, also states that knowledge is a fundamental asset for companies in an increasingly knowledge-based global economy (2005) and links knowledge to competitive intelligence, by gathering and turning raw knowledge data into intelligence through the process of applying judgment & wisdom (Murphy, 2005). Competitive intelligence can provide companies / organisations with an early identification of risks and opportunities in the market before they become obvious.

Competitive Intelligence Defined

While some businesses may view competitive intelligence as merely “keeping an eye on our competitors”, the evidence indicates that competitive intelligence is much more and requires business discipline and applied knowledge management. Competitive intelligence can enable the business/organisation to maintain a sustained advantage.

To assist with defining competitive intelligence, a number of leading competitive intelligence practitioner’s beliefs and definitions are examined:

Competitive intelligence is the key fundamental of any business strategy and is the method of turning raw data into valuable information, turning that valuable information into strategy, and turning strategy into business performance which can maintain a company’s advantage (Agarwal, 2006).

Nonaka states that knowledge and its strategic use is one sure source of sustained competitive advantage for the organisation (1991), therefore competitive intelligence can create the ability to develop, use, retain and transfer knowledge to become the lifeblood for the organisation.

Luecal and Dahl believe that competitive intelligence is information and knowledge to be gained and used to formulate strategies to maintain effective dealing with three factors: competitors, customers and regulators (1995).

Another definition is that ‘competitive intelligence’ is a systematic programme for gathering and analysing information about a competitors’ activities and general business trends to further the company’s own goals (Kahaner, 1996).

Each has merit. However, Kahaner’s definition is simple and direct and will be used for the remainder of this research report.

“The next information revolution is well under way... It is not a revolution in technology, machinery, techniques, software or speed. It is a revolution in CONCEPTS ...” (Drucker, 1998).

The relationship between knowledge management and competitive intelligence

Without argument, we are now in the Information Age, with more than 50 percent of Gross Domestic Product (GDP) within major OECD economies now based on the production and distribution of knowledge (The Knowledge Economy, 1999). Within a knowledge economy, the primary asset and the source of competitive advantage is a company's / organisation's ability to effectively manage knowledge (Murphy, 2005).

Furthermore, Drucker mentions that in a knowledge economy, it makes sense that competitive advantage would be gained from the specialised knowledge and skills from that labour force (1991).

As competitive intelligence involves the use of public sources of information to develop intelligence data on competition, competitors and market environments (McGonagle and Vella, 2002), this data can be used as a knowledge asset and is a subset of the knowledge management process (Agarwal, 2006).

Santosus and Surmacz (2001) states *“Effective Knowledge Management is critical because in today's information-driven economy, companies uncover the most opportunities and ultimately derive the most value – from knowledge assets rather than physical assets”* (as cited in Agarwal, 2006).

While these statements are valid, Rothberg & Erickson point out that, if unmanaged, there can be conflict between knowledge management and competitive intelligence values (2005). The fundamental value of knowledge management is to leverage that knowledge through learning and sharing with any and all individuals within and/or outside collaborative companies. However, the core objective of competitive intelligence is to gather and analyse information about competitors' activities, to further a company's goals. This would imply that any knowledge obtained should be more guarded and/or strategically restricted to limited personnel to reduce the risk of losing this competitive knowledge (Rothberg & Erickson, 2005).

One of the goals of this research is to explore the knowledge and competitive intelligence relationship further and to determine the knowledge management and competitive intelligence value within the New Zealand market place. Further analysis of the knowledge management and competitive intelligence relationship can be found in the *‘managing competitive intelligence in a knowledge economy’* section of this report.

Objectives of the research

As observed by Trengrove and Vryenhoek (1997), New Zealand companies/organisations misunderstand and underestimate the value of competitive intelligence. Additionally, the research showed there was a degree of complacency among New Zealand organisations to address possible competitive threats and change in their environment (1997, pg 8). Their key findings were:

- *New Zealand companies and New Zealand local government believed that their competitive environment was very challenging and that it was likely to become more challenging in the future.*
- *The average expenditure on competitive intelligence by companies with revenues of NZ\$ 20 million or more was less than 0.05%.*
- *The prominent source of gaining competitive information was word of mouth and personal contacts. A general failure to use all sources of information in a comprehensive and co-ordinated manner was detected.*
- *In 1997, forty-six percent of the respondents did indicate that they had plans to improve their competitive intelligence processes.*
- *Very few organisations understood the need and importance of protecting their strategic information by using counterintelligence methods.* (Hawkins, 2004)

Trengrove's and Vryenhoek's study also recommended that New Zealand companies/organisations should (Hawkins, 2004):

- *Develop integrated and comprehensive competitive intelligence processes that are linked to strategic planning systems.*
- *Integrate existing systems throughout the company with a centralised system for coordinating information.*
- *Widen the focus of information gathering using a fuller range of information sources.*
- *Allocate adequate resources to ensure effective competitive intelligence activities.*

The objective of this research is to conduct explorative research on the state of competitive intelligence within New Zealand's private & public organisations and to benchmark the current competitive intelligence practices & environments against Trengrove and Vryenhoek competitive intelligence study (1997). To achieve this, the following question is used to analyse and explore the survey responses:

“Have New Zealand Private and Public Sector Organisations developed a better understanding of Competitive Intelligence as a valuable business resource?

Or does it remain undervalued and immature?”

The purpose for undertaking a literature review is not only to gain a level of topical, methodological knowledge and expertise, but to also find any potential gaps in the literature that could assist with benchmarking the current state of competitive intelligence within New Zealand.

To fully understand this question (*“Have New Zealand Private and Public Sector Organisations developed a better understanding of Competitive Intelligence as a valuable business resource or does it remain undervalued and immature?”*) and the current mindset of competitive intelligence within the New Zealand Organisation environment, this research also explores a number of other relating factors:

- The theory of competitive intelligence.
- Competitive intelligence Culture.
- Managing in an Information/Knowledge economy.
- Internal and External Business Drivers of competitive intelligence.
- Legal and Ethical Aspects of competitive intelligence.

It is without a doubt that there is a wealth of literature covering competitive intelligence and the above relating factors, however, much of the current competitive intelligence literature is written by Americans or overseas authors, with very little related to the New Zealand environment. This has been highlighted by Brent Hawkins, an Auckland University of Technology lecturer, who completed a search of New Zealand academic databases using the keywords ‘competitive intelligence’. His search only identified six studies since 1991 (Burmester, 1991; Kearns 1997; Trengrove & Vrvyenkoek, 1997; Fourie, 1998; Ng 1999, and Pidgeon, 1999, as cited in Hawkins, 2004). Of these, it was only the Trengrove & Vrvyenkoek and Fourie studies that focused on competitive intelligence. While both these studies have merit, Trengrove & Vrvyenkoek study (1997) provides a more in-depth analysis on the competitive intelligence topic and will be used as the basis for the remainder of this report.

The theory of competitive intelligence

Often competitive intelligence is thought of as merely 'keeping an eye on our competitors. Unfortunately this approach is very limited and could lead a company/organisation to establish a very narrow view of the competition and environmental factors (Murphy, 2005, pg 4). For example, in the mid-1980's IBM found its personal computer market-share becoming eroded by Compaq's low cost, but equally good quality machines. Both companies started to produce more sophisticated computers and focused on each other's moves rather than their customer preferences. By the end of the 1980's, other rivals (such as Dell) capitalised on the technology gains made by IBM and Compaq by introducing lower pricing and more user-friendly computers which satisfied customer demands (Kim and Mauborgne, 1997).

Another example of this narrow view was when Callaway seized a market opportunity by establishing a new marketing concept of introducing a bigger head golf driver called the 'Big Bertha'.

Callaway had noticed that there was little that distinguished products and that golfers seem to have a desire for a bigger head driver to improve their game. Other competitors remained focused on the current environment, i.e. status-quo of golf club design and production.

Competitive intelligence is not just limited to researching and benchmarking other companies in order to outperform them (Murphy, 2005, pg 6). Competitive intelligence incorporates all of the environmental elements that could damage or enhance a company's revenue and profits.

To understand companies'/organisations' attitudes towards competitive intelligence, Rouach and Santi (2001) created five attitude categories on how companies conducted and viewed competitive intelligence. These categories were based on a study of US and European companies completed in 2001. The five categories (*Sleepers, Reactive, Active, Assault and Warrior*) are:

- *Sleepers*
Applies to companies who have no deliberate competitive intelligence activity and are managed by passive managers who believe they have all the information to operate a business. They are classed as a 'closed shop' environment (i.e. do not collaborate or gain market insights outside their company).
- *Reactive*
Applies to companies that have no competitive intelligence operations, however, these companies will undertake some ad hoc competitive intelligence exercises when challenged for market share by a competitor. Rouach and Santi found that most French small – and medium-sized enterprises (SMEs) were in this category (2001).

- *Active*

Applies to companies who have a permanent competitive intelligence function and who are active in anticipating their opportunities and threats rather than reacting to them. Under this category, these companies would have modest resources undertaking competitive intelligence activities, but would have no developed structure to handle the information obtained. Interestingly, Rouach and Santi (2001) found that most large French companies and American SMEs were within this category and their study suggests that some large French companies could suffer a competitive disadvantage due to the higher levels of awareness of competitive intelligence from the smaller America rivals.

- *Assault & Warrior*

The last two categories are the Assault & Warrior and these apply to companies who take competitive intelligence very seriously and devote considerable resources to this discipline. At the top end of the scale, the warrior class companies conduct 'war room' exercises to investigate extensive patent searches, searches for counterfeit versions of their products and market gain & lost scenarios using competitive intelligence as a business practice tool.

Examples of companies under this category include AT&T, Hoffman Laroche, L'Oreal, Mitsubishi and Shell (Rouach and Santi, 2001).

Following on from Rouach and Santi attitude categories (2001), Wright, Picton and Callow (2002) also identified similar competitive intelligence types when they conducted an empirical study in competitive intelligence types in the UK. For example:

1. Many companies were either unaware of competitive intelligence or regarded it as a non-viable exercise
2. Most the companies/organisations studied had implemented competitive intelligence, but at a very low level and lacked the commitment or resource (resulting 'ad hoc' and reactive business actions).
3. Only companies which exceed £10 million per annum implemented developed competitive intelligence frameworks.
4. While these companies had implemented competitive intelligence frameworks, the companies only provide limited resources. This can result in unstructured competitive intelligence processes being used and unclear business goals.

While both these studies suggested that Europe is lagging behind the US corporate sectors, Murphy provides some insights which could be used by European companies to overcome these shortfalls and provides the following recommendations (Murphy, 2005 pg 15):

- Competitive intelligence is part of everyone's job description:
Every member of the company/organisation should obtain or seek out useful intelligence to contribute to the company's competitive intelligence efforts.

- Competitive intelligence is identified and implemented as a separate business unit or function:
A company/organisation ensures that competitive intelligence follows a structured framework and formal reporting structures are in place. For example, the Proctor & Gamble competitive intelligence director takes charge of gathering of intelligence and reports directly to the company's CEO. (Stephens, 2007)

- Strategic and Tactical competitive intelligence:
While strategic competitive intelligence can inform senior management of the potential risks and rewards, the tactical aspects could also be used to rally the company's employees into implementing any rapid changes into their business environment through the insights gained by competitive intelligence.

Competitor Analysis Framework

To assist with a strategic and tactical analysis, Bernhardt (1993) has created a framework for competitor analysis which can provide a greater overview than Porter's five forces model (figure 1.0 on page 5). This framework has been defined in figure 2.0 and provides a good insight into the environment from a competitor's 'point of view'.

Figure 2.0 Competitor Analysis Framework



While both, Porter's approach and Bernhardt's framework can support the strategic decision making process, they cannot replace sound judgement or logical thinking, from senior management questioning the current situation to determine "What are our goals and what is missing to achieve them?" (Bernhardt, 1993)

To assist with this goal, the most common competitive analysis technique is the SWOT analysis which can be used as a means to capitalise on strengths, address weaknesses, exploit opportunities and minimise threats (Stephens, 2007).

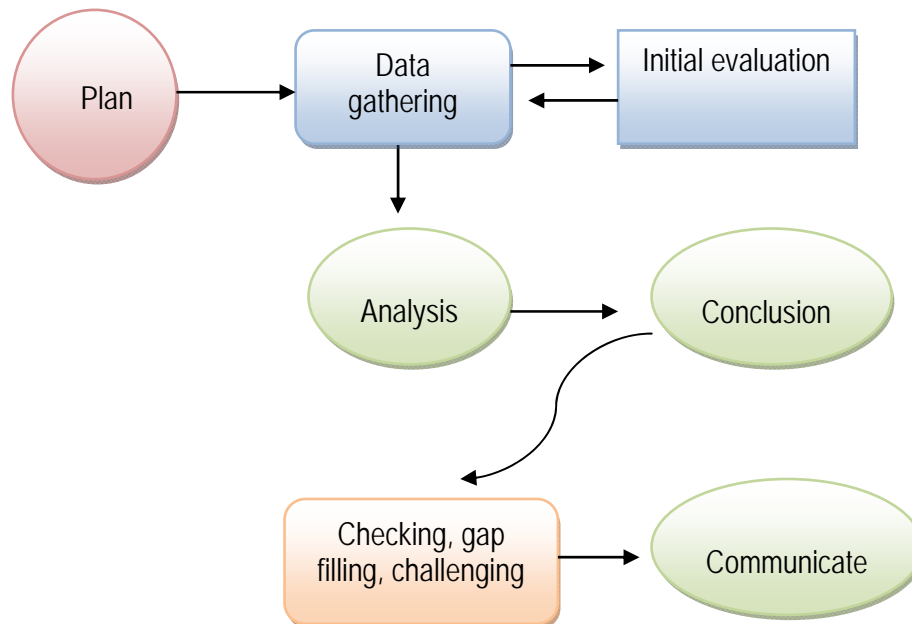
Originally pioneered by Ken Andrews in 1971, SWOT analysis is a good tool for identifying internal Strengths, Weaknesses, external Opportunities and Threats and measuring them against competitor's goals, for example (Stephens, 2007, pg 8):

- Internal Strengths with External Opportunities
- Internal Weaknesses relative to External Opportunities
- Internal Strengths with External Threats
- Internal Weaknesses relative to External Threats

Competitive intelligence channels and sources

In partnership with a SWOT analysis, the process of creating actionable intelligence (i.e. competitive intelligence) follows a number of stages with planning and initial data gathering. This process is cyclical and, therefore, the process requestor may generate further work after a product is finished. An example of the actionable intelligence cycle is outlined in Figure 3.0.

Figure 3.0 Actionable intelligence cycle



Source Murphy, 2005

The actionable intelligence cycle is defined by Murphy and is based on the US Central Intelligence Agency model (2005), which identifies five key elements in the above cycle.

1. *Planning and direction:* Decide on resources and intelligence strategies to apply.
2. *Collection:* How raw data is gathered and stored to form a knowledge base.
3. *Processing:* The unformed data retrieved is organised into a structured body of information.
4. *Analysis:* This category information will be used to manage the alerts, conclusions and recommendations based on the information obtained.
5. *Dissemination:* The findings will be presented to the end-users.

Bernhardt states that *“wherever money is exchanged so is information”* (1993) and there appears to be limitless access to this competitive information. McGonagle (cited in Trengrove and Vryenhoek, 1997, pg 26) provides an example list of sources and possible techniques which could assist with the ‘data gathering’ phase of competitive intelligence. This list has been detailed as Table 3.1.

Table 3.1 Sources of Competitive Information

Sources of Competitive Information	
<p>Government: agencies, departments, local government reports;</p> <ul style="list-style-type: none"> ▪ Courts ▪ Patent and trademark applications; permit/planning applications <p>Specialised interests: academics and academic resources, publications, studies, research centres;</p> <ul style="list-style-type: none"> ▪ Consumer and advocacy groups, product tests and comparisons, publications, studies. ▪ Experts, consultants, security analysis, expert witnesses. ▪ Trade associations, publications and membership directories, studies, meetings. <p>Private Sector: business information services, credit reports;</p> <ul style="list-style-type: none"> ▪ Chambers of commerce. ▪ Competitors. ▪ Customers, suppliers, retailers and distributors of the target firm, advertising agencies, consultants, investment and commercial banks, agents, brokers. <p>Client employees:</p> <ul style="list-style-type: none"> ▪ Sales/marketing/planning/engineering/purchasing, former employees of target firms. ▪ Target company; employees, catalogues and price lists, in-house publications, press releases and promotional materials, products, speeches, annual reports and other filings. <p>Media:</p> <ul style="list-style-type: none"> ▪ Business newspapers, magazines and wire services, advertisements, articles and reporters. ▪ Directories and reference aids. ▪ Local and national newspapers; advertisements, articles, reporters. Technical journals; articles and authors. ▪ Trade papers and journals; articles, advertisements, reporters, marketing studies. ▪ Financial periodicals. ▪ Security analysis reports. 	
Techniques	Explanation
<ul style="list-style-type: none"> ▪ Obtaining information from recruits and competitor's employees. ▪ Obtaining information from people who do business with competitors. ▪ Obtaining information from published material and public documents. ▪ Obtaining information by observing competitors and physical evidence. 	<ul style="list-style-type: none"> ▪ Job seekers eager to impress. Informal contact by specialists at conferences and trade shows. ▪ Key customers who are dealing with your competitors in different markets. For example, engineers on loan to a company. ▪ Analysing situations vacant advertisements. Department of Statistics information about an organisation. ▪ Buying competitors products. Benchmarking by analysing the best features of a competitor's product.

Competitive Intelligence and Culture

This section examines competitive intelligence and the relationship of culture. Culture plays a very important role and can be the main inhibitor or the promoter to competitive intelligence. To understand this relationship, the cultural focus and acceptance of competitive intelligence is examined by exploring two different country's mindsets (New Zealand and Japan) and examines each country's historical culture, its government's support of competitive intelligence and academic institutes towards fostering competitive intelligence.

Historical Cultures

New Zealand was discovered and colonised by the British and followed an English culture & values society. Unlike Japan's strong group behaviour of gathering and sharing information culture, New Zealand has maintained strong ties with the English system (decision making, financial systems and knowledge sharing), thus limiting the need for knowledge dependence. Only in the late 1990's, has competitive intelligence been present as a concept (Hawkins, 2004).

Compared with the New Zealand culture, Japan's historical culture developed a strong group behaviour which had a history of gathering information and sharing competitive intelligence among fellow countrymen. Examples of this culture were demonstrated by rice paddy neighbours working together to obtain water resources (Kahaner, 1996). Japan believes gathering information is a noble calling and will pay dividends to people who shared this concept. In the nineteenth century, when Japan was isolated from the rest of world, Emperor Meiji established programs to gain knowledge about western cultures (i.e. business & economics) and applied these lessons ("Wakon yosa" – 'Japanese spirit and western knowledge') to improve Japanese culture. While these programs were established in the nineteenth century, these fundamentals are still being applied today. (Kahaner, 1996).

Government support

The role of CI at a government level is equally important, and Baumard (1993) believes that "Economic intelligence" is the ability of using knowledge as the basis of economic advantage and is the key element to enable a country's competitiveness. Furthermore, as the world develops and international relations shift from 'geo-politics to geo-economics', the competitive advantage of countries lie in their ability to strategically manage their knowledge, administrations, industries, people, economic wealth and social welfare.

New Zealand Trade and Enterprise provides funding (consultant grants of up \$50,000) to improve companies' 'capability and international competitiveness', which can be used to obtain expertise and assistance to develop international business projects (NZTE, 2009). However, there appears to be no

local agencies offering competitive intelligence as a service or applying competitive intelligence in New Zealand government agencies (Hawkins, 2004).

Japan's Government heavily supports their economy by using and creating awareness of the importance of competitive intelligence and activity establishing competitive intelligence networks within their country. Walter Barndt (1994) documents that leading Japanese agencies (i.e. Trade & Industry and External Trade, Ministry of International Trade and Japanese External Trade Organisation agencies), businesses, banks and advertising agencies all work together and share competitive advantage knowledge (competitive intelligence) to promote business growth and competitiveness. This form of cooperation can be classed as 'Intelligent Intrusiveness', which is a series of actions, like sending agents to the Competitors trade-shows or 'subscribing to monitoring services' (Baumard, 1993).

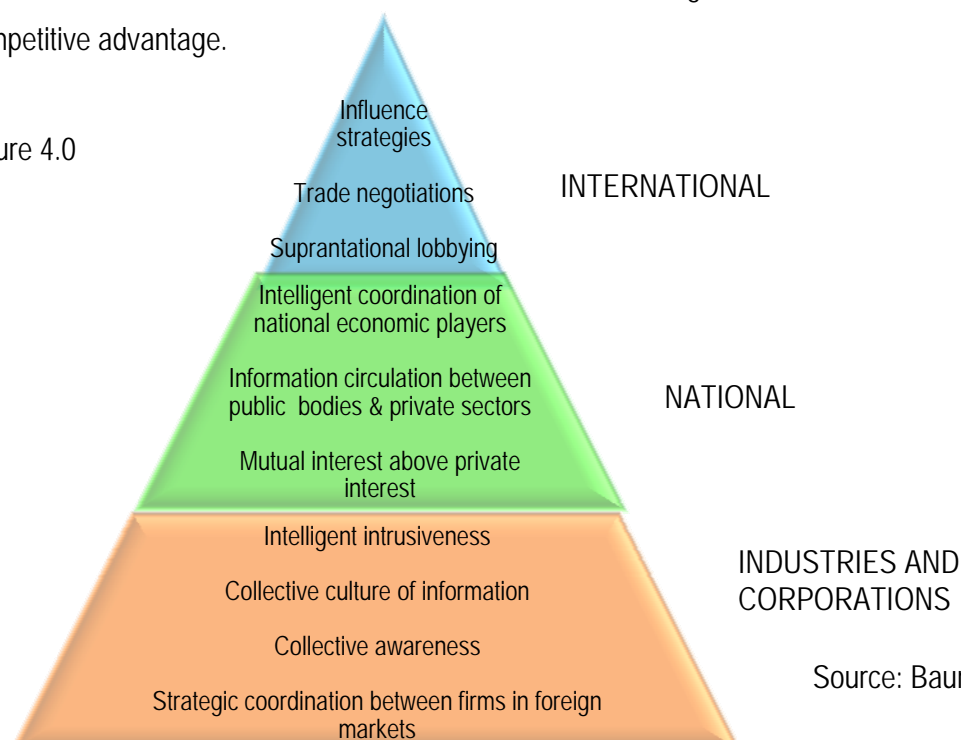
The Japanese Government has also amended its Law of Unfair Competition to protect its core business sectors (manufacturing, marketing practice and/or technical/business information) by prohibiting the acts of obtaining, distributing or using trade secrets (Blenkhorn & Fleisher, 2005), while promoting information intelligence gathering by establishing the Japanese External Trade Organisation as a global government sponsored competitive intelligence agency (Kahaner, 1996).

In summary, it is through these relationships that Japan is able to create competitive advantage by applying:

**"INTELLIGENT COORDINATION + INTELLIGENT INTRUSIVENESS
= NATIONAL COMPETITIVE ADVANTAGE"** (Baumard, 1993)

Figure 4.0 illustrates Baumard three levels of economic intelligence which can assist with a countries competitive advantage.

Figure 4.0



Source: Baumard 1993, pg 5

Tertiary education institutes

As mentioned in previous sections of this report, in 1991 Hawkins (2004) was only able to find evidence of six competitive intelligence studies completed within New Zealand and of these it was only the Trengrove & Vryenhoek's (1997) and the Fourie (1998) studies that focused on 'competitive intelligence'. Both these studies are academically unpublished.

To assess the state of competitive intelligence education and awareness by leading tertiary education institutes within NZ (Lincoln, Auckland, Canterbury, Massey, Otago, Waikato and Victoria Wellington universities) for this report, a key word search of "competitive intelligence" on each of the University internet sites was undertaken.

The only universities that returned a result of programs available were:

University of Auckland:

- A review of competitive intelligence was offered as part of the BBIM–Information Management 294 paper.
- A two day short course, titled "Strategic Marketing of High Technology Products and Innovations (Auckland University, 2007).

Massey University (Canterbury):

- A one day short course, titled" Wielding the Power of the Internet for Market Research and competitive intelligence (Massey University, 2007).

Victoria University of Wellington:

- Competitive intelligence as a subject was offered in INFO 560 & MMIM 582 papers, with a study duration of 12 weeks in 2007 (Hawkins 2007). However this course is no longer being offered as part of the Victoria University of Wellington Masters of Information Management programme.

Similarly to the New Zealand search of competitive intelligence in universities, a sample of ten leading Japanese University sites (Ward, 2007) were assessed for competitive intelligence subjects being offered.

- Hokkaido, (2007)
- Keio, (2007)
- Kobe, (2007)
- Kyoto, (2007)
- Kyushu, (2007)
- Nagoya, (2007)
- Niigata, (2007)
- Osaka, (2007)
- Tohoku, (2007)
- Tokyo Institute of Technology, (2007)

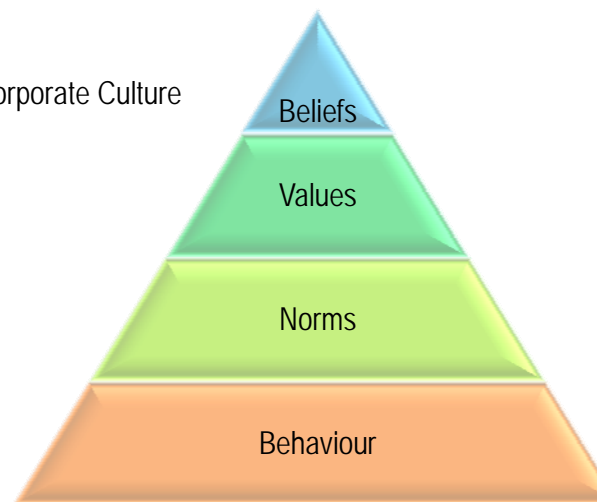
All of the Japanese universities include competitive intelligence as part of their tertiary education programs and core subjects. Interesting to note, that these universities have expanded the role of competitive intelligence into other non business education studies (for example Robotics, technology design etc.), demonstrating that Japanese universities understand the importance and the role of competitive intelligence within their businesses and cultural networks.

Corporate Culture

A major shortfall of companies undertaking competitive intelligence is that competitive intelligence analysts only examine the competitor's office locations, senior management structure, financial data and do not measure its culture or interpersonal politics (Murphy, 2004, pg 197). Furthermore, Murphy states that corporate culture is like love, intangible and difficult to define, but is incredibly powerful (2004).

Corporate culture not only includes its internal rules and traditional ways of working, but also includes the mindsets and assumptions of the staff within that organisation. Kotter and Hesketh (1992) have defined four key elements (*Beliefs, Values, Norms, and Behaviours*) of a company's culture and how they are interconnected. This is portrayed in Figure 5.0

Figure 5.0 Elements of a Corporate Culture



Source: Murphy, 2005

The following description of each element is useful in understanding its relevance to this research:

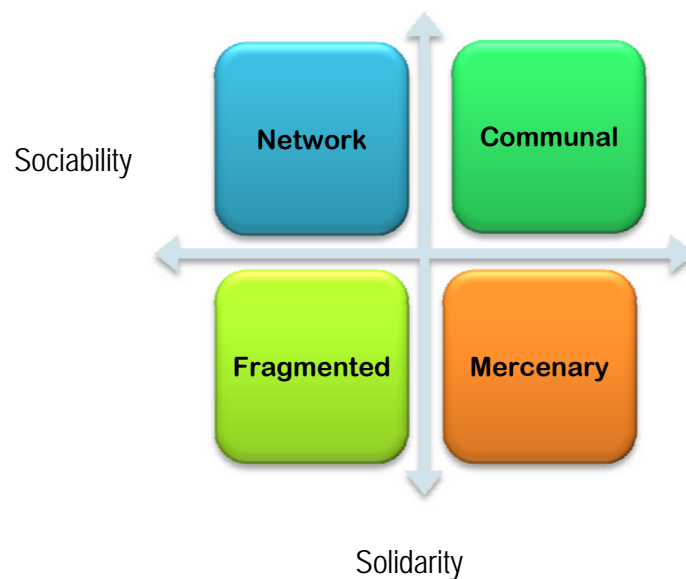
- *Beliefs*: Can be described as the shared view of the company's employees on how they perceive their company/organisation, their company purpose and how external relationships are maintained.
- *Values*: Describes the priorities given to a company's different objectives and their principles and beliefs. For example, maintaining a high value of loyalty within their staff and customers and, how they form and maintain these relationships when interfacing.
- *Norms*: Can be described as policy and operating guidelines which govern how a company conducts its business. These principles are based upon its beliefs and values. For example "We will refund our customers their money for unused goods or dissatisfied with their purchase and in return they must provide a proof of purchase" and new employees joining the company are taught to accept and abide by these norms.
- *Behaviours*: Describes employees' behaviours and how they follow a company's policy or order. While most company employees usually conform to the company norms, some employees may refuse to follow a company's order and may be removed either by persuasion, pressure or formal dismissal.

A company's culture, beliefs and values are often communicated in corporate mission statements, marketing campaigns and in senior management speeches and/or articles and can be used to assist with a competitive intelligence analysis.

Another viewpoint towards understanding and defining a company's culture is the "Sociological matrix of an organisational culture" (Goffee and Jones, 1996). This theory believes that a company acts more like a family, local village or a sports team community. They each share similar values and beliefs (sociability and friendliness), which in turns attracts similar people to join this community. The Sociologist matrix plots the position of a company's culture by *Sociability* and *Solidarity*. Solidarity is based more upon rational calculations, for example 'what do we get out of this'. In a high solidarity company, employees 'stand shoulder to shoulder' to enable success for the group rather than an individual reward.

An example of this matrix is presented in Figure 5.1. Within this culture matrix, there are four types of principle cultures called *Network*, *Communal*, *Fragmented* and *Mercenary* (Goffee and Jones, 1996).

Figure 5.1 Sociological matrix of an organisational culture



Companies/organisations with both high sociability and solidarity elements can be described as a *communal* culture, where people are bound together both by friendship and a strong identification & commitment to the company's success. Examples of types of this model, would include 'Business start-ups', where the owners are close friends and everyone is striving hard to ensure company success. Everyone is very clear on who are their competitors and are highly motivated in trying to beat them.

When companies grow and become more mature, personal relationships become more diluted as head count increases and it becomes more difficult to maintain this environment.

Companies with a high solidarity and low sociability can be described as *mercenary*. The core focus is on achieving a common purpose, while 'getting on well together', employees are focused on getting results rather than enjoying themselves. Individual interests are subordinated to those of the company and underperformance is firmly measured and dealt with. Those working for this type of company accept these values, because the company's success will benefit their personal interest. They also have a strong awareness of competitors and have a strong desire to beat them.

The third type of culture is the *networked* which contains a high sociability, but a low solidarity. This category contains people who place greater value on loyalty to their colleagues, who are also friends rather than to the company itself. This does not mean this type of company cannot be successful, for example, Goffee and Jones believes that Unilever is a networked organisation (1996). Senior managers were encouraged to develop close personal ties through the process of internal conferences, training courses and social events. Frequently relocating young managers to other business areas and countries, this process enabled the company to understand the local markets. Unilever were able to maintain success by promoting a culture of diversity, attracting staff from wide backgrounds and nationalities and who were able to establish personal friendships with colleagues in other countries, thus enabling a support network of sharing knowledge and common themes. However by the mid 1990's, Unilever had to change its emphasis on commitment to group goals as well as personal, when fiercely challenged by highly solidarity companies like Procter & Gamble and L'Oreal (Murphy, 2005, pg 201)

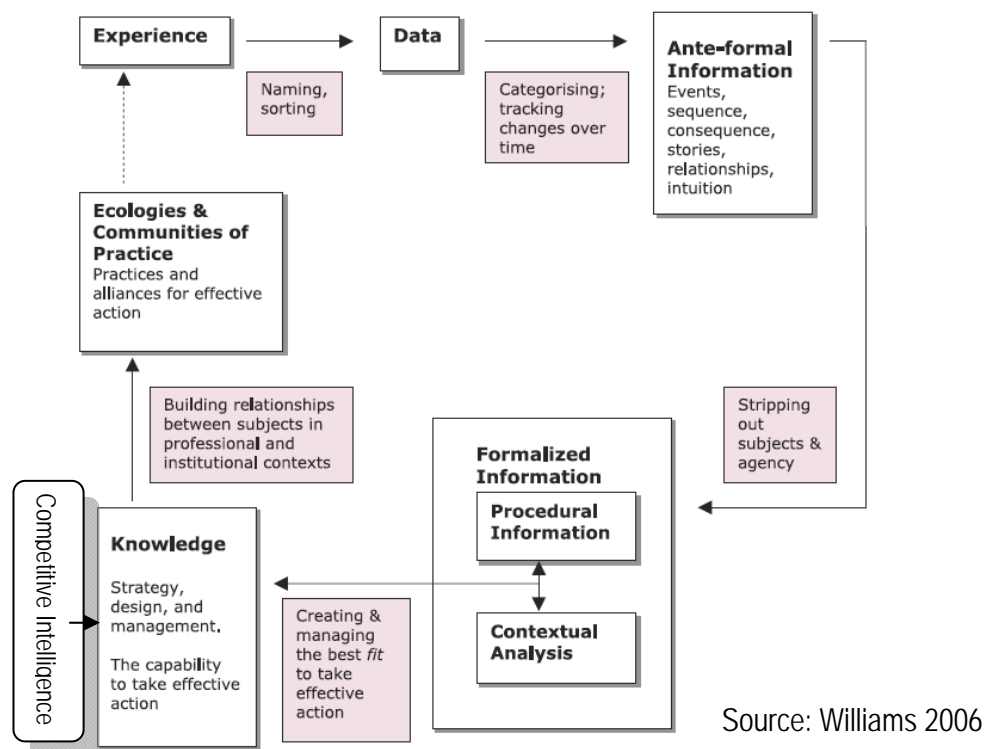
The fourth cultural category is the *fragmented* organisation, which is defined as having both low sociability and low solidarity. Contained in this category would be 'Virtual companies', where there is limited personal contact between staff and work largely autonomously. Other companies contained in this category would be legal or consulting companies where senior management (i.e. business partners) operate on their own and maintain little social interaction with work colleagues and organisational strategies.

Unhappy situations in the work environment can also impact on the culture and can move the work environment from a *networked* type culture to a *fragmented* organisation, thus creating a disharmony and dissatisfaction among employees.

Managing competitive intelligence in a knowledge economy

Knowledge is now a company's/organisations greatest asset for competitiveness in today's economy (Harrison and Kessels, 2004). Furthermore, Kessels believes that the concept of knowledge is *"the ability for an organisation to obtain relevant information, creating new knowledge with this information and then applying this knowledge to improve and renew processes, products and services"* (2001). While acknowledging the importance of the role of knowledge, the process of sharing knowledge can result in a range of threats and risks, which if not managed or controlled may result in knowledge being shared to your competitor. To understand this risk, it is important to examine William's (2006) framework for analysing and managing intellectual capital and knowledge (Figure 6.0).

Figure 6.0 Intellectual Capital Framework



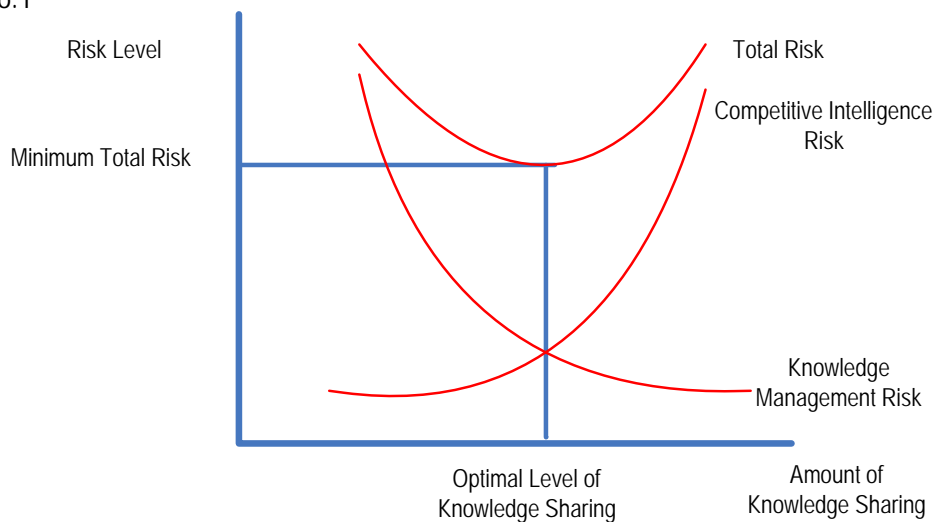
The use or gathering of knowledge is not only used to inform people or companies, it can enable a company to strategise decisions or as Saint-Onge and Armstrong states "knowledge is the capability to take effective action" (as cited in Williams, 2006). Knowledge has the opportunity to become the new currency of success and there is a greater pressure for companies/organisations to better manage their knowledge or risk losing market share/revenue to their competitors who can be better at managing their own intellectual capital.

The key risk with the knowledge management and competitive intelligence relationships is that they both have different agendas and their objectives move in opposite directions when knowledge is developed and shared. For example, Rothberg and Erickson (2005) believe that when companies/organisations establish and facilitate knowledge sharing, the knowledge management risk

(i.e. loss of knowledge) decreases when the optimal level of knowledge sharing is exceeded, as outlined in Figure 6.1.

However, the risk of competitive intelligence breaches increases (i.e. your competitors gaining access to your intelligence information) when the optimal level of knowledge sharing is exceeded. Figure 6.1 illustrates Rothberg and Erickson (2005) theory of optimal level of knowledge sharing.

Figure 6.1



Furthermore, Rothberg and Erickson (2005) acknowledge that these knowledge assets must be protected and have developed a framework called the “Strategic Protection Factor (SPF)”, to assist with understanding and measuring the knowledge management and competitive intelligence risks. The framework includes four broad scenarios and includes the following descriptions:

- *SPF 5: Low KM Risk, Low CI Risk*
Applies to industries like electrical products, insurance and air travel where there is little knowledge management and competitive intelligence risk. Generally knowledge is very individual and is difficult to share within the company or unintentionally with competitors.
- *SPF 15: High KM Risk, Low CI Risk*
For organisations who have innovation but are typically not scientific or technological innovative. While operations, marketing and sales knowledge is important and needs to be shared, these organisations are better able to protect their knowledge assets as it is very specific to them. For example Microsoft, Coca-Cola and big accounting firms would fit this category.

Knowledge is shared widely across locations, people and functions and due to the nature of being particular, any knowledge gained by a competitor may ‘not fit within their environment’ because it is too specific, thus resulting in a lower competitive intelligence risk.

- *SPF 30: Low KM Risk, High CI Risk*

Applies to organisations who find knowledge to be less critical to their success. While they may be innovative, their new products/processes are often too easily copied. Generally these organisations would range from auto and computer manufacturing to telecommunication service providers.

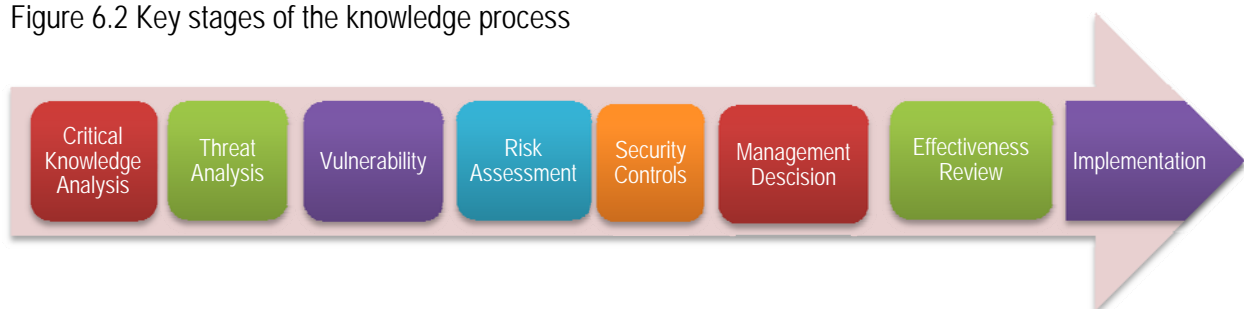
- *SPF 45: High KM Risk, High CI Risk*

For organisations where developing and sharing knowledge is imperative for competitiveness and at the same time competitors are very interested in their proprietary knowledge.

Often these organisations have a strong Research and Development, advanced manufacturing and/or service operations which supply highly complex/technology products and solutions. An example of this industry would be pharmaceuticals where they are required to supply documented knowledge to the FDA for approval. Products are often protected and trademarked, but knowledge is not specific to the particular company. So knowledge is shared widely, resulting in a high knowledge management and competitive intelligence risk.

Now that we have explored Rothberg and Erickson's (2005) "Strategic Protection Factor (SPF)" to understand and measure the knowledge management and competitive intelligence risk, Marson's (2006) key stages of the knowledge process for assessing and managing the risks of critical knowledge when leaving the organisation are now reviewed. This process has been displayed in Figure 6.2

Figure 6.2 Key stages of the knowledge process



Critical knowledge analysis: The first stage includes identifying and reviewing the company's critical knowledge, with the objective of understanding what knowledge might be targeted and its value.

Threat analysis: The next stage is to identify and review the threats which will assist with retaining the critical knowledge within the company. These threats could range from other competing companies, activists, pressure groups or even foreign government agencies.

Vulnerability analysis: The third stage identifies weaknesses in the company's current capabilities in protecting their knowledge and information. This stage also includes the assessment or collection techniques that might be used, for example, legal and illegal, ethical and unethical.

Risk Assessment: This stage gathers the knowledge and information data and provides a risk assessment, highlighting the relative risks and importance of the different threats to the company. This assessment should identify the most critical risks and rank them.

Security Controls: Identifies the detailed security controls required to eliminate or mitigate the threat. For example, simple preliminary screening of telephone calls to key individuals to assist with identifying 'suspicious or high risk' contacts.

Management Decision: Buy-in and sign-off will be required by the company's management team to agree on the *security controls* and resources to be applied.

Effectiveness Review: Monitoring and in-depth reviews should be undertaken to ensure the effectiveness of the systems implemented.

While Murphy's (2005) framework can be used as a process for intelligence-generation or as counter competitor intelligence, it is important to note, that this process will not magically create competitive advantage, only people who use these frameworks do. Following the counter competitor intelligence theme, Rothberg and Erickson recommends the implementation of intelligence teams called 'Shadow Teams' (2005).

The aim of shadow teams is to bring together organisation wide competitive knowledge and create competitive capital through the competitive intelligence processes (Figure 9.0). As a group, they have the ability to provide unfiltered assessments across all levels and functions and are future-focused on the company's internal and external business drivers and offer solutions to existing challenges and issues.

Internal and External Business Drivers

A company's competitive performance and capability depends on a number of internal and external factors (Murphy, 2005). As described in the previous sections, Porter's 'five factors' model demonstrates the relationship with companies and customers operating in a competitive environment, to further provide insights into this model. Murphy states that a company's performance is driven by both internal drivers (how it operates) and the external factors (2005).

The internal and external business drivers can enable companies/organisations (players) to establish and contest the market. These *drivers* have been identified and are as follows:

Internal factors

- Critical Success Factors
- Resources
- Tangible assets (Financial, Physical, Technology etc.)
- Intangible assets (Management, Corporate knowledge, Reputation, Business processes, Alliances)

External factors

- Social and cultural
- Technological
- Economic and environmental drivers
- Political regulatory and legal drivers

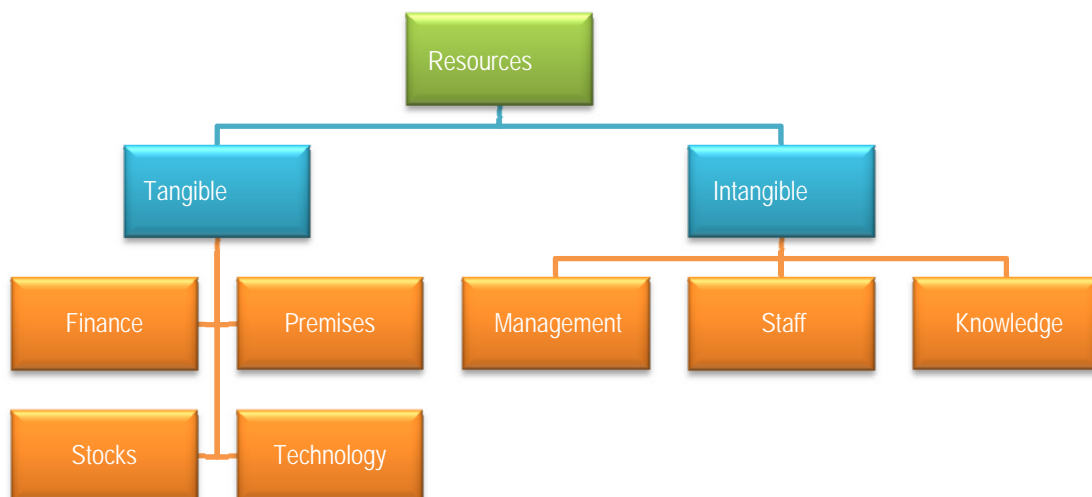
Internal factors

Critical Success Factors are a company's competitive performance and capability indicators and depends upon the effective use of a company's resource to assist with gathering competitive intelligence knowledge and the company's strategic ambitions in their marketplace.

Insufficient resources and/or lack of strategic planning will hamper the competitive intelligence gathering process. To mitigate this risk, a combination of resources and a sound strategy can be used to measure success as part of a company's Critical Success Factors (CSF's). Developed in 1961, Roger Daniel believed that many of the company's leaders were being overwhelmed with information and were unable to identify the critical elements in their businesses to succeed. For example, *offering the right product mix to match customer wants in each store, effective advertising to entice people to visit the shop, attractive prices to persuade people to buy and efficient logistics to avoid products selling out or being left on the shelf* (Daniel, 1961).

Resources. As Murphy states, output is determined by the number of inputs available. As described by economists, resources are the 'inputs' as the elements of production (2005). Resources can be classed as tangible or intangible factors and can be subdivided into financial assets (for example, issued shared capital, cash, bank loans or bonds) and physical assets (for example, raw materials and machinery). Examples of these factors have been provided in figure 7.

Figure 7.0 Tangible and Intangible factors



Tangible

While financial assets are used to assist a company's long-term of 'product to output' assets and helps maintain the working capital to achieve day-today expenses. Analysis of these financial assets and the company's shareholders (for example, structure of shareholders, owners etc) should be included in the competitive intelligence analysis process as these items will influence the company's strategy and business culture.

Physical assets contain land or premises, stock (also known as inventories), technology and equipment, such as tools, machinery and fixtures. Land/premises in this context refers to the company's property portfolio and can be of significant value if the property is 'freehold'. This can also be classed as a major component of the company's assets regardless of the main focus of their activities. In the manufacturing and utilities industries, stocks of raw materials are required to fulfil their production. The poor management of this stock can contribute to a company's reputation and affect their bottom line. Technology covers a wide range of items including plant and machinery, technology systems, the company's fixtures and fittings, furniture, tools and transport. The quality of these assets is critical to a company's success, especially when superior technology can provide significant competitive advantage. This applies not only in leading-edge technology industries, but also in the service sectors.

Intangible

Included in this category are the intangible assets such as management, Human Resources, Corporate Knowledge, alliances and business processes which all attribute to a company's reputation. For example, the competitive intelligence element of Human Resources would identify the demographic profile of the staff and can provide an insight into both the company culture and their strategic situation. For example, tele-working and staff locations, outsourcing of critical functions like security, and IT services to external contractors.

In partnership with a company's culture, is *Corporate Knowledge*, as described by Murphy, "*is a company's principal asset and source of competitive advantage in a knowledge economy*" (2005, pg 32). In an attempt to preserve and develop this fundamental, knowledge management was recognised and gained corporate acceptance to record, store, organise and retrieve corporate knowledge. By the late 1990's, knowledge management was included as a balance sheet item in the same way as other traditional categories (i.e. turn-over, number of employees etc) were measured. While it is academically acknowledged that knowledge is crucial for a company to compete and is the process by which "*the organisation generates wealth from its knowledge or intellectual capital*" (Bukowitz & Williams, 2000), applying this concept in practice can be difficult when corporate knowledge is the 'know how' (*tacit* knowledge) of its people and there is a requirement for employees to have a total trust and are willing to share their *tacit* knowledge.

Business processes and *Alliances* include activities like research and development (R&D), production, marketing, establishing and maintaining external suppliers/resources (i.e. alliances). It is acknowledged is that the more efficient business processes are, the greater that a company will succeed in achieving greater returns from the use of resources. Likewise, weaknesses in this process can undermine a company's performance. This concept was explored by Porter who identified that "*a business must undertake to create the goods or services it offers and deliver into the hands of the customer*" (Murphy, 2005). This is known as Porters value chain and is shown in figure 7.1.

Figure 7.1 Porter's value chain



It is important to note that a company's corporate resources may extend beyond the assets it owns and can include other companies which have similar goals (i.e. licensing agreements) or formed partnerships to achieve a greater market share (Murphy, 2005, pg 35).

The strongest types of alliances are when joint ventures are established by both companies purchasing shares in the other company. In competitive intelligence terms, these are typically highly visible and are easy to research and analyse.

External factors

While the previous section analysed a company's *internal* drivers, this section of the report explores the *external* drivers. It is important to note that while the external drivers can influence a company's financial wellbeing, the company may have no direct control of these elements. Murphy's STEEP framework (2005, pg 37) is used to understand these elements. This framework includes Social and Cultural, Economic, Environmental and Political, regulatory and legal drivers.

Social and Cultural

Some social developments are on a grand scale and take form over a lengthy period of time and are ingrained in our history, for example, the United Kingdom of Great Britain achieved a superior sailing industry, which enabled and led to a greater colonisation by the English. Other social shifts in attitudes and behaviours are less visible and harder to predict. For example, the speed and strong uptake of TradeMe in New Zealand has rapidly changed the business environment for second hand trading companies, e.g. New Zealand Cash Converter's retail shops. These companies are faced with the decision to join or adopt new business models to compete with this new e-commerce channel.

It is important to mention the role of demographic drivers under the Social and Cultural theme. As the majority of businesses now compete in a global market, companies need to tailor strategies that not only support the local population patterns, but also attract global populations (e.g. people who are online purchasing from international website). Companies who are just focusing on local population will still need to adapt marketing strategies to match their market demographic such as sex, ethnic culture and household structures. For example, in the USA the Hispanic population will increase from 13 percent in 2000 to an expected 24 percent by 2050 (Murphy, 2005, pg 38). This has led some companies to create marketing campaigns with the use of Spanish speaking role models.

The impact of technology innovations can also play a role or change the Social and Cultural environment. Chandler (2002) believed "*To prescribe to the theory of Technological Determinism one must believe that technology shapes society rather than people, their actions and beliefs shape society*". There are two types of innovations. The smaller innovation which provides incremental improvements to techniques (for example the personal computer), the second, is on a larger scale and can be classed as the 'killer app'. Examples of these innovations range from the more obvious such as the World Wide Web, and others like "the stirrup" which was the medieval killer app. It allowed the Franks-Germanic (tribes who ruled central Europe) mounted fighter to strike with his lance without falling off his horse, greatly increasing the force that could be put behind such a blow. It proved decisive in the Franks' efforts to turn back the marauding Saracens (White, 2009).

Another form of 'killer app' communication is the cellular phone, which has radically changed not only the way we communicate, but has changed our acceptance of technology within the Social and Cultural environment (e.g. children's use of cell phones).

Economy

There is a wealth of information relating to economic data, commentary and forecasts which can be analysed to assist with understanding of the *Economic drivers*. The difficulty lies in making sense from credible sources of this information. For example, during the recession in the 1990's, the Chancellor of the Exchequer Norman Lamont, did not issue any forecasts indicating that the UK had a shrinking economy (Murphy, 2005, pg 40), thus making it difficult for strategists and analysts to accurately gauge or report on the status of the economy. Additionally, the reliability of data is based on the current state of the economy and includes a margin of error due to the delays between collecting and the release of information. Most of the time, this data is out of date when published and is too late to take action.

Environmental

Environmental drivers relate not only to the food and agriculture, energy producing industries within that country, but also factors on a global scale, such as global warming. While some may argue that the environment may have limited value to operating a business, the volatility of weather and inaccuracy of forecasting the weather could impact the retailers, clothes manufacturers and beverage makers. An example of this was when a number of leading technology companies who had their technology centres located in India, suffered major outages due to the country's unexpected flooding (Europa, 2008).

Industries like utilities, pharmaceuticals, transport and financial services are greatly affected by regulatory changes and issues. Regulations can impact on the participant's costs, a company's operational freedom and their profit margins to maintain the required controls (Murphy, 2005, pg 41). An example of this was the constraint that retail shops could not open on Easter Monday under New Zealand Law and if retailers want to open to maintain their competitive strategy, they would be penalised. In recognition, an amendment was established and removed Easter Monday as a restricted trading day (Chemis, 2003).

Utilities are required to comply with a number of controls relating to their prices, profits or dividends. They are greatly affected by changes in environmental legislation and enforcement. In this arena, competitive intelligence can play a critical role with lobbying, anticipate possibilities in the authority's regulatory position and be able to identify potential risks and opportunities in the business environment.

Legal and Ethical Aspects of Competitive Intelligence

The practice of competitive intelligence raises serious issues of legality and business ethics. Considerable debate was generated in America about the ethics of gathering competitive information in 1996. Due to the sheer scale and frequency of industrial espionage, the US government implemented the United States Industrial Espionage Act of 1996. At the time, the Federal Bureau of Investigation (FBI) estimated that companies had lost USD \$1.5 billion to espionage (Murphy 2005, pg 47). While this law has been implemented, incidents still continue. In 2001, a case of corporate espionage between two rival companies, Procter and Gamble and Unilever occurred.

Procter and Gamble had appointed competitive intelligence agents who allegedly represented themselves as market analysts to collect information about Unilever's hair care business (Stephens, 2007,b). While the senior Procter and Gamble management informed Unilever once they had discovered the secret operations, the company still faced a sizable settlement and damaged reputation.

Legal and ethical within competitive intelligence has raised questions about what is acceptable behaviour when undertaking competitive intelligence analysis. For these reasons, the Society of Competitive Intelligence Professionals (SCIP) was created in 1986 to promote the professional and ethical guidelines. An example of these guidelines has been provided in the following SCIP code of Ethics, Vision and Mission statements:

SCIP Code of Ethics for competitive intelligence Professionals

1. To continually strive to increase the recognition and respect of the profession.
2. To comply with all applicable laws, domestic and international.
3. To accurately disclose all relevant information, including one's identity and organisation, prior to all interviews.
4. To avoid conflicts of interest in fulfilling one's duties.
5. To provide honest and realistic recommendations and conclusions in the execution of one's duties.
6. To promote this code of ethics within one's company, with third-party contractors and within the entire profession.
7. To faithfully adhere to and abide by one's company policies, objectives and guidelines. (SCIP, 2008)

Vision: Better decisions through competitive intelligence.

Mission: SCIP will be the global organisation of choice for professionals engaged in competitive intelligence and related disciplines. SCIP will be the premier advocate for the skilled use of intelligence to enhance business decision-making and organisational performance (SCIP, 2008).

The Trengrove and Vryenhoek, 1997, competitive intelligence study noted that there was no SCIP New Zealand branch. Furthermore, Hawkins (2004) found that there was no SCIP association due to the lack of active participants in 2004.

While the SCIP codes of ethics are honourable, these ideals are based on a western culture and in some countries like China the values would be reflective of the Chinese culture.

Tao and Prescott reported that in 2000, China had a resource pool of 80,000 Scientific and Technical Information Intelligence Systems practitioners and 10,000 Economic Information System practitioners (2000). While China has the largest number of competitive intelligence resources, they are in the early stages of competitive intelligence development where best practices have not yet been implemented widely, nor a code of ethics established (Tao and Prescott 2000).

There is a strong element of espionage within China's competitive intelligence community and although China has established an anti-unfair competition law which targets illegal business behaviour, such as industrial espionage, only 32 percent of Chinese companies have established a competitive intelligence code of ethics. (Bonthous, 1994).

In 2007, the New Zealand Herald reported that the New Zealand government computers were hacked by a foreign government, believed to be China (2007). Other examples of Chinese espionage have been documented and state that Chinese espionage is conducted by employing Chinese travellers, scientists, students and business people to develop relationships in order to collect intelligence (Nolan, 1999). Not only is this a concern, but the American authorities believe China is unable to abide or enforce international trade agreements or protect intellectual property (US Trade, 2007).

Counter Competitive Intelligence

Identified within this report are the competitive intelligence attitude types and the recommendation that competitive intelligence becomes part of everyone's job description. It is important to note, however, that "wherever money is exchanged, so is information" so it is almost impossible to stop the release of competitive information from within the company or organisation. For example, it is necessary for companies to provide annual accounts and comply with the local legislation.

In partnership with competitive intelligence, Counter competitive intelligence can be used as the tool to limit the unplanned information escaping externally. Prescott (1995) has highlighted that some organisations like Motorola and 3M have not only embraced competitive intelligence, but have gone further and developed Counter competitive intelligence practices. Counter competitive intelligence can be described as the 'flip-side' of competitive intelligence where a counter-intelligence specialist actively limits a competitive intelligence specialist from gathering information and knowledge.

Trim (2004) states that the importance of competitive intelligence work involves "*analysing and interpreting multi-faceted and complex business issues*" and that competitive intelligence owners should work closely with Marketing, Planning and Research & Development to create Counter competitive intelligence (Prescott, 1995).

Stalk and Lachenauer (2004) identify six key elements, which could be employed to ensure that the information that goes out is limited:

- *Don't over disclose:* Some companies go overboard in providing too much information in their public disclosure documents. It is best to maintain minimum disclosure.
- *Contain the information flow:* Only non-sensitive marketing communication should go through the normal communication channels. Any information that could give away your company's intentions should be protected.
- *Sending False Signals:* It is becoming more and more common to issue new products and/or release specific information to get a competitor to move in a certain direction or way. This strategy of sending signals can be an effective way of gauging competitors' intentions.
- *Don't be Predictable:* A key to counter competitive intelligence is to adopt unpredictable strategies that could include sending false signals.
- *Recognise Intelligence Attacks:* Unfortunately most companies do not realise that they have been intelligence attacked and only find to that their competitor is always one step 'ahead of the game' or beats your company to a product release. The competitor may be obtaining a competitive edge from leaks from your own staff.
- *Don't be afraid to Counter Attack:* Noting the well known military quote "*...the best form of defence is to counter attack*" and could be applied in the Counter competitive intelligence arena. (Stalk and Lachenauer, 2004)

Research Design

The aim of the survey questionnaire was to assess and benchmark the maturity levels of competitive intelligence within New Zealand organisations. There is a perceived view that competitive intelligence is conducted on an ad hoc behaviour, resulting in the use of unstructured intelligence gathering practices.

To achieve the goal of understanding the development of competitive intelligence, the key findings from this survey were analysed against trends and key findings identified in Trengrove and Vryenhoek (1997) competitive intelligence study. A similar theme of questions in the 1997 competitive intelligence study was used to enable this comparison. To ascertain the link between knowledge management and competitive intelligence, new questions were developed that incorporated the competitive intelligence and knowledge management factors (*i.e. the theory of competitive intelligence, competitive intelligence culture, Managing in an Information/Knowledge economy, Internal and External Business Drivers of competitive intelligence and Legal and Ethical Aspects of competitive intelligence*) as identified in the Literature Review section with the aim of addressing the research report's question.

Survey Method

Thirty-four companies were approached in person to complete this survey. A letter outlining the purpose of the study and a consent to participate form was also included. The target audience was people who held senior positions of their respective company (CEO's, managing directors, divisional directors). Recipients were asked to complete the survey themselves or assign another person within their company who had an invested interest in this area. Recipients were also offered a copy of the research report once completed. A copy of the covering letter and survey can be found in Appendix A.

A semi-structured survey approach was used as an 'open framework' to enable a two-way communication administered using a 'one-to-one' interview process where the researcher took notes and recorded responses. This interview process was undertaken between 18 May, 2009 and 23 July, 2009.

Twenty nine Wellington based companies (85%) and five Auckland based companies (15%) (also with a strong presence in Wellington) completed the survey. All of the companies surveyed were located in Wellington or Auckland, New Zealand.

Each of the participants was asked to complete a twenty eight question survey (a copy of this survey can be found in Appendix A) their answers and conversations were recorded for research and content analysis (refer to Appendix B). The interviews generally lasted between 10-15 minutes and were conducted using the interviewing principles and guidelines as outlined in the Masters of Information Management 522 lecture (MMIM, 2008).

Analysis of Data

The survey questionnaire was created to gauge the state of competitive intelligence within New Zealand private and public sector organisations that were based or had a strong presence in Wellington, New Zealand.

The analysis of data was restricted to satisfy the objectives of the survey and to identify significant trends to enable effective benchmarking between this study and the Trengrove and Vryenhoek (1997) study. The interviewed organisations were then categorised into industry catalogues (Table 13) to assist with understanding the role of competitive intelligence and knowledge management.

Rothberg and Erickson (2005) "Strategic Protection Factor (SPF)" framework was applied to identify each company's competitive intelligence attitude category (i.e. *Sleepers, Reactive, Active, Assault or Warrior*) and to provide insights into how they monitored and gauged their competitors.

Non-Disclosure

As outlined in the 'Consent to Participation in Research' letter (Appendix A), respondents were advised that company and organisation details would remain confidential and would not be identified in this research report. The database containing the questionnaire responses and company information will remain confidential.

Classification Variables

Similar to Trengrove and Vryenhoek (1997) competitive intelligence study, the following classification variables have been used (Table 8.0).

Table 8.0 Classification Variables

Classification Variable	Explanation
▪ Industry Segment	▪ Companies/organisations were categorised into their core industry segment.
▪ Annual Expenditure on Competitive Intelligence	▪ Nothing; 0 - \$25,000; \$25,000 to \$100,000 and above \$100,000
▪ The relationship between Competitive Intelligence and Knowledge Management.	▪ Companies/organisations realised and understood the value of competitive intelligence and knowledge management.

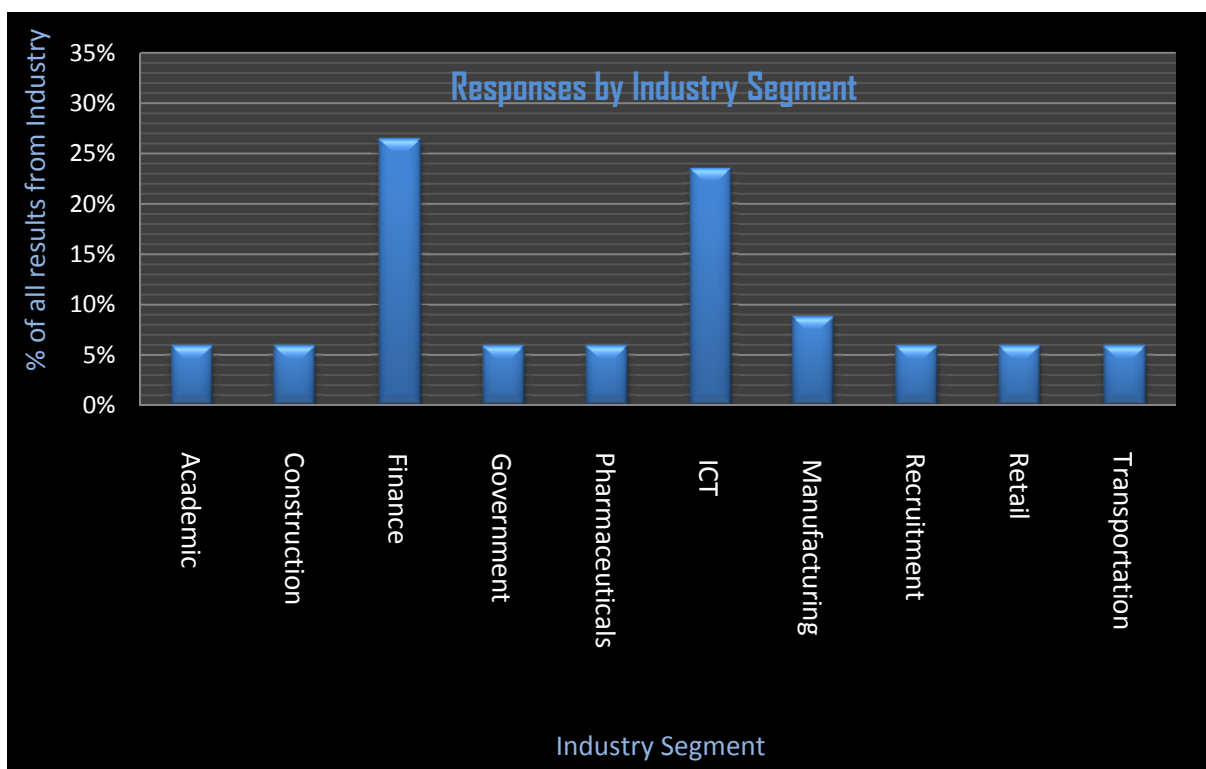
Industry Segment

The responses by industry segments are detailed in Table 8.1 and Figure 8.2. These results were based on responses from twenty nine Wellington companies (85%) and five (15%) Auckland companies who had a well established presence in Wellington, New Zealand. As there were no responses from the Wholesale trade industry, this category will not be referenced within this report.

Table 8.1 Responses by Industry Segment

Industry Sector	Reference Name	Responses	Percentage
Academic and Training	Academic	2	6%
Construction and building	Construction	2	6%
Finance, Insurance and Real Estate	Finance	9	27%
Government and Public Administration	Government	2	6%
Health care and Pharmaceuticals	Pharmaceuticals	2	6%
ICT and Technology	ICT	8	24%
Manufacturing	Manufacturing	3	9%
Recruitment	Recruitment	2	6%
Retail Trade	Retail	2	6%
Transportation and Public Utilities	Transport	2	6%
Wholesale trade	Wholesale	0	0%
		34	100%

Figure 8.2 Responses by Industry Segment



Company and Organisation Profile

To identify if there was a correlation between competitive intelligence expenditure and the size of an organisation (number of staff and annual company turn-over), Question 5 and 8 asked the respondents to confirm their companies turn-over and size.

Table 9.0 and Table 9.1 provide a profile of respondents by size of company turnover and employee size comparison.

Table 9.0 Profile by size of New Zealand company turn-over

Category	Number of Responses	Percentage
0 to \$499k	0	0 %
\$500k to \$10million	9	26%
\$11m to \$50m	8	24%
\$51m and over	17	50%
	34	100%

Table 9.1 Profile by employee size

Category	Number of Responses	Percentage
0 to 10 employees	6	18%
11 to 50 employees	4	12%
51 to 250 employees	9	26%
251 employees and over	15	44%
	34	100%

Figure 9.2 has been created for the use of profiling analysis and has categorised the respondent's data into four *employee size* groups, by the four *company turnover* elements and includes Trengrove and Vryenhoek (1997) competitive intelligence study results.

It is important to note that the Trengrove and Vryenhoek (1997) competitive intelligence study surveyed 282 organisations, compared to this research study of 34.

Figure 9.2 Profile by New Zealand Company size

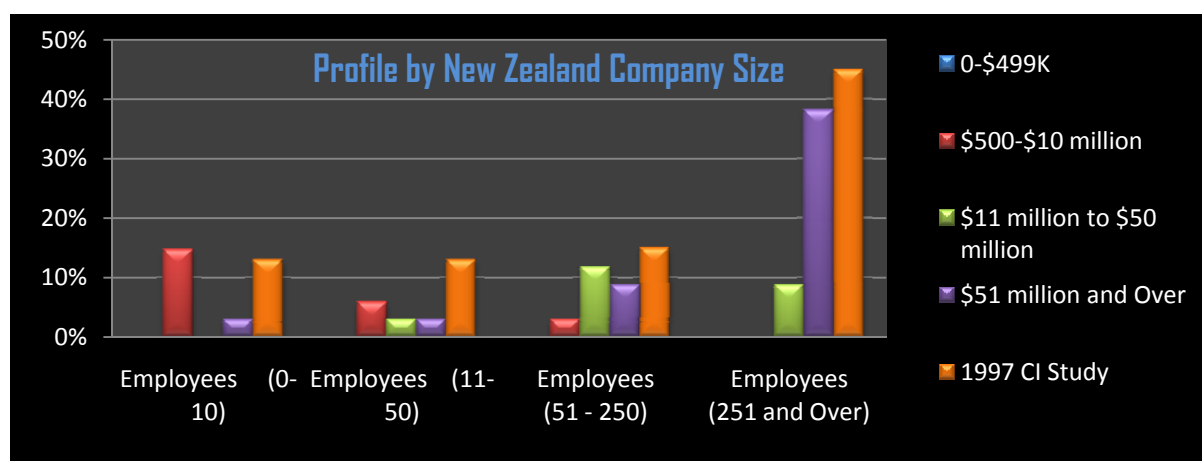


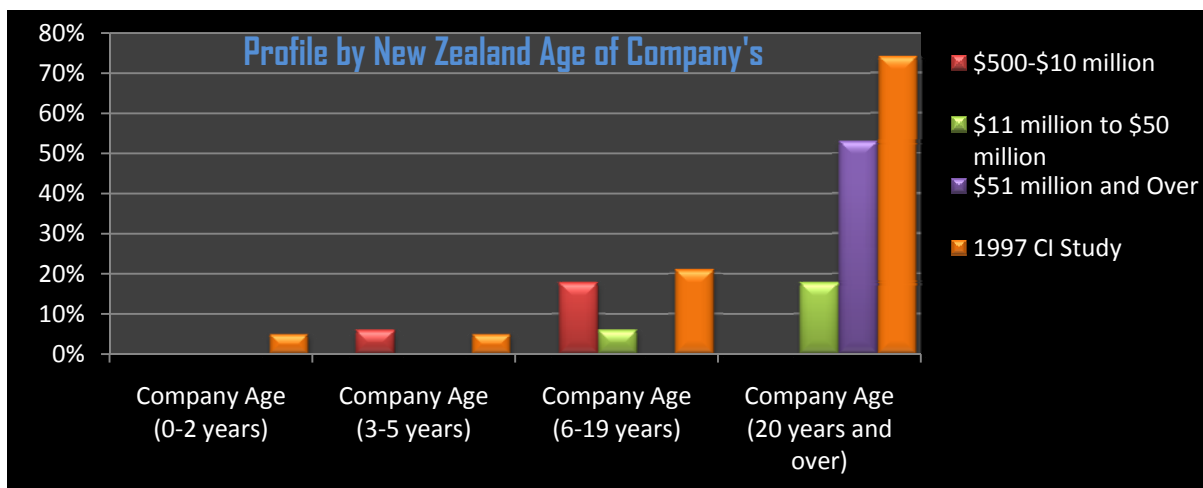
Table 9.3 categorises the age of companies/organisations into four age groups (0-2 years, 3-5 years, 6-19 years and 20 years & over) to enable comparisons with Trengrove and Vryenhoek (1997) competitive intelligence study of similar age groups (0- 5 years, 6-10 years, 11-15 years, 16-20 years and 21+ years).

While there are minor differences in the age categories, for comparison, figure 9.4 provides a profile by age of New Zealand companies surveyed and includes the 1997 competitive intelligence study results.

Table 9.3 Profile by age of companies/organisation's

Category	Number of Responses	Percentage
0 to 2 years	0	0 %
3 to 5 years	2	6%
6 to 19 years	8	24%
20 years and over	24	71%
	34	100%

Figure 9.4 Profile by age of companies/organisation's and Turn-over



In profiling the surveyed companies/organisations, respondents were also asked the number of office locations and affiliated offices outside of New Zealand. Table 9.5 provides the survey results.

Table 9.5: Number of offices and affiliated offices

Category	Number of Responses	Percentage
No Offices	1	3 %
1 location	11	32%
2 to 10 locations	13	38%
11 to 50 locations	4	12%
51 locations and Over	5	15%
Affiliated offices outside of New Zealand	11	32%
No affiliated offices outside of New Zealand	23	68%

Rothberg and Erickson (2005) "Strategic Protection Factor" framework was applied to analyse a company's value type of knowledge management and competitive intelligence factors, and industry type (Question 10).

- **Industry A:** We are an industry which produces or sells products/services which are similar to other companies, for example electrical items, durable and nondurable goods, insurance or air travel. With our industry, there is a low risk if our competitors gained access to our products or services knowledge.
- **Industry B:** We are innovative and share knowledge between our operations, marketing and sales, but as our product and service knowledge are very specific to our company, this knowledge could not be adapted outside our company.
- **Industry C:** We are innovative but we find knowledge to be less critical to our success, i.e. our products/processes are often easy to copy.
- **Industry D:** We know developing and sharing knowledge is imperative for competitiveness and at the same time competitors are very interested in our proprietary knowledge.

Table 9.6 provides the survey results and number of responses against each industry type.

Table 9.6 Strategic Protection Factor framework

Category	Number of Responses	Percentage
Industry A:	16	47%
Industry B:	6	18%
Industry C:	4	12%
Industry D:	8	24%
	34	100%

Aim of Research Report

Trengrove and Vryenhoek (1997) identified that in 1997 competitive intelligence lacked maturity and was undervalued by New Zealand organisations. While their study was in-depth, the concept of knowledge management was not identified as a business tool/discipline or the relationship between these two key elements. This has resulted in a gap in their study and is the motivation for this research.

The aim of this report was to examine this gap and use the literature review tools identified (i.e. "Strategic Protection Factors" (Rothberg and Erickson, 2005) and Rouach and Santi (2001) competitive intelligence attitudes) to examine the relationship between knowledge management and competitive intelligence and the current mindset/value of competitive intelligence in the New Zealand, Wellington based companies/organisations.

This research report has applied a method of using quantitative research (Creswell, 2003) from a questionnaire survey that was completed by 34 organisations. The survey questions were based on Trengrove and Vryenhoek (1997) competitive intelligence study questions and elements from the completed *Literature Review* which included expert and academic resources. These academic resources were sourced from Victoria University of Wellington, New Zealand online library (Proquest), lecture notes and a presentation from Masters of Information Management 582 competitive intelligence 2007 course, academic articles and books from leading competitive intelligence authors and practitioners (MMIM 582, 2007).

While a number of the survey questions were based on Trengrove and Vryenhoek (1997) competitive intelligence study to enable a comparison for the purpose of benchmarking, new questions were added or redefined to reflect the competitive intelligence and knowledge management elements identified in the *Literature Review* factors. This approach has been used to determine the research question (*"Have New Zealand Private and Public Sector Organisations developed a better understanding of Competitive Intelligence as a valuable business resource or does it remain undervalued and immature"*).

Survey respondents had a choice of either completing the survey in private or face to face, or via a teleconference. Completed surveys were then emailed or returned by courier. Surveys that were completed in person via the telephone were recorded for quantitative research content analysis and can be referred to in Appendix B.

Content analysis results have been included in the key findings in each of the sections.

Limitations of this Research

While the objective of this research was to assess the perceived value of competitive intelligence with Wellington located companies and then compare it against the Trengrove and Vryenhoek (1997) competitive intelligence study to provide insights into the current trends on the maturity and use of competitive intelligence, there are some research limitations which have been identified and could form the basis for future research.

These limitations include:

- Limited survey participants: While this research studied 34 Wellington organisations, Trengrove and Vryenhoek (1997) competitive intelligence study surveyed 282 organisations. To ensure that the full trend analysis has been identified, it is recommended that the research survey is expanded to a wider audience (for example companies who are located outside of the Wellington region)
- Exploration research into comparing the New Zealand competitive intelligence environment against other countries. This could include similar countries within the Asia- Pacific region or other regions.

Further Research Possibilities

As highlighted, there are a number of key elements which could be explored in further research. A greater insight can be gained into competitive intelligence by undertaking research in the following areas:

- Invite companies outside the Wellington region to participate in the survey of this research.
- Greater engagement, by targeting 2500 companies/organisations to participate.
- The integration of competitive intelligence and company strategy. Do New Zealand companies understand this relationship? Is this a formal or informal process?
- The use of domestic competitive intelligence sources. How is this information gained and valued?
- The use of 'soft' information, such as rumours and personal contacts in social and work networks versus formal information collection processes.
- The effectiveness of competitive intelligence benchmarking activities used by New Zealand companies and have they identified tangible benefits?

Research Findings

The objective of this analysis is to assess the perceived exposure to competitive risk and the state of competitive intelligence within New Zealand Wellington companies/organisations, with the aim of benchmarking the results against Trengrove and Vryenhoek (1997) competitive intelligence study.

To achieve this objective, this report explores five key factors in the research findings:

1. Current state of the market competition.
2. The relationship between knowledge management and competitive intelligence.
3. The value of managing knowledge and competitive intelligence.
4. Competitive Risk Factors.
5. Future plans for improving competitiveness.

Current state of the market competition

The aim of this analysis is to examine the current market competition within surveyed companies' markets. Survey questions 13 to 21 were tailored to determine the state of competition and included collecting data on the number of competitors, number of market competitors, the company's own competitiveness and whether there will be change to competition in the market.

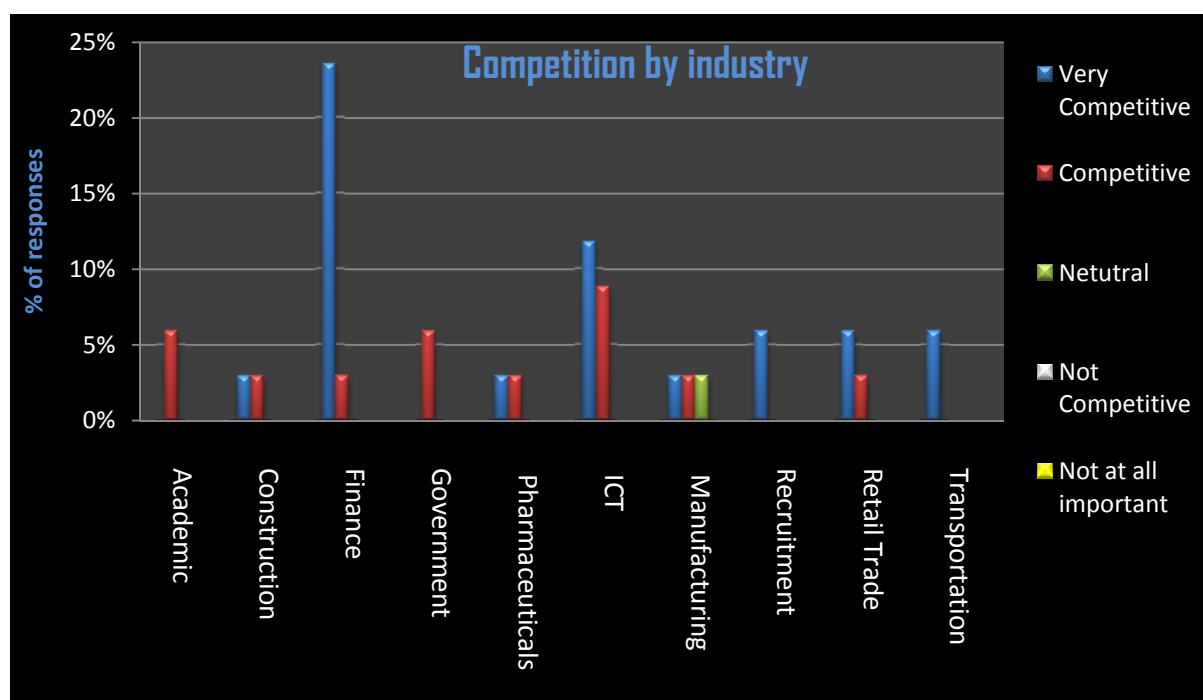
Almost all of the surveyed companies responded (97%) that they were in a very competitive (59%) or a competitive (38%) market, derived from Question 13. Only one manufacturing company (3%) believed that their market competition was neutral as they felt that they had a unique product/monopoly on their market.

A Market Competition analysis from the survey respondents has been provided in Table 10.0 and Figure 10.1

Table 10.0: Market Competition

Question 13, 'How competitive would you describe your market that you are in'?					
Company Turnover	Market Competition				
	Very Competitive	Competitive	Neutral	Not Competitive	Not at all important
0-\$499k	0%	0%	0%	0%	0%
\$500k to \$10million	9%	15%	3%	0%	0%
\$11m to \$50m	21%	3%	0%	0%	0%
\$51m and over	29%	21%	0%	0%	0%

Figure 10.1: Competition by industry



Trengrove and Vryenhoek study found that 88% (1997, pg 45) of New Zealand firms believed that they were in a competitive or very competitive market. Included in their analysis, the 1997 study identified that the Electricity Industry felt that they were not in a competitive industry. This industry was not included in this research so is not comparable.

Number of competitors and location of competitors

Further analysis on the competition in the Wellington, New Zealand markets, question 14 asked *‘How many competitors would you estimate that your company/organisation has?’*

- *0-5 Competitors*
- *6-19 Competitors*
- *20 or more competitors*
- *Not Sure*

Thirty nine per cent of all respondents answered that they had 0-5 competitors, 30% selected 6-19 competitors and 31% per cent answered with 20 or more competitors. When questioned “Were your main competitors located in New Zealand, Australasia or Worldwide” by question 15. Seventy three per cent confirmed that their main competitors were based only in New Zealand. This would suggest that the respondents had a strong focus only on the local marketplace and a limited engagement outside of New Zealand. Table 10.2 provides the results from Question 14 and 15.

Table 10.2: Number of Competitors and location

Question 14: How many competitors would you estimate that your company/organisation has?				
Company Turnover	Number of Competitors			
	0-5 Competitors	6-19 Competitors	20 or more Competitors	Not Sure
0-\$499k	0%	0%	0%	0%
\$500k to \$10million	9%	6%	12%	0%
\$11m to \$50m	9%	9%	6%	0%
\$51m and over	21%	15%	15%	0%
Question 15: Are your main competitors located in?				
Company Turnover	New Zealand	Australasia	Worldwide	
0-\$499k	0%	0%	0%	
\$500k to \$10million	18%	0%	9%	
\$11m to \$50m	18%	0%	6%	
\$51m and over	38%	9%	3%	

Perceived Ability to Compete

Question 17 asked 'How do you rate your competitiveness relative to others in the New Zealand market?'

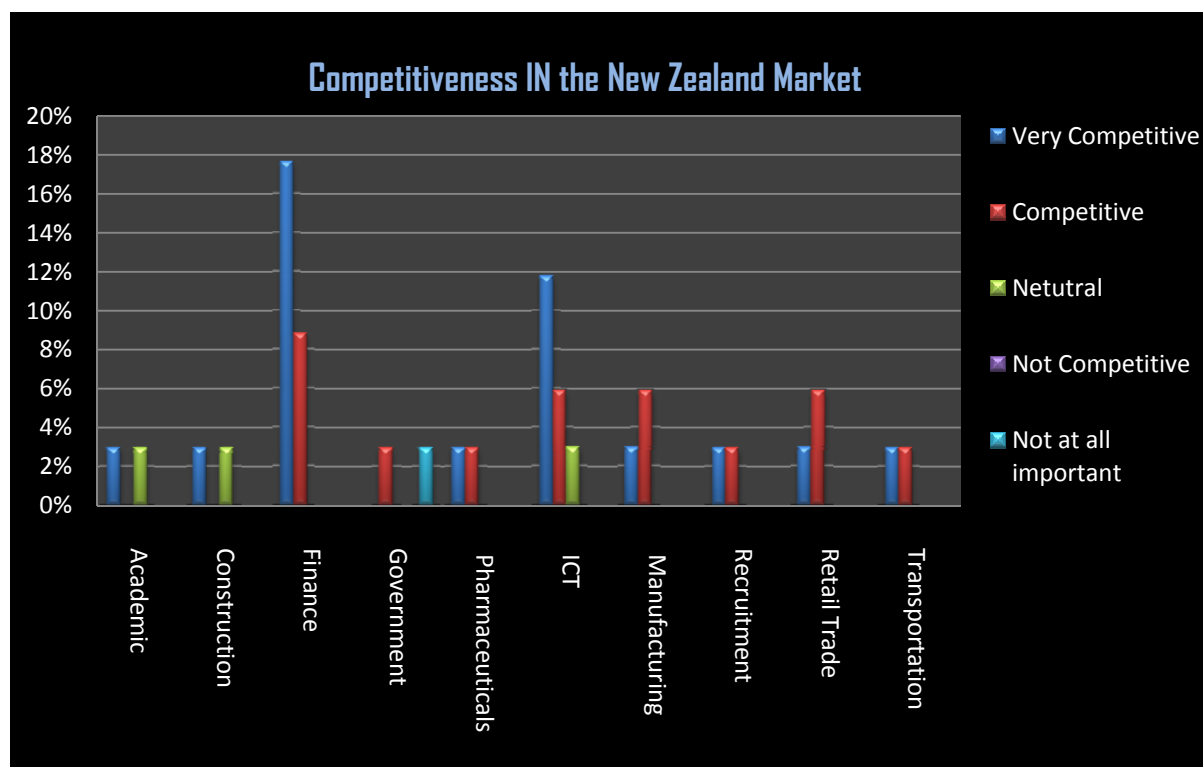
- *Very Competitive*
- *Competitive*
- *Neutral*
- *Not Competitive*
- *Not at all important*

Of the thirty four companies who completed the survey, 88% believed that their competitiveness was very competitive (50%) or competitive (38%) within the New Zealand market. Three companies (9%) from the Academic and Training, Construction and ICT and Technology industries perceived that their competitiveness was Neutral. When queried about their responses, both the Construction, and ICT and Technology companies felt that they were in the process of establishing a presence or were too small (staff between 1-5) and the academic Institution described that it operates an 'open' environment with other academic institutions.

There was one response from the Government & Public Administration industry as '*not at all important*'. When asked, the respondent believed that their core competitive market was outside of New Zealand.

A chart has been created to provide a 'snap-shot' of the state of Competitiveness by industry in Figure 10.3.

Figure 10.3: Competitiveness IN the New Zealand Market

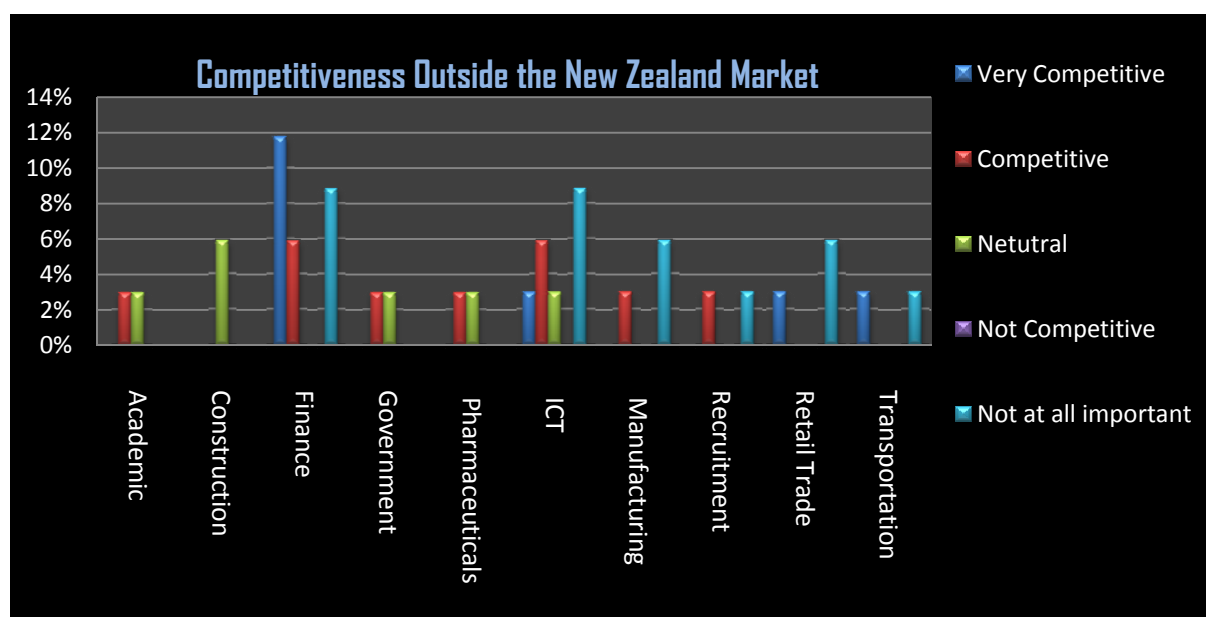


In terms of competitiveness, Trengrove and Vryenhoek study (1997) identified that 63% of the market competition were 'above average' (defined as *competitive*) and 9% were 'well above average' (defined as *very competitive*) a total of 72%. Compared with this survey where 88% of companies/organisations believe that they are in a competitive or very competitive market.

This would suggest that the New Zealand surveyed companies/organisations believe that their competitiveness in the New Zealand market has improved from 1997.

Question 18 asked 'How do you rate your competitiveness relative to others OUTSIDE the New Zealand market?' Only 47% of companies surveyed believed that they were either competitive or very competitive outside the New Zealand market. 53% of companies stated that it was 'Not at all important' (35%) or 'neutral' (18%). This result indicates that many of the surveyed companies focused only on the New Zealand market and there was no or limited interest outside of New Zealand. A chart based on industry type and their state of *competitiveness outside the New Zealand Market* has been provided in Figure 10.4.

Figure 10.4: Competitiveness OUTSIDE the New Zealand Market



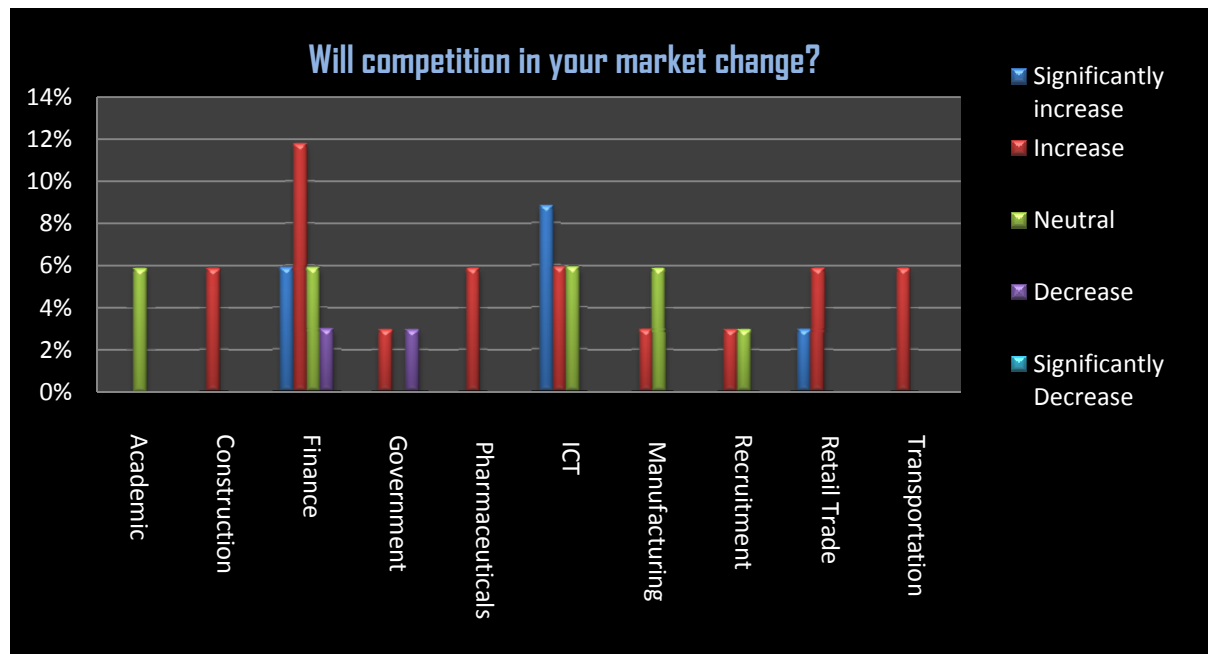
There was no comparison data between this study and the Trengrove and Vryenhoek (1997) study, as the 1997 study did not analyse competitiveness outside the New Zealand market.

Question 19 How will competition in your market(s) change? The analysis shows that 68% of the companies in *competitive* or *very competitive* market, compared to the 1997 study of 88%, believe that competition in their market would increase over the next three to five years (Table 10.5 and Figure 10.6 market change by industry).

Table 10.5: Market change by company turn-over

Question 19: Will competition in your market(s) change?					
Company Turnover	Significantly increase	Increase	Neutral	Decrease	Significantly decrease
0-\$499k	0%	0%	0%	0%	0%
\$500k to \$10million	6%	6%	12%	3%	0%
\$11m to \$50m	6%	15%	3%	0%	0%
\$51m and over	6%	29%	12%	3%	0%
	18%	50%	27%	6%	0%

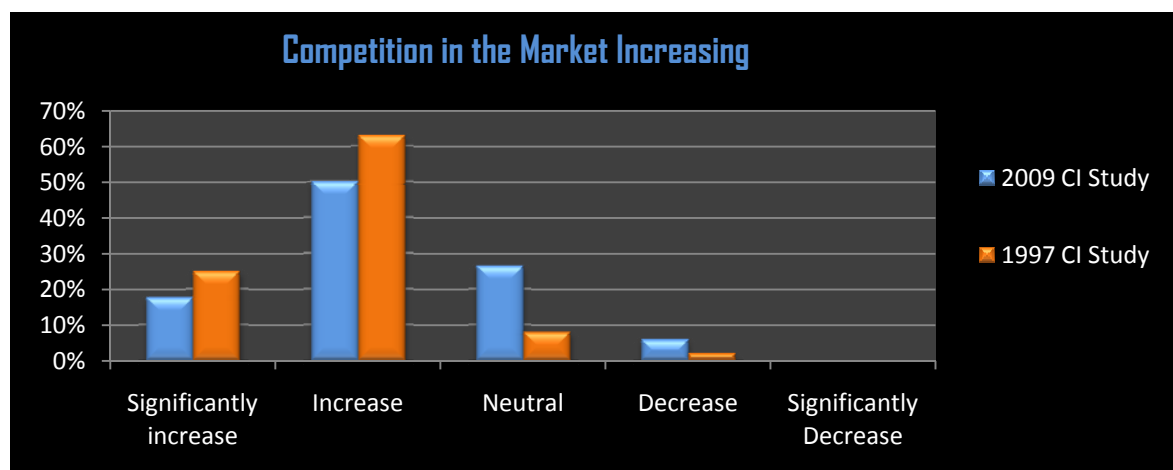
Figure 10.6: Market change by Industry



This result of 68% is a significant decrease to that of the Trengrove and Vryenhoek study that identified 88% (1997, pg 45) of New Zealand companies, believed that there would be an increase of competition within their marketplace.

A chart based on increase of market competition has been provided and includes the 1997 study results in Figure 10.7

Figure 10.7: Increase of market competition



Key findings of the current state of the market competition

The survey analysis indicates the following key findings:

- 70% of all respondents confirmed that their main competitors were based in New Zealand and little focus outside of the New Zealand market. Of the surveyed companies, 39% confirmed that their competitors ranged from the 0-5 competitor category, 21% of those companies had a turnover of over 51 million, and their competitors were mainly located in New Zealand. This would suggest that their marketplace is restricted to a relatively small competitor environment.
- The survey identified that most of the respondents (73%) competitors were mainly located in New Zealand and they had a strong focus only on the local marketplace and a limited focus outside of New Zealand.
- 97% of the surveyed company's believed that they operate in competitive markets and that their current markets would increase (18%) or increase (50%) in competition in the next three years. This is a significant decrease (20%) from the predictions of increased competition expressed by companies in the Trengrove and Vryenhoek study (1997).

Content Analysis:

- The content analysis reinforced the above findings and highlights that the current state of the New Zealand market is very competitive or "cut throat" as described by one surveyed company. The analysis also suggests that companies who categorised themselves between the "\$500k to \$50 million" annual company turn-over, took a more reactive approach when dealing with competitor products and services (for example altering pricing or supplier/dealer negotiations). Companies/Organisations who were in the higher turn-over category (\$51million and over) had a more strategic approach and were not so reactive when new competitors entered the market, as their marketplace was mature.
- Surveyed industries also confirmed the heavy reliance on the use of supplier tools (for example. rebate systems, dealer and product ordering reports, etc.) to not only benchmark themselves against their competitors, but also to provide an analysis of the current state of the market. However, it is important to note, the data from this channel is often 'ad hoc' and unstructured, thus requiring further analysis to provide the complete market intelligence.

The relationship between competitive intelligence & knowledge management

As identified in the Literature Review informing this report, Kessels (2001) states that the concept of knowledge is *“the ability for an organisation to obtain relevant information, creating new knowledge and then applying this knowledge to improve and renew”* and is critical to the success of any company. However, as knowledge management and competitive intelligence have opposing directions, there is a risk that if unmanaged, they could conflict.

The Rothberg and Erickson (2005) “Strategic Protection Factor” framework (SPF) has been used and adapted to understand this relationship and their SPF industry type. For example:

- Industry A: *We are an industry that produces or sells products and services which are similar to other companies, for example electrical items, durable and nondurable goods, insurance or air travel. There is a low risk if our competitors gained access to our product or services knowledge.*
- Industry B: *We are innovative and share knowledge between our operations, marketing and sales, but as our product and service knowledge is very specific to our company, this knowledge could not be adapted outside our company.*
- Industry C: *We are innovative but we find knowledge to be less critical to our success, i.e. our products/processes are often easy to copy.*
- Industry D: *We know developing and sharing knowledge is imperative for competitiveness and at the same time competitors are very interested in our proprietary knowledge.*

Table 10.8 identifies that 44% of surveyed respondents believed that their company has a low knowledge management risk, a low competitive intelligence risk and that their Product and Services were similar to other companies.

Table 10.8: Surveyed Companies Strategic Protection Factors

Category	Number of Responses	Percentage
SPF Industry A: (SPF 5: Low KM Risk, Low CI Risk) Products & Services are similar to other companies.	15	44%
SPF Industry B: (SPF 15: High KM Risk, Low CI Risk) Innovative and share unique knowledge between themselves, but cannot be adapted outside the company.	4	12%
SPF Industry C: (SPF 30: Low KM Risk, High CI Risk) Innovative, but our products & processes and be easily copied outside the company.	4	12%
SPF Industry D: (SPF 45: High KM Risk, High CI Risk) Product and processes knowledge is imperative for success and competitors are very interested in our proprietary knowledge	11	32%
	34	100%

When asked if their company/organisation understood the importance of managing knowledge (Question 9). Twenty per cent of Strategic Protection Factors (SPF) Industry A believes that they understood knowledge and that it was well managed, 67% of the same industry type believed that they understood, but it could be managed better. Industry C reported 20% in the understood and well managed and 80% in understood, but could be managed better categories. In comparison, only 25% of SPF Industry D responses believe that their company knowledge is understood and was well managed and interesting 13% believed that their company/organisation understanding was only neutral.

As highlighted in Table 10.9, the results suggest that there is a gap between the management of knowledge and the SPF element that “knowledge is imperative for success” categorised by SPF Industry D companies.

Table 10.9:

Question 9: Do you believe that your company/organisation understands the importance of managing knowledge (i.e. Knowledge Management) to grow and develop your company?					
Industry Type	Understood and is well managed	Understood, but could be managed better	Neutral	Not understood	Not at all important
SPF Industry A	20%	67%	7%	7%	0%
SPF Industry B	33%	67%	0%	0%	0%
SPF Industry C	20%	80%	0%	0%	0%
SPF Industry D	25%	63%	13%	0%	0%
The above percentage is measured on the total respondents from each Industry type					

Furthermore, when asked about the effective use of knowledge management, only 25% of SPF Industry D believed that their company/organisation managed knowledge effectively, and 13% as *not understood*. A similar result was SPF Industry B (an industry based on innovation and sharing of unique knowledge between themselves) respondents who believed that this element was not understood (17%).

Table 10.10:

Question 9b: Effective use of Knowledge Management					
Industry Type	Understood and is well managed	Understood, but could be managed better	Neutral	Not understood	Not at all important
SPF Industry A	13%	67%	13%	7%	0%
SPF Industry B	17%	67%	0%	17%	0%
SPF Industry C	20%	60%	20%	0%	0%
SPF Industry D	25%	50%	13%	13%	0%
The above percentage is measured on the total respondents from each Industry type					

Question 9 also asked if the respondent's companies/organisations understood the effective use of competitive intelligence (CI).

SPF Industry A had the highest percentage (47%) in that they understood CI and that it was well managed.

SPF Industry B had a 67% of respondents who believed that their companies understood this element, but it could be managed better. However, 17% believed it was not understood and/or it was neutral

SPF Industry C answered 100% to effective use and understanding of competitive intelligence, but could be managed better.

SPF Industry D had 38% of respondents who believed that competitive intelligence is understood and was well managed. However 25% of these industry respondents believed that effective use of competitive intelligence is not understood.

Table 10.11 provides the full results of the surveyed respondents to question 9 and the *Effective use of Competitive Intelligence* based in Industry type.

Table 10.11:

Question 9c: Effective use of Competitive Intelligence					
Industry Type	Understood and is well managed	Understood, but could be managed better	Neutral	Not understood	Not at all important
SPF Industry A	47%	40%	13%	0%	0%
SPF Industry B	0%	67%	17%	17%	0%
SPF Industry C	0%	100%	0%	0%	0%
SPF Industry D	38%	38%	0%	25%	0%
The above percentage is measured on the total respondents from each Industry type					

To provide an analysis or insight into this trend, respondents were then asked if their company/organisation staff were supportive and active in promoting knowledge management and competitive intelligence.

While there are positive percentages the understood categories from all industry types, there are high percentages in the neutral and not understood categories. This would suggest that there are still perceived issues to the effective use of competitive intelligence within the surveyed industries.

Table 10.12 provides the results of all surveyed respondent's to question 9 and "*your company and staff are supportive and active in promoting knowledge management and competitive intelligence*".

Table 10.12:

Question 9d: Your company & staff are supportive and are active in promoting Knowledge Management and Competitive Intelligence.					
Industry Type	Understood and is well managed	Understood, but could be managed better	Neutral	Not understood	Not at all important
SPF Industry A	27%	53%	20%	0%	0%
SPF Industry B	33%	33%	17%	17%	0%
SPF Industry C	20%	40%	40%	0%	0%
SPF Industry D	38%	38%	25%	0%	0%
The above percentage is measured on the total respondents from each Industry type					

Analysis from these results suggest that there is a high awareness and acknowledgment of competitive intelligence compared knowledge management value, as presented in Table 10.8 (pg 53) and Table 10.9 (pg 54).

Surprisingly, Industry D type companies which had been categorised with a Strategic Protection Factor of 45: High knowledge management risk and High competitive intelligence risk (Rothberg and Erickson, 2005), had a lower percentage compared to the other SPF Industry types in Table 10.9 (pg 54), suggesting there is a gap between the company's goals of managing knowledge management and competitive intelligence and actual expectations of staff.

All three tables report a high percentage in the Neutral category for knowledge management and competitive intelligence factors, suggesting that there are still perceived issues. If unresolved, these issues will become barriers to the development and acceptance of knowledge management and competitive intelligence.

Key findings to the relationship between Knowledge Management and Competitive Intelligence

The research indicates the following key findings:

- Particularly with type D industries, there is a considerable gap between the acceptance that developing and sharing knowledge is imperative for their success and the reality of their practice. In successfully managing and understanding the importance of knowledge management, 63% of this industry believed that the importance of managing knowledge to grow and develop their company is *understood, but could be managed better*. Interestingly, 13% of the same industry believed that knowledge management was only neutral.
- All of the respondents *strongly agreed* (68%) or *agreed* (32%) that there is a link between knowledge management and competitive intelligence. However, the results from the survey also suggest that there is a greater understanding and management of competitive intelligence (29% understood this element and believed it was well managed) compared to knowledge management (18% understood this element and believed it was well managed).
- While the results identified positive percentages in “understood” categories from all industry types, there were high percentages in the neutral and not understood categories. This would suggest that there are still perceived issues with the effective use of competitive intelligence and knowledge management. If unresolved will become barriers to these elements.
- As identified in the content analysis, interviewed respondents stated that within New Zealand there were inadequate knowledge channels (i.e. domestic competitive intelligence sources) to gain intelligence on their competitors and/or the marketplace.

Content Analysis:

- Analysis confirmed that there is gap between formal knowledge on market information (i.e. understanding market share) and accurate market research. While the surveyed industries confirmed the importance of knowledge management, the process for obtaining this knowledge is still based on informal and ‘word of mouth’ feedback.
- It is understood that knowledge management could be improved and can have a direct impact to their company reputation and market share, for example *“people are creating products without background knowledge of the market”*, reported by a survey respondent.

The value of managing knowledge and competitive intelligence

To assist with further analysis on the relationship between competitive intelligence and knowledge management, in terms of managing knowledge value, Question 11 asked *'Do you believe that there is a link between knowledge management and competitive intelligence, i.e. using your company's knowledge to gain a competitive advantage.'*

There were a high percentage in the *strongly agreed* category by SPF Industry A (67%), SPF Industry B (100%) and SPF Industry D (75%). SPF Industry C responded with 20% to the *strongly agreed* and 80% in the *agreed* category. These results have been documented and provided in Table 11.0

Table 11.0

Question 11: Do you believe that there is link between Knowledge Management and Competitive Intelligence (i.e. using your company's knowledge to gain a competitive advantage)?					
Industry Type	Strongly agreed	Agreed	Neutral	Do not believe there is a link	Not at all important
SPF Industry A	67%	33%	0%	0%	0%
SPF Industry B	100%	0%	0%	0%	0%
SPF Industry C	20%	80%	0%	0%	0%
SPF Industry D	75%	25%	0%	0%	0%
The above percentage is measured on the total respondents from each Industry type					

When asked "how will their company keep track of what the competition is doing", as defined in Question 23, there was a high response 'with the use of informal use of rumours and personal contacts', 41% of the total responses selected the *'very important'* category and 47% selected the *'important'* category (Table 11.1). Trengrove and Vryenhoek (1997) also highlighted that the use of rumours and personal contacts was *reasonably constant* (60% to 75%) across their surveyed industry groups (1997).

Table 11.1

Question 23: What best describes the processes and systems used in your organisation to help keep track of what the competition is doing (or likely to do), or other factors that may affect your competitive position (i.e. Informal use of rumours, personal contacts).					
Industry Type	Very important	Important	Neutral	Not very important	Not at all important
SPF Industry A*	44%	50%	0%	6%	0%
SPF Industry B*	33%	67%	0%	0%	0%
SPF Industry C*	0%	33%	67%	0%	0%
SPF Industry D*	50%	42%	8%	0%	0%
Total responses from all respondents	41%	47%			
* The above percentage is measured on the total respondents from each Industry type					

With the exception of measuring the informal use of rumours and personal contacts, Trengrove and Vryenhoek (1997) study did not analyse the knowledge management and competitive intelligence relationship. This limitation means that this research was unable to compare the competitive intelligence and knowledge management relationship between both studies.

To understand a company / organisation's perceived value of competitive intelligence, this research tailored the survey questionnaire to determine three key competitive intelligence areas, and they were:

- Current competitive intelligence practices
- Financial expenditure on competitive intelligence.
- Current perceived value of competitive intelligence.

Current competitive intelligence practices

As identified on page 13 of the Literature Review. Rouach and Santi (2001) identified five attitude categories (*Sleepers, Reactive, Active, Assault and Warrior*) on how companies conducted and viewed competitive intelligence (2001). Applying Rouach and Santi (2001) framework, Question 16 asks: '*Which category would you best describe your company / organisations approach towards Competitive Intelligence*'.

- **Sleeper:** *No deliberate competitive intelligence activity and as a company, we believe we have all the information in-house to operate a business.*
- **Reactive:** *While we do not have formal competitive intelligence operations or dedicated competitive intelligence resources, we do some ad hoc Competitive Intelligence exercises when challenged for market share by a competitor.*
- **Active:** *We do actively operate a competitive intelligence operation, which enables us to anticipate market opportunities and threats rather than reacting to them. However, our competitive intelligence operation is informal and not structured (i.e. we do not follow any formal competitive intelligence methods, like SWOT, Competitor Analysis etc).*
- **Assault and Warrior:** *We take Competitive Intelligence very seriously and devote considerable resources to our competitive intelligence operations and conduct market gained and lost scenarios through the use of a formal competitive intelligence structure.*

The results identified that 44% of the respondents operated a *reactive* competitive intelligence operation and 35% believe that their company/organisations operated an *active* competitive intelligence operation. Seven responses (21%) believe that their company were operating an *assault and warrior* competitive intelligence operations and included the following industries:

- Construction (1 response)
- Finance, Insurance & Real Estate (2 responses)
- Health care and Pharmaceuticals (1 response)
- Recruitment (1 response)
- Retail Trade (2 responses)

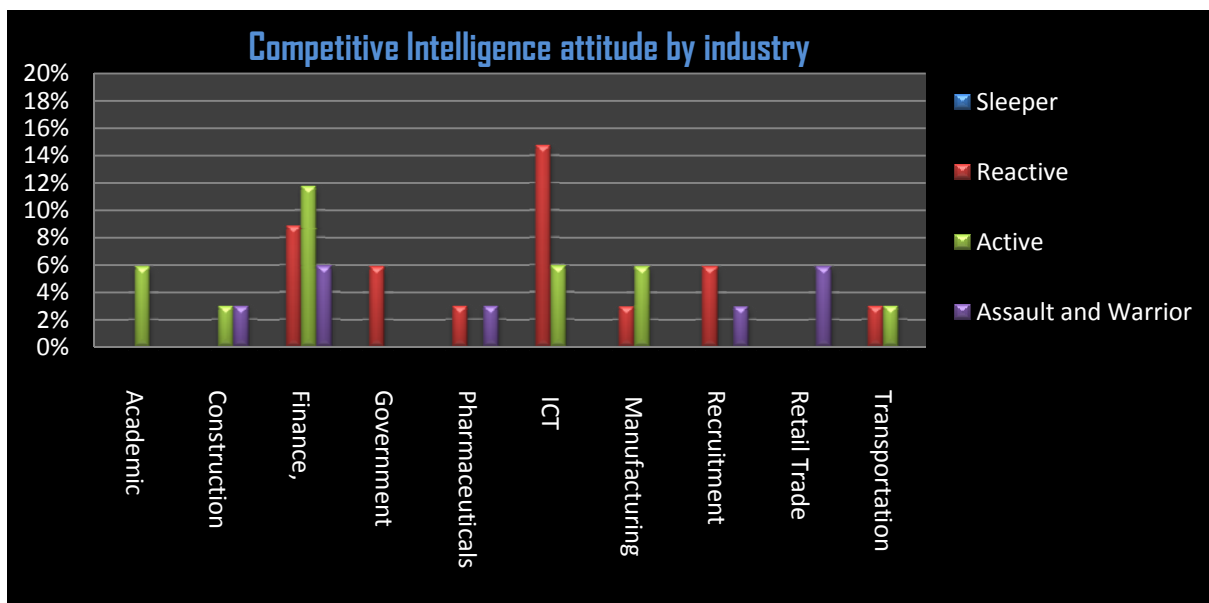
Six of the *assault and warrior* companies had a turn-over of *\$51 million and over*, the other company had a lower turn-over of between \$11 and \$50 million, but were part of a larger parent company (*who operated in a higher turn-over category*) who assisted with their competitive intelligence.

Table 12.0 provides results to question 16 and Figure 12.1 provides a chart by competitive intelligence attitude and by industry.

Table 12.0 competitive intelligence attitudes

Question 16: Which category would you best describe your company/organisations approach towards Competitive Intelligence		
Category	Number of Responses	Percentage
Sleeper	0	0%
Reactive	15	44%
Active	12	35%
Assault and Warrior	7	21%
	34	100%

Figure 12.1 competitive intelligence attitudes by Industry



In reviewing the SPF Industry types (A-D) who were asked *Do you think Competitive Intelligence is important to your company's/organisation's growth and development?* in Question 12, SPF Industry type A had the highest response (80%) that competitive intelligence was very important to a company's/organisation's growth and development, followed by SPF Industry D with 75%, SPF Industry B (50%) and SPF Industry C (20%) having the lowest percentages, however Industry C also had higher response selecting the *important* category.

Interestingly, companies that self categorised as Industry A (low risk) i.e. *an industry that produces or sells similar products and services and there is a low risk if our competitors gained access to our product or services knowledge*, had the highest rating of competitive intelligence being very important to their companies' growth and development. This may reflect the competitiveness of the industry sector. Table 12.2 provides all of the surveyed respondent's results to question 12.

Table 12.2

Question 12: Do you think Competitive Intelligence is important to your company's/organisations growth and development?					
Industry Type	Very Important	Important	Neutral	Not very important	Not at all important
Industry A	80%	0%	13%	7%	0%
Industry B	50%	50%	0%	0%	0%
Industry C	20%	80%	0%	0%	0%
Industry D	75%	25%	0%	0%	0%
The above percentage is measured on the total respondents from each Industry type					

This research (table 12.0) suggests that the surveyed respondents have a greater awareness and value on competitive intelligence, with 79% of companies operating *reactive and active* competitive intelligence operations and they have a strong belief that competitive intelligence is very important/important (65 % of all respondents) to the growth and development of their company/organisation.

In comparison, the Trengrove and Vryenhoek (1997) study identified that middle management did not view the importance of keeping track of competitors and nor were they decision makers when presented with competitive intelligence (pg 62). This would suggest that there is more awareness and acceptance of competitive intelligence in today's companies/organisations management.

Financial expenditure

The previous section suggested that there was a greater awareness and value on competitive intelligence. This section examines the current financial expenditure on competitive intelligence against perceived competitive intelligence awareness and value. Information on competitive intelligence expenditure was asked for question 25: *Do you have or planning to have a financial commitment to establishing Competitive Intelligence within your organisation?*

- Nil Expenditure
- Up to \$25K
- \$25K to \$100K
- Above \$100K.

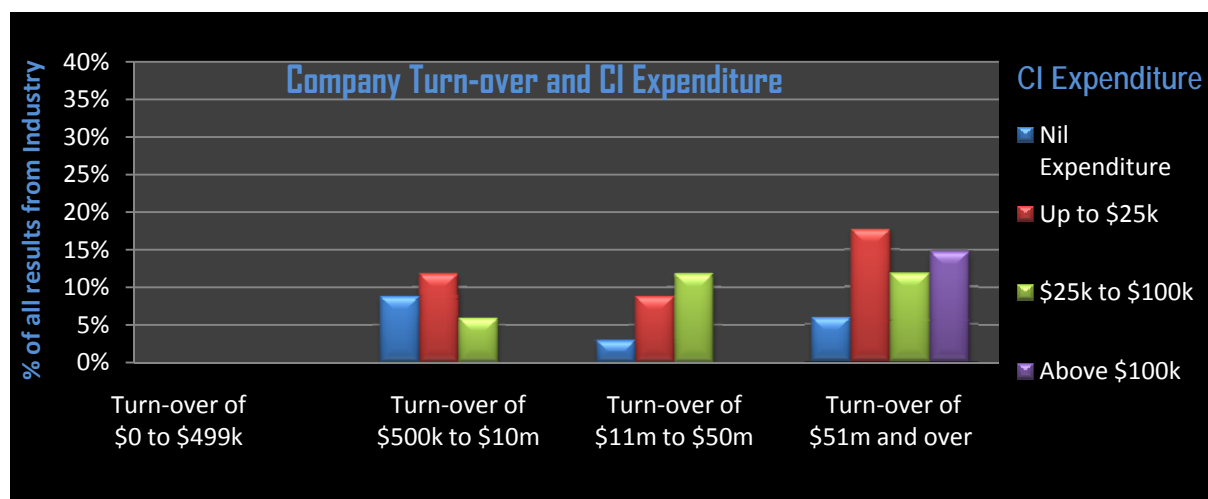
Table 13.0 provides the respondent's results to the above question and suggests that most of the surveyed companies/organisations (79%) have established a financial commitment to competitive intelligence. This table (13.0) provides a comparison with the Trengrove and Vryenhoek (1997) study results. Interestingly, the results are almost identical.

Table 13.0

Question 25: Do you have or planning to have a financial commitment to establishing Competitive Intelligence within your organisation?		
Category	Percentage	1997 Survey results
Nil Expenditure	21%	22%
Up to \$ 25K	35%	34%
\$ 25K to \$ 100K	29%	30%
Above \$ 100K	15%	14%
	100%	100%

Figure 13.1 provides a chart on competitive intelligence expenditure against company turn-over and as expected companies with a turn-over of \$ 51 million and over have a higher expenditure (i.e. above \$100K).

Figure 13.1



To validate the respondent's current view of competitive intelligence (as defined in *Question 16*) against the financial commitment of competitive intelligence, the responses from companies who believed competitive intelligence is *very important* and *important* were analysed.

The results identified that 79% of all respondents had established a financial commitment to competitive intelligence, which ranged within four expenditure categories (*Nil, \$0-\$25k, \$25k to \$100k and Above \$100k*). Twelve per cent of the responses categorised that *competitive intelligence is very important/important* and had financial commitment to competitive intelligence of over \$100k.

Six respondents answered that they had no financial commitment, but confirmed in *Question 26* that they were planning to improve the ability to track their competitors and improve their competitive position (i.e. competitive intelligence was seen as a priority). Table 13.2 compares respondents' beliefs in competitive intelligence against expenditure.

Table 13.2

Respondents who believe in competitive intelligence: Category	Against Current Competitive Intelligence expenditure			
	Nil Expenditure	Up to \$ 25K	\$ 25K to \$100K	Above \$100K
Is very important	18%	21%	18%	12%
Is important	3%	15%	6%	3%
Is neutral	0%	6%	0%	0%
Is not very important	0%	0%	0%	0%

Question 26 also identified that 50% do not intend to improve its company's tracking of competitors or competitive position versus 44% who answered yes. There were two respondents (6%) who answered *not sure*.

While both results are very similar on competitive intelligence expenditure, Trengrove and Vryenhoek (1997) study focused on 'Plans for improving competitive intelligence against Expenditure on competitive intelligence, where this study has focused on the respondent's value of competitive intelligence against competitive intelligence expenditure. Trengrove and Vryenhoek (1997) study concluded that it was impossible to make any conclusive assumption, hence the reason for this study being focused on the respondent's value of competitive intelligence against competitive intelligence expenditure.

Key findings to the companies/organisations value of competitive intelligence

The research indicates the following key findings:

- The survey suggests that 79% of companies/organisations have established a financial commitment to competitive intelligence. However, in comparing both survey results (this survey and Trengrove and Vryenhoek (1997) survey), the financial commitment results are very similar with only minor movement. While it is expected that companies with a turn-over of *\$51 million and over* would be expected to have a spend of *above \$100k* on competitive intelligence, only 12% of this group responded that they believed in the value of competitive intelligence against the current competitive intelligence expenditure.
- Using Rouach and Santi (2001) competitive intelligence attitude framework (*Sleepers, Reactive, Active, Assault and Warrior*) (2001), 44% of respondents categorised their approach as *Reactive*, followed by 35% as *Active* and 21% believed that they were operating an *Assault and Warrior* competitive intelligence operation. Of which, six out of seven *Assault and Warrior* competitive intelligence operation companies had a turn-over of \$51 million and more, suggesting that only these companies are able or willing to provide resourcing (people and funding) to maintain this style of competitive intelligence environment.
- The ICT and Technology industry had the highest response (15%) in the *Reactive* attitude, followed by 12% in the *Active* attitude by the Finance, Insurance and Real Estate industries.
- The results from the research suggest that there is a greater awareness and value on competitive intelligence, with 79% of companies operating *Reactive* and *Active* competitive intelligence operations and they felt this element was very important (67%) or important (23%) to grow and develop their company.

Content Analysis:

- Some companies confirmed that they are planning to use third party resources to develop better knowledge management processes in the hope of providing a greater understanding of the marketplace. Respondents acknowledged that without robust knowledge management processes, they will be unable to understand their competitive market.
- Marketing departments were still confirmed as having the primary role for managing their competitive intelligence operations. In larger organisations, the responsibilities were assigned to regional managers or strategy groups outside of New Zealand.

Competitive Risk Factors

Exposed to Competitive Risk

The objective of this analysis was to identify the surveyed companies' and organisations' perceived value of current and future competitive risk.

To assist with this objective, Question 20 asked: *To what extent do you regard your company to be exposed to risks from?*

- *Existing or potential competitors*
- *New technology*
- *General economic trends*
- *Other*

Across all three risks (*Existing or potential competitors*, *New technology*, *General economic trends*), the highest rating per risk was 47% of surveyed respondents believed that there was an increase of risk *existing or potential competitors*, 56% perceived that the risk of *new technology* was manageable, followed by 38% indicating that there was an increase of risk in the *General economic trends* category.

In comparing the results against Trengrove and Vryenhoek (1997) study, 48% of surveyed respondents believed that there was an increase of risk from *existing or potential competitors*, 37% perceived that the risk of *new technology* was manageable, followed by 38% indicating that there was an increase of risk in the *General economic trends* category. It is important to note, that while there was not a global economic recession in 1997 as there is in 2009, the results from both studies are the same. The increased confidence in managing new technology risks could reflect the current technology competency within companies/organisations compared to 1997.

Figure's 13.3, 13.4 and 13.5 provides the respondent's results to the above question and displays the exposure to competitive risk factors.

Figure 13.3

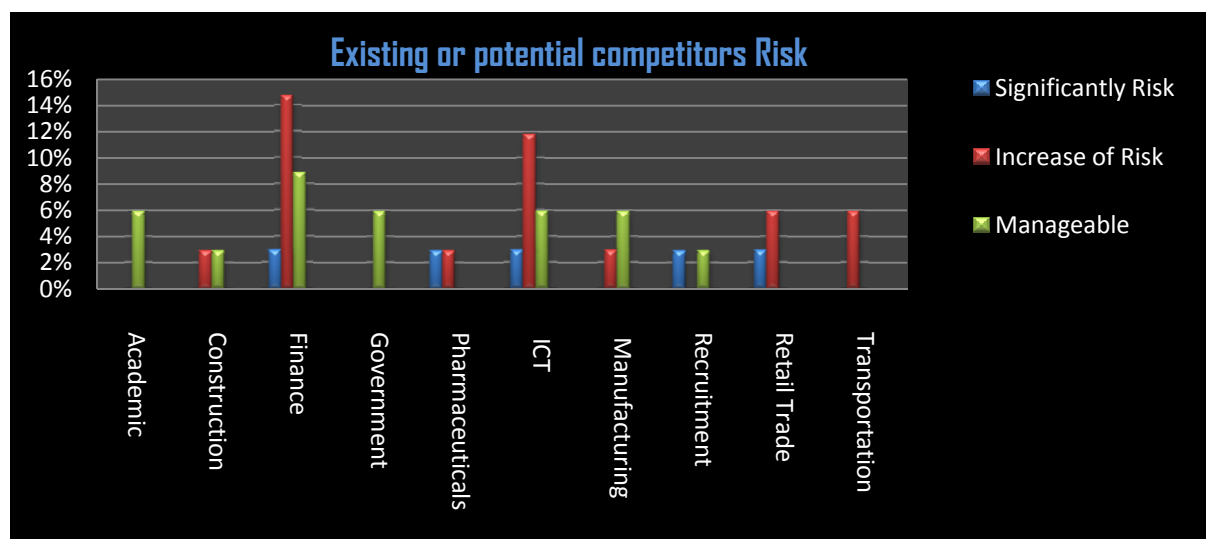


Figure 13.4

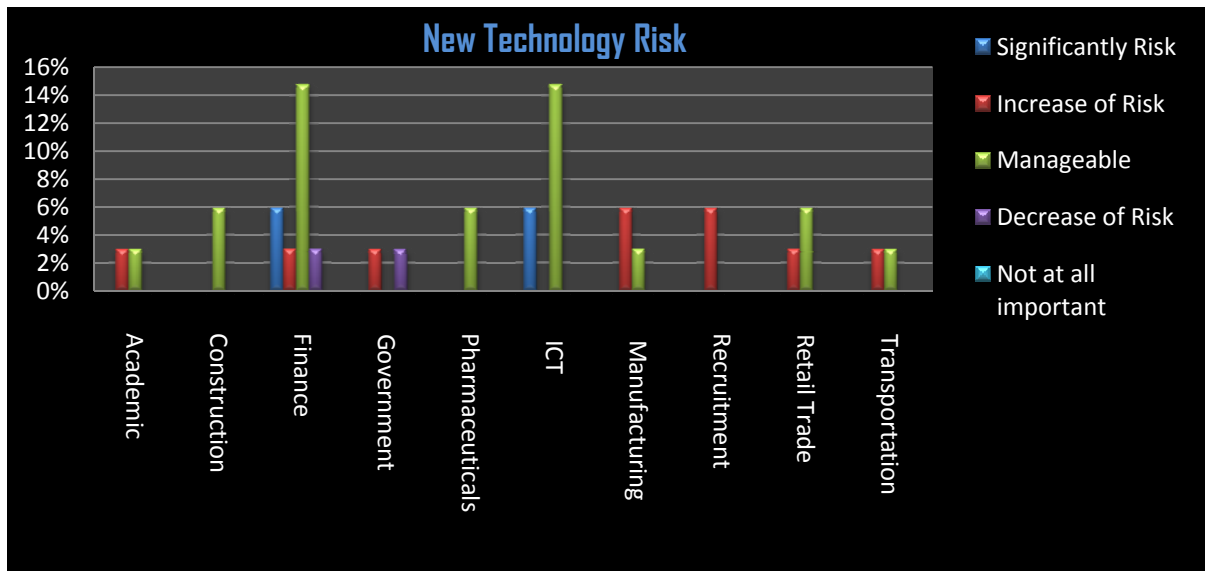
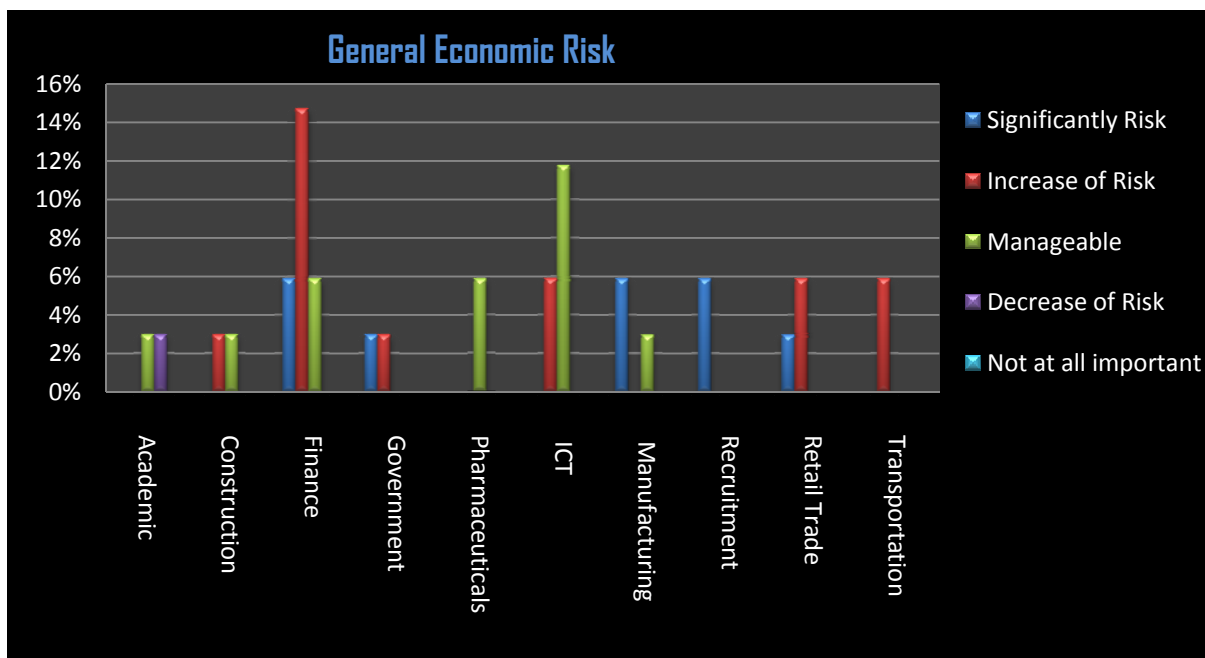


Figure 13.5



To assess these two risks (*existing competitor and new technology*) over the next three years (and outside the current economic climate), Question 21 asked, "Over the next three years, what do you see as being the main things that you will need to know in order to maintain or improve your competitiveness?"

- *New products or services.*
- *New technology and processes.*
- *How to compete in a global market (i.e. abroad).*
- *What existing competitors are likely to do?*
- *What new or potential competitors might do?*
- *Other*

While 56% perceived that the risk of *new technology* was manageable, the results from this question identified that 94% of respondents believed this risk would become a greater risk (*very important* 59% and *important* 35%) in the next three years. Equally, respondents perceived that there would be an increase to the current *Existing or potential competitor* risk (47%) and this would increase in risk to 74% in the next three years (in Question 21).

Figure 13.6 and Figure 13.7 provides the respondents' results to the above question and displays the current existing competitors risk versus future competitors risk chart and current existing technology risk versus future technology risk.

Figure 13.6

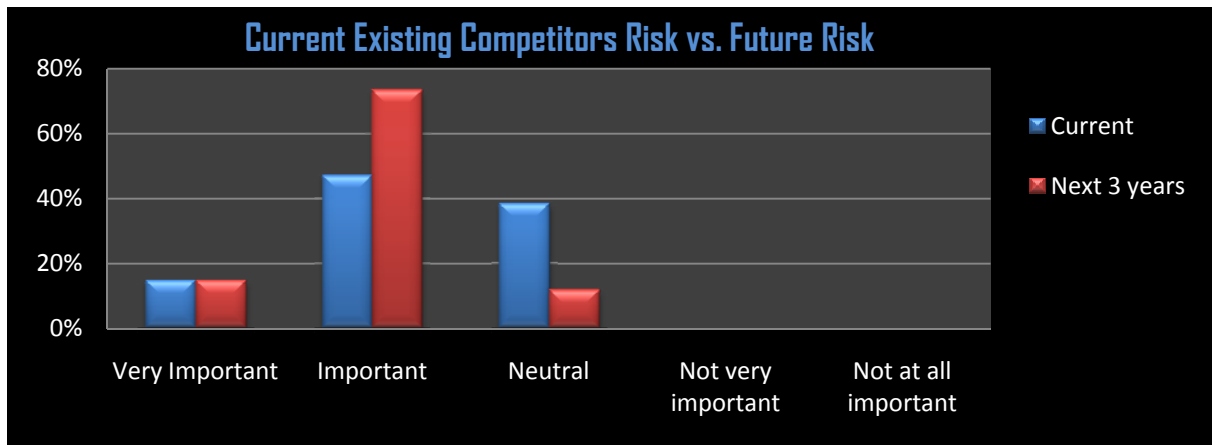
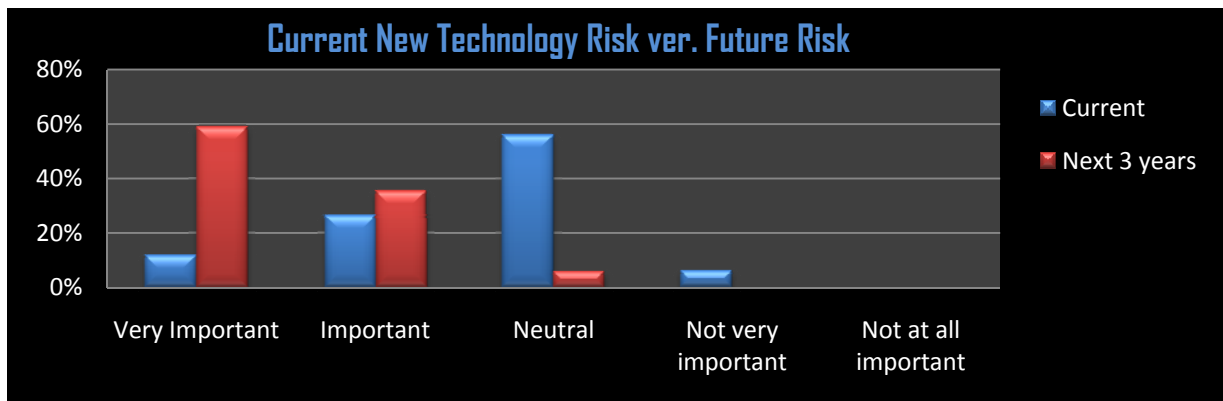


Figure 13.7:



The current and future (next 3 years) suggests that the surveyed companies/organisations believe that there will be future challenges with technology and their existing competitors. While other elements were explored (page 66 of this report), the *Existing or potential competitor* and *new technology* risks had the highest responses of the Question 21 elements. Table 13.8 and Table 13.9 provide the full results by Industry, current and future risk and importance.

Table 13.8: Current existing competitors risk versus future competitors risk table

Industry	Current					Future				
	Significantly Risk	Increase of Risk	Manageable	Decrease of Risk	Not at all important	Very / Important	Important	Neutral	Not very important	Not at all important
Academic			6%				6%			
Construction		3%	3%				3%	3%		
Finance	3%	15%	9%			9%	18%			
Government.			6%				6%			
Pharmaceuticals	3%	3%					6%			
ICT	3%	12%	6%			3%	12%	6%		
Manufacturing		3%	6%				6%	3%		
Recruitment	3%		3%				6%			
Retail Trade	3%	6%				3%	6%			
Transportation		6%					6%			
Totals	15%	47%	38%	0%	0%	15%	74%	12%	0%	0%

The results suggest that the “Finance, Insurance and Real Estate” industries are most concerned that the state of competition will increase in the next three years

Table 13.9: Current existing technology risk versus future technology risk table

Industry	Current					Future				
	Significantly Risk	Increase of Risk	Manageable	Decrease of Risk	Not at all important	Very Important	Important	Neutral	Not very important	Not at all important
Academic		3%	3%			6%				
Construction			6%			3%	3%			
Finance	6%	3%	15%	3%		15%	9%	3%		
Government		3%		3%		3%	3%			
Pharmaceuticals			6%				6%			
ICT	6%		15%			18%	3%			
Manufacturing		6%	3%			6%	3%			
Recruitment		6%					6%			
Retail Trade		3%	6%			6%		3%		
Transportation		3%	3%			3%	3%			
Totals	12%	26%	56%	6%	0%	59%	35%	6%	0%	0%

The results clearly identified that the seven industries (*Academic & Training, Finance, Insurance and Real Estate, Government & Public Administration, ICT and Technology, Manufacturing, Retail Trade and Transportation and Public utilities*) also have high concerns that the technology risk will also increase in the next three years.

The need for information to remain competitive

Question 21 has been used to provide insights into the “need for information to remain competitive goal”. This section of the report explores some factors and the processes and systems used to achieve this goal:

Factors to remain competitive:

- New products or services.
- New technology and processes.
- How to compete in a global market (i.e. abroad).
- What existing competitors are likely to do?
- What new or potential competitors might do?
- Other

Processes and systems used to remain competitive:

- Informal use of rumours, personal contacts.
- Competitor audits.
- Market research.
- Benchmarking.
- Strategic reviews.
- Integrated competitive intelligence systems.

Factors to remain competitive

As identified in Table 14, there are a high percentage of respondents that view ‘Elements to remain competitive’ as very important/important to remain competitive in the future (next three years). Only 3% of responses indicated that *new products or services* and *what new or potential competitors might do* as not *very important*. The only exception was the need to gain information on *how to compete abroad*, which had a low importance rating (29% believed this risk to be *Neutral*).

Table 14.0: Elements to remain competitive

Question 21: Over the next three years, what do you see as being the main things that you will need to know in order to maintain or improve your competitiveness?					
Elements	Very Important	Important	Neutral	Not very important	Not at all important
New products or services	47%	38%	12%	3%	0%
New technology and processes	59%	35%	6%	0%	0%
How to compete in a global market (i.e. abroad)	21%	18%	29%	15%	18%
What existing competitors are likely to do?	15%	74%	12%	0%	0%
What new or potential competitors might do?	12%	62%	24%	3%	0%

The results of survey questions 7, 15, 17 and 18 indicate that the majority of surveyed companies/organisations were focused only on the New Zealand domestic market with little or limited focus on the wider global market place. This indicates an opportunity not yet realised for these companies. They may also be at risk from global companies establishing a presence within New Zealand.

The results from this research are very similar to Trengrove and Vryenhoek (1997) study. Their survey highlighted and recognised that there was an important need to gather information on new products, new technology, existing competitors and new competitors as elements to remain competitive and they also identified that there was a New Zealand domestic market focus.

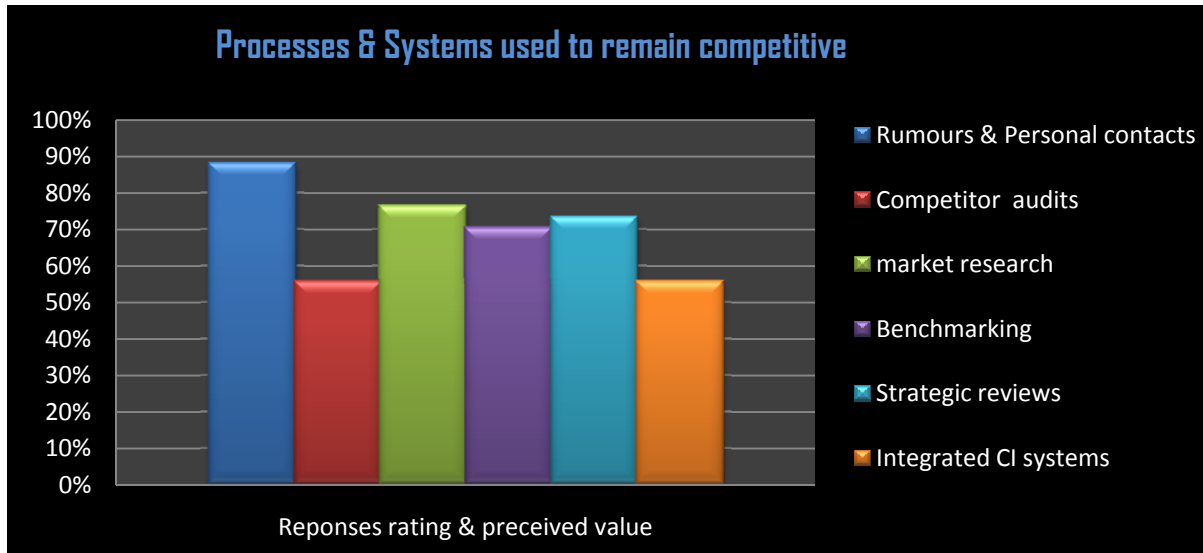
Processes and systems used to remain competitive

Question 23 asked *"What best describes the processes and systems used in your organisation to help keep track of what the competition is doing (or likely to do), or other factors that may affect your competitive position (for example technology, changes in consumer tastes, new regulations)"*

- *Informal use of rumours, personal contacts*
- *Competitor audits*
- *Market research*
- *Benchmarking*
- *Strategic reviews*
- *Integrated competitive intelligence systems*

The results from this analysis indicates that the main processes and systems used to remain competitive was the use of rumours and personal contacts, Figure 14.1 has been created to provide rankings on each of the above elements based on importance. This highlights the number of respondents who have indicated that the value of the element was very important or important.

Figure 14.1: Processes & Systems used to remain competitive



The results of the survey suggest that the principal system used to gain competitive information is by the use of the *rumours and personal contacts* element (88%), followed by *market research* (76%). It should also be noted, that many of the survey respondents conducted their market research through their work and social networks. Integrated competitive intelligence systems had the lowest perceived value.

Again the results from this research are very similar to Trengrove and Vryenhoek (1997) study. Their survey identified that the use of *rumours and personal contacts* element was the highest perceived value, followed by *strategic reviews*. Integrated competitive intelligence systems also had the lowest perceived value (56%).

Key findings to the Competitive Risk Factors

The research indicates the following key findings:

- 88% of the respondents believed that rumours and personal contacts (i.e. work and social networks) played an important element in the process used to remain competitive, followed by the use of market research (76%) and strategic reviews (74%). Of which, the surveyed respondents confirmed the use of their work and social networks to complete market research and/or strategic reviews.
- Almost all of the respondents (97%) believed that they are in competitive markets, a similar percentage (94%) believed that these markets would become more competitive over the next three years. The largest *increase of risk* was in the *Finance, Insurance and Real Estate industries* and *ICT & Technology* companies.
- The highest rating per risk was the existing or potential competitor (47%) which was similar to the 1997 study. Interestingly the new technology risk was rated as considerably more manageable at 56% compared to 37%, which suggests the current technology competency with today's companies/organisations. While there is currently a worldwide economic recession, 38% believe that there will be an increase in this risk, which is identical to the 1997 study. It is important to note, 38% believed that the new technology risk would become a greater risk in the next three years. The Academic & Training, Finance, Insurance and Real Estate, Government & Public Administration, ICT and Technology, Manufacturing, Retail Trade and Transportation and Public utilities industries were identified as having a concern with the increase in technology risk over the next three years.
- 73% of respondents confirmed that their main competitors were located in New Zealand and they had a strong focus on the New Zealand marketplace rather than regional or international markets. This would suggest that the surveyed companies could have a limited understanding of how the external (international) 'forces' are impacting/shaping the New Zealand economy and marketplace (e.g. Baumard three levels of economic intelligence, page 20).
- While it has been identified that New Zealand markets are competitive and are most likely to become more competitive in the next three years, this would suggest that monitoring competition would be a high priority. However, only 56% viewed integrated competitive intelligence systems as important (47%) and *very important* (9%), 44% believed it was *neutral* (29%) or *not very important* (15%).

Content Analysis:

- Content analysis also reinforced the new technology risk and that some of the surveyed companies would need to move to a new technology earlier adopter environment to enable or maintain a competitive edge. It is important to note that this environment is not without its own risks, such as a high cost for establishing and developing these technologies and that they are often unproven.
- The survey respondents acknowledged the reliance on rumours and personal contacts element to form market intelligence by industries who categorised themselves between the \$500k to \$10 million annual company turn-over organisations.

Plans for improving competitiveness

As identified in the last section, the use of *rumours and personal contacts* were strongly favoured, where 88% of surveyed companies/organisations used this medium as the preferred process and system to remain competitive. The objective of this section is to examine companies' and organisations' plans to improve their competitiveness through the use of competitive intelligence. Two key elements are examined, the *current competitive environment and value* and *future value of competitive intelligence*.

This theme has also been reflected in the content analysis with the use of *rumours and personal contacts* and a heavy reliance of supplier/vendor tools for benchmarking of competitors and market insights.

Current competitive environment and value

To analyse the value of competitive intelligence within the current competitive environment, two questions were asked to determine how their companies/organisations were monitoring (i.e. tracking) what the competition is doing or likely to do (Question 22) and the process of using an integrated competitive intelligence system (Question 23).

Sixty-eight per cent responded that they understood the factor, but this could be managed better by understanding "*what the competition is doing or likely to do*". There were eight responses who indicated that they understood this element and that it was well managed. There were three responses who believed that this value was neutral. There were similar results when asked if their company/organisation understood their competitiveness, 68% responded that they understood the element, but it could be managed better. There were nine responses who indicated that they understood this element and that it was well managed. There were overlaps between industries that selected the *Understood and are well managed* for both questions.

When asked if their companies/organisations were using integrated competitive intelligence systems to improve their monitoring of their competitors (Question 23), 47% believed that integrated competitive intelligence systems were *important* and enabled them to track their competitors 9% believed that this element was *very important*. A total of 44% of respondents believed that having integrated competitive intelligence systems was neutral (29%) or not very important (15%).

The results also identified that there was a 'gap' between the value and importance of operating integrated competitive intelligence systems and people supporting competitive intelligence. For example, 65% of the respondents believe competitive intelligence is very important/important factor (page 61), while there were 44%, who did not value an integrated competitive intelligence system. This split would be a barrier when trying to fully implement competitive intelligence systems.

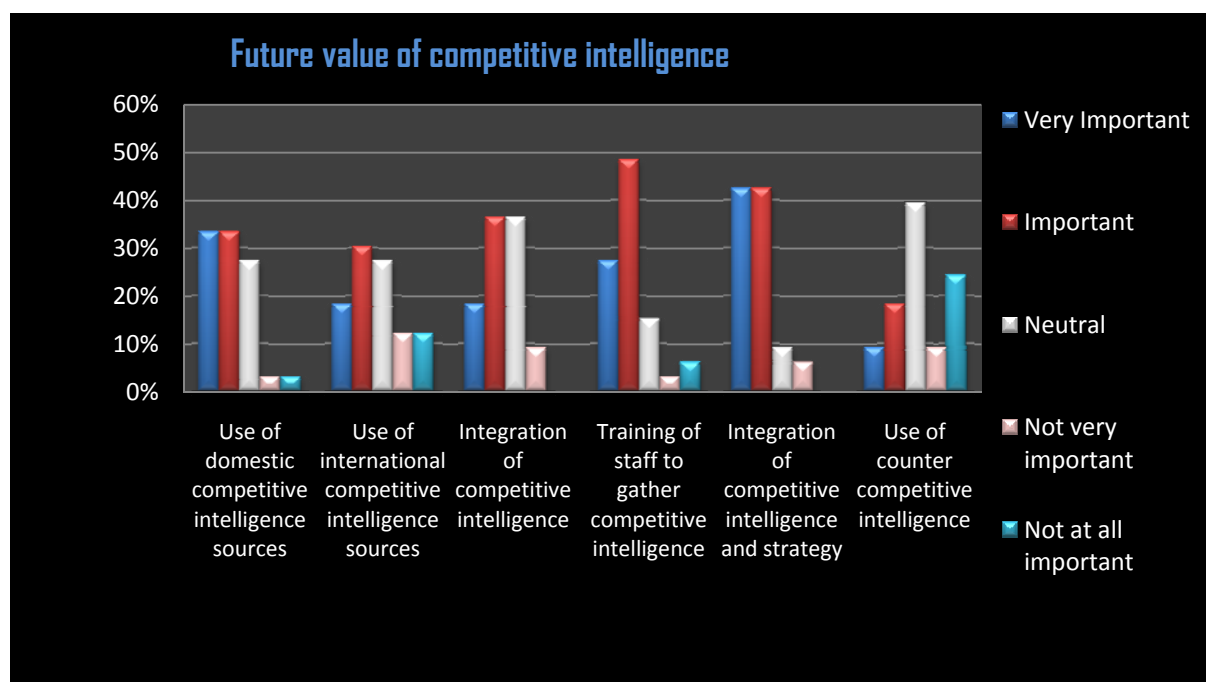
Future value of competitive intelligence

To determine if this mindset would change, Question 28 asked *What do you think would be most likely to help your organisation improve its ability to keep track of what your competitors are doing and of your own competitiveness?*

- *Government assisted programmes & support*
- *Use of electronic sources (including the internet) & databases*
- *Competitor analysis and audits*
- *Use of domestic competitive intelligence sources*
- *Use of international competitive intelligence sources*
- *Implementation of competitive intelligence systems*
- *Training of staff to gather competitive intelligence*
- *Use of 'soft' information, such as rumours*
- *Integration of competitive intelligence and strategy*
- *Handling of ethical issues*
- *Use of counter competitive intelligence*

Each respondent confirmed their importance. 66% believed that the use of domestic competitive intelligence sources was *very important* (33%) or *important* (33%), however, there was a 33% who believed that this element was *neutral* (27%), *not very important* and *not at all important* (3%). When asked about the integration of competitive intelligence and strategy, there was an 84% response that this element was *very important* (42%) or *important* (42%). Figure 15.0 provides the results of the analysis.

Figure 15.0 Future value of competitive intelligence



Key findings to the future plans of competitive intelligence

The research indicates the following key findings:

- When comparing the perception of competition increasing and how companies/organisations have implemented unstructured and informal processes (for example, rumours and personal contacts) to monitor competition there is clearly a significant gap. This would suggest that within the current environment there is a complacent attitude by the surveyed companies/organisations to fully understand their marketplace in a structured and coherent process.

This theme is supported - when respondents were asked about implementing future plans to monitor competition half the respondents said yes (47%) they were planning to and the other half answered no (47%), there were 2 responses who were unsure (6%).

- Competitor audits and benchmarking were highly valued as the best process for formally tracking competitors, while rumours and personal contacts remains the highest used medium (unstructured and informal).

The least favoured method of tracking competitors was the use of counter competitive intelligence, where 73% of respondents believed that this element was *neutral* (39%), *not very important* (9%) and *not at all important* (24%)

- The results from the survey identified that 66% of respondents believe the use of domestic competitive intelligence sources are very important/important. However the current domestic competitive intelligence sources are inadequate and undeveloped. This is critical to the development of competitive intelligence and if not addressed, will impact the future uptake of competitive intelligence within New Zealand.
- When asked about Government assisted programmes and support, 76% believed this element was *neutral* (21%), *not very important* (26%) and *not at all important* (29%). Only seven companies, who were heavily involved in trade or tourism, believed Government assistance was *very important or important*. This result confirms the current mindset of companies on the role of the New Zealand Government and limited focus/ emphasis on the global market place.

Content Analysis:

- Analysis confirmed that there was the lack of formal structures and process used to measure and benchmark competitive information. Half of the respondents stated that they were planning to establish a more formal process by using third party resources/vendors to assist developing these processes and/or Customer Relationship Management solutions.

This is reflected by many of the respondents confirming the use of AC Nieslsen, who provides services like measure their market performance and analyse market dynamics.

- The results suggest that those responsible for maintaining competitive intelligence operations is still the marketing department who has been tasked to identify what the market, business strategy and direction, what are the new competitors products being developed and what are the business drivers. The potential issue is that this is outside the core function of a marketing team, which is focused on branding and marketing campaigns.

Conclusion and Implications

Globalisation and rapid technology advancements, like the internet are having a profound change and impact not only in the way companies are operating, but in how it is changing and shaping New Zealand's economy.

The marketplace has changed from a local community to a global village business model (Amin and Thrift, 1994). New Zealand companies are not just competing against other New Zealand companies, but they are competing against other companies who operate in a global marketplace. It is well documented that these global companies are using competitive intelligence not only as tool to monitor and engage with their marketplace, but to also enable strategic planning to grow and establish new markets.

The aim of this research was to compare the state of competitive intelligence in 2009 with Trengrove and Vryenhoek (1997) study results. Specifically the perceived value and maturity of competitive intelligence within the New Zealand private and public sectors. To understand this goal, five key areas were analysed:

1. The current state of market competition within New Zealand.
2. The relationship between knowledge management and competitive intelligence.
3. New Zealand companies/organisations value of competitive intelligence.
4. Competitive Risk Factors.
5. Plans for improving Competitiveness within New Zealand.

Current state of the market competition

This research identified that the surveyed companies/organisations clearly believe that their competitive environment is challenging and is likely to become more challenging over the next three years. Interestingly, 70% of surveyed companies confirmed that their main competitors were based in New Zealand and they had a strong focus on the New Zealand marketplace only. As a result of this strategy the surveyed companies may be at a greater risk from external or international competitors.

Also identified, companies *with a turn-over of \$500k-\$10 million* had the highest number of competitors (20 or more). Established companies with a higher turnover tended to have a lower number of competitors, perhaps reflecting the cost of entry barrier and maturity of marketplace.

The relationship between Knowledge Management and Competitive Intelligence

As outlined in the literature review, Nonaka (1991) states that knowledge and strategic use is the key source for creating and maintaining competitive advantage. This is reflected by all of respondents confirming that they perceived that there was a link between knowledge management and competitive intelligence. However, there appears to be a greater understanding and acceptance of competitive intelligence than knowledge management. This was highlighted by industries who believed that developing and sharing knowledge was imperative for competitiveness and their success and had a lower response to the effective use of knowledge management (i.e. was well managed and understood), compared to competitive intelligence. The risk of not managing or understanding knowledge management is that without this core element it would be very difficult to implement and maintain a fully developed competitive intelligence operation.

Additionally, 88% of the respondents confirm the use of rumours and personal contacts as the process and system used to remain competitive. This analysis also confirms Rothberg and Erickson (2005) theory that if unmanaged, there can be conflict between knowledge management and competitive intelligence values. It is important to note, due to the medium being unstructured, this channel does not promote the established, sophisticated and coordinated information gathering required by competitive intelligence.

The value of managing Knowledge Management and Competitive Intelligence

While 79% of the surveyed companies/organisations had established a financial commitment to competitive intelligence, the survey results were very similar to the 1997 survey results. This would suggest that there has been very little development of competitive intelligence within New Zealand. This theme is also highlighted with only 12% of companies (with a turn-over of \$51 million and spend \$100K & above on competitive intelligence operations) believing in this value.

As highlighted by Rouach and Santi (2001), most of the SME European companies operated a reactive and active style of competitive intelligence operation, which is similar to the New Zealand environment. The surveyed companies confirmed that they operated *Reactive* (44%) and *Active* (35%) competitive intelligence operations. However, the responsibility for maintaining these operations was assigned to the sales and marketing teams and not the CEO or General Manager. This reporting structure could lead to the lack of senior management 'buy-in' and promote conflict with other business priorities, resulting in the misalignment of company strategy and missed market opportunities.

After applying Rothberg and Erickson(2005) "Strategic Protection Framework" to assist with measuring knowledge management and competitive intelligence risks, there appears to be discrepancies between Rothberg and Erickson category definitions (i.e. industries with a low KM risk and low CI risk) and the

respondents answers, for example companies/organisations who indicated that they were SPF Industry A companies had the high percentages in the *understood and well managed* for managing competitive intelligence and knowledge management, where SPF Industry D industries had high percentages in the *neutral* and *not understood* categories for the same elements.

Competitive Risk Factors

As identified by Murphy (2005), all companies are subjected to internal and external business drivers and the associated risks, for example tangible (new technology) and intangible (existing and potential competitors) elements. This is reflected in that almost all of the surveyed companies (97%) believed that they are in competitive markets. A similar percentage (94%) believed that these markets would become more competitive over the next three years from *new technology* risk (94%) and *existing or potential competitors* risk (88%). As most new technology trends are established outside of New Zealand and/or new global competitors are formed, it is surprising, that the surveyed companies focus was only on the New Zealand marketplace rather than regional or international markets. This would suggest the need for companies to develop structured and comprehensive monitoring processes (like competitive intelligence). However, only 56% viewed integrated competitive intelligence systems as *important* (47%) or *very important* (9%).

Future plans for improving competitiveness

While 56% believed competitive intelligence systems were seen as *important* to *very important*, only half of the respondents (47%) said they would implement integrated competitive intelligence systems in the future. The use of rumours and personal contacts still remains the highest valued communication channel used to understand their competitive markets.

This current mindset is the fundamental challenge for New Zealand companies if future competitive (intelligence) opportunities, in a coordinated, integrated and structured manner are to be gained. If this challenge is overcome, New Zealand companies can then start investigating other opportunities and compete equally in the global market.

Also following Murphy (2005) theme of internal and external business drivers, the current economic and environmental drivers are also identified when asked if Government assisted programmes and support were made available to facilitate the growth of New Zealand companies in the global marketplace (i.e. using similar programmes which have been established by Japanese and Chinese Governments). Seventy six per cent of the respondents believed this was *neutral* (21%), *not very important* (26%) and *not at all important* (29%). This result indicates that companies do not see the New Zealand Government as an enabler. This would also reflect the limited focus/emphasis on the global market place.

Comparisons between this study and Trengrove and Vryenhoek 1997 study

Overall there was similar correlation between the findings of this study and the 1997 study.

However, there were a few differences. For example Trengrove and Vryenhoek (1997) study stated that 88% of respondents believed that they were in competitive markets and that the main risks they were facing were *existing competitors* and *new technology* risks, compared to this study of 68%, this is a significant decrease.

There appears to be a greater acceptance and awareness of competitive intelligence through the use of market knowledge within today's middle managers, compared to the 1997 study, *where middle management was not seen to have an important role*. It is difficult to determine if this change occurred due to the growing maturity of knowledge management as business discipline.

However it is important to note, the use of rumours and personal contacts continues to have a strong presence in both studies and there is continues to be an inward focus on the New Zealand marketplace, rather than a global market place.

Conclusion of the research question

In response to the research question "Have New Zealand Private and Public Sector Organisations developed a better understanding of competitive intelligence as a valuable business resource OR does it remain undervalued and immature"?

In summary, YES there have been improvements made in the awareness of competitive intelligence as a business tool, but there are still fundamental issues which need to be addressed to enable maturity, for example:

- To fully implement the benefits of competitive intelligence, companies will need to establish sophisticated information gathering processes, rather than the use of unstructured channels, like rumours and personal contacts.
- The overall responsibility for competitive intelligence operations should be maintained by the CEO or General Managers, who can assign dedicated resources to maintain, promote and educate competitive intelligence to all staff.
- Address the perceived marketplace complacency, by applying competitive intelligence to monitor and track global opportunities and threats.
- Incorporate competitive intelligence into the company's strategy plans or objectives of the strategic planning teams.

Recommendations

For New Zealand companies to gain the full potential of competitive intelligence systems:

1. Establish clear objectives for maintaining competitive intelligence operations and ensure that these objectives are integrated into the company's strategy plans and/or goals of the strategic planning teams.
2. Raise the profile and awareness of competitive intelligence as a business discipline to provide a greater understanding of their marketplace and competitors. This would include competitive intelligence education, the use of structured information gathering channels (i.e. domestic intelligence) and that all staff are responsible for maintaining and fostering competitive intelligence.
3. Clear reporting of competitive intelligence to senior management (CEO, General Manager) and that there is sufficient resources allocated to enable accurate decision making.
4. To enable New Zealand companies to expand and compete in the global markets the New Zealand Government should encourage and assist with providing market intelligence (i.e. competitive) ion potential overseas markets.



Content of information sheet:

Participant information sheet for a research project on the state of Competitive Intelligence within New Zealand Private and Public Sector Organisations in 2009.

Researcher: Tony Skerrett of the School of Information Management, Victoria University of Wellington.

I am a Masters student in Information Management at Victoria University of Wellington. As part of this degree I am undertaking to write a research report on the state of Competitive Intelligence within New Zealand Private and Public Sector Organisations. The University requires that ethics approval be obtained for research involving human participants.

Although there is a significant amount of published information on the subject of Competitive Intelligence, there is very little on the Competitive Intelligence environment within New Zealand. I hope to interview you as a key management participant within a New Zealand Private and Public Sector Organisation will enable a greater understanding of Competitive Intelligence not only within your company, but with other New Zealand industries.

I expect that in most cases this will last less than an hour and any notes from our interview (including recordings and transcripts of recordings) will be made available to you within four weeks of the interview for you to confirm (so I can attribute information to you if required), and all copies of these I hold will be destroyed two years after the end of the project. Copies of any voice recordings (where they exist will be electronically wiped once the transcript is confirmed with you.

I will securely hold raw data from the interviews, and this will not be shared with any other parties in its raw form.

If you agree (in the consent form), your options may be attributed to you based on industry type in the final report. You may withdraw yourself (or any information you have provided) from this project (before data collection and analysis is complete) without having to give reasons or without penalty of any sort.

If you choose (on the consent form), I will provide a copy of the final research report resulting from this research when it is completed.

The research report which results from this project will be submitted to the School of Information Management for marking and deposited in the University Library. I also aim for it to be used in teaching, be published in industry or academic journals, and presented to industry groups.

✉ If you have any questions or would like to receive further information about the project, please contact me at 0274 573 251 or my supervisor, Dr William Wang, at the School of Information Management at Victoria University, P.O. Box 600, Wellington, Phone 04 463 6857.

CONSENT TO PARTICIPATION IN RESEARCH

Research project on the state of Competitive Intelligence within New Zealand Private and Public Sector Organisations in 2009

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered to my satisfaction. I understand that I may withdraw myself (or any information I have provided) from this project (before data collection and analysis is complete) without having to give reasons or without penalty of any sort.

- I consent to one interview of not more than an hour.
- I consent to information or opinions which I have given being attributed to me or my industry in any reports on this research (strike out if not applicable).
- I consent to information or opinions from my organisations employees and staff to assist with this research report (strike out if not applicable).
- I understand that the data I provide will not be used for any other purpose or released to others without my written consent.
- I consent to raw data collected as part of this research to be held by the researcher.
- I would like to receive a copy of the final case study resulting from this research when it is completed.
- I agree to take part in this research.

Signed:

Date:

Name of participant (please print clearly):



1. Name of Company or Public Sector Organisation:

2. Is your Company/Organisation a:

Private Company

Government Agency/Public Sector Organisation

3. What industry type would best describe your Company or Organisation?

Academic and Training

Manufacturing

Agriculture

Public Administration

Construction

Recruitment

Finance, Insurance, & Real Estate

Retail Trade

Health care and Pharmaceuticals

Transportation and Public Utilities

ICT and Technology

Wholesale Trade

4. Number of years your Company or Organisation has been operating?

0 - 2 years

6 – 19 years

3 – 5 years

20 years and Over

5. Number of staff employed in your Company/Organisation?

0 - 10 employees

51 – 250 employees

11 – 50 employees

251 employees and Over

6. Number of offices located in New Zealand?

One location

More than one (Approx. number: _____)

7. Do you have sites/offices located outside of New Zealand?

Yes (Approx. number: _____)

No

8. Annual Company/Organisation turn-over of your New Zealand office?

0 – \$499K

\$11 - \$50 million

\$500K – \$10 million

\$51 million and Over

9. Do you believe that your company/organisation understands:

	Understood and is well managed	Understood, but could be managed better	Neutral	Not understood	Not at all important
The importance of managing knowledge (<i>i.e. Knowledge Management</i>) to grow and develop your company.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effective use of Knowledge Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effective use of Competitive Intelligence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your company & staff are supportive and are active in promoting Knowledge Management and Competitive Intelligence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Would you describe your industry as

- Producing or selling products and services which are similar to other companies, for example electrical items, durable and nondurable goods, insurance or air travel. There is a low risk if your competitors gained access to your product or services knowledge.
- We are innovative and share knowledge between our operations, marketing and sales, but as our product and service knowledge is very specific to our company, this knowledge could not be adapted outside our company.
- We are innovative but we find knowledge to be less critical to our success, i.e. our products/processes are often easy to copy.
- We know developing and sharing knowledge is imperative for competitiveness and at the same time competitors are very interested in our proprietary knowledge.

11. Do you believe that there is link between knowledge management and Competitive Intelligence (i.e. using your company's knowledge to gain a competitive advantage)?

- Strongly agreed
- Agreed
- Neutral
- Do not believe there is a link
- Not at all important

12. Do you think Competitive Intelligence is important to your company's/organisations growth and development?

- Very Important
- Important
- Neutral
- Not very important
- Not at all important

13. How competitive would you describe the market that you are in?

- Very Competitive
- Competitive
- Neutral
- Not Competitive
- Not at all important

14. How many competitors would you estimate that your company/organisation has?

- 0- 5 Competitors
- 6 – 19 Competitors
- 20 or more Competitors
- Not sure

15. Are your main competitors located in?

- New Zealand
- Australasia
- Worldwide

16. Which category would you best describe your company/organisations approach towards Competitive Intelligence.

- No deliberate CI activity and as a company, we believe we have all the information in-house to operate a business.
- While we do not have formal CI operations or dedicated CI resources, we do some ad hoc Competitive Intelligence exercises when challenged for market share by a competitor.
- We do actively operate CI operations, which enables us to anticipate market opportunities and threats rather than reacting to them. However, our CI operation is informal and not structured (i.e. we do not follow any formal CI methods, like SWOT, Competitor Analysis etc.).
- We take Competitive Intelligence very seriously and devote considerable resources to our CI operations and conduct market gained and lost scenarios through the use of a formal CI structure.

17. How do you rate your competitiveness relative to others **IN** the New Zealand market?

- Very Competitive
- Competitive
- Neutral
- Not Competitive
- Not at all important

18. How do you rate your competitiveness relative to others **OUTSIDE** the New Zealand market?

- Very Competitive
- Competitive
- Neutral
- Not Competitive
- Not at all important

19. How will competition in your market(s) change?

- Significantly increase
- Increase
- Neutral
- Decrease
- Significantly Decrease

20. To what extent do you regard your company to be exposed to the following risks?

	Significantly Risk	Increase of Risk	Manageable	Decrease of Risk	Not at all important
Existing or potential competitors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General economic trends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (Please explain) _____

21. Over the next three years, what do you see as being the main things that you will need to know in order to maintain or improve your competitiveness?

	Very important	Important	Neutral	Not very important	Not at all important
New products or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New technology and processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How to compete in a global market (i.e. abroad)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What existing competitors are likely to do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What new or potential competitors might do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (Pls explain)

22. How would you rate your Company's/Organisations ability to keep track of

	Understood and is well managed	Understood, but could be managed better	Neutral	Not understood	Not at all important
What the competition is doing or likely to do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your own competitiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. What best describes the processes and systems used in your organisation to help keep track of what the competition is doing (or likely to do), or other factors that may affect your competitive position (for example technology, changes in consumer tastes, new regulations)

	Very important	Important	Neutral	Not very important	Not at all important
Informal use of rumours, personal contracts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competitor audits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benchmarking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strategic reviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated competitive intelligence systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Does your organisation have any plans to improve its ability to keep track of competitors and your competitive position?

	Established & implemented	Important, but not established	Neutral	Not very important	Not at all important
Use of electronic sources (including the Internet) and databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competitor analysis and audits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of domestic competitive intelligence sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of international competitive intelligence sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Implementation of competitive intelligence systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training of staff to gather competitive intelligence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of 'soft' information, such as rumours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integration of competitive intelligence and strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling of ethical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of counter competitive intelligence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Do you have or are you planning to have a financial commitment to establish Competitive Intelligence within your organisation?

Nil Expenditure

\$25-\$100K

Up to \$25K

Above \$100K

26. Does your organisation have any plans to improve its ability to keep track of competitors and your competitive position?

YES NO

If yes, what increased commitment and resources would you apply

27. How would you expect to measure or benchmark Competitive Intelligence within your Company/Organisation?

28. What do you think would be most likely to help your organisation improve its ability to keep track of what your competitors are doing and of your own competitiveness?

	Very important	Important	Neutral	Not very important	Not at all important
Government assisted programmes & support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of electronic sources (including the internet) & databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competitor analysis and audits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of domestic competitive intelligence sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of international competitive intelligence sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Implementation of competitive intelligence systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training of staff to gather competitive intelligence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of 'soft' information, such as rumours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integration of competitive intelligence and strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling of ethical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of counter competitive intelligence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix B: Data Collection methods

Data Collection methods: Key Conceptual Categories

Qualitative analysis was performed by using content analysis to determine the presence of certain words or themes within text or sets of text. The text is coded or broken down into manageable categories, such as words, word sense, phrase, sentence or concepts (Palmquist, 2005).

These themes were colour coded to recognise the key words and similar concepts to identify the key Conceptual Categories (KWIC= Keyword Word In Context) (Rogers, 2008). The result of this analysis has identified six conceptual elements, which have been outlined in Table 16.

To assist with identifying the key conceptual categories, this assignment reviewed and defined each of the questionnaire respondent's answers into categories and the number of times these themes appeared (Mayring, 2000).

Table 16

Key Conceptual Categories	
Market	Actions
Market Competitiveness	Competitors actions and visions
Role	Constraints

Question 9	<p>[ICT industry] Quite topical -having battles . I have come in with a marketing role and what people are typically doing is creating products with out background knowledge of the market. Quite common. So I am really driving hard saying , what is your market what are your customers saying, what are competitors doing, what are the drives . I am really pushing back -at the beginning stages</p> <p>[Government industry] Effective use of competitive intelligence- we get to represent all sides of the market – you might know something in a commercial environment but we can not act on the information to our advantage</p> <p>[Manufacturing industry] Effective use of Competitive intelligence:</p> <p>[ICT industry] Your company and staff are supportive etc- just commence a company to do this for us - a third party- doing a regular programme of CI and presenting back to leadership team - about to kick off</p> <p>[Recruitment industry] Understood but could be managed better, we are doing more work around this at the moment because we have been constraints being an American listed company with head offices in Australia with a CEO that manages the observation region, so we're looking at new directions from him but that's all changing.</p>
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Question 10	<p>[ICT industry] Implementing the same products as 20 -30 other companies in NZ. Fundamental way we do things, we are doing things as other companies so as first option. However there are other areas and services we are trying to implement differently to the market -trying to protecting these</p> <p>Option 1</p> <p>[Government industry] We share very readily, we also steal very readily.</p> <p>I guess the nature of this industry, we really haven't set ourselves as competitive although we are. So from one local authority to another, they will give you what they do and I would give them what I do</p> <p>[Recruitment industry] We are very much "Aware" that we have to, in fact we're at the point where we're redesigning our overall vision of strategy to make sure that the whole company is taken ,you know 50 years at a view point in terms of future of where we're going to be positioned.</p>
Question 11	<p>[Recruitment industry] Strongly agreed, it's all about information sharing, "Knowledge is Power", you know</p>
Question 12	<p>[ICT industry] Trying to change business</p> <p>[Manufacturing industry] Quite diversified, so our product range we try and stay slightly different to what other people are doing so I would say fairly neutral actually.</p> <p>[ICT industry] Very important - change business to something else- needs to be agreed by customers</p>
Question 13	<p>[Recruitment industry] Very Competitive - Cutthroat!!</p>
Question 15	<p>[Manufacturing industry] Main competitors would be New Zealand, but we do export so there could be competition coming from them.</p>
Question 16	<p>[Manufacturing industry] Yeah we have to react to it if it's a threat to us, say someone comes out with a product that is similar, we react by altering pricing or having deals and stuff like that.</p> <p>[Finance industries] Last option – we have a formal structured market vision</p> <p>[Finance industries] We used to use pie graphs but the difficulty is to source the actual total – ok to source sales information, but not market share – information not registered anywhere – we were kidding ourselves a bit. We monitor other publications other than websites to clear out listings and make sure we have the listings we should have. Ray White does monitor market share and are focussed on the sales of assets. They know what the total stock is sold and what each franchise is selling, so they expect a franchise to have 25% or ideally 30% of the market. They monitor quite well but it does not help us. We could allocate a lot of resource but would add no value to a franchise.</p>
Question 17	<p>[Manufacturing industry] I think that when we need to be we can be very competitive.</p>
Question 18	<p>[Manufacturing industry] We're competitive outside NZ.</p>

	<p>[Recruitment industry] Competitive, across Australasia we're good but we're a small player in America compared to the likes of "Manpower" although they have very little presents in New Zealand.</p>
Question 19	<p>[Manufacturing industry] Is this short or long term, I think its probably going to stay the same, so it would be neutral can't see that changing.</p> <p>[Finance industries] Neutral – have decreased over the last year</p> <p>[Finance industries] Neutral – Mature industry been competitive for years</p>
Question 20	<p>[Finance, industries] Other – Some positions in are specialised and the pool is quite limited in NZ i.e. chief underwriting. A little exposed there- increased risk</p> <p>[ICT industry] Technology changes everything.</p> <p>[Manufacturing industry] Other risks, I can't think what other risks we could be under. Competition is always a good one. No not really at the moment.</p> <p>[Government industry] Yeah, I don't know about the decrease of risk because I believe we need to be ever aware and I think that the environment is going to change, so from our existing competitors there is a possible increase but I think that's manageable in the short term. Others – Takeover services, Shared services, change of</p> <p>[Construction industry] New technology – we hold difference to everyone else, General economic trends- managed through our way</p> <p>[Government industry] Other – environmental issues outside the terms of the nature of the market or stakeholders</p> <p>[Finance industries] Existing or potential Competitors – bolding them over New Technology- Take on new technology earlier adopters- will take on new technology before competitors Other Management of people and motivation. Real estate is all about training technique skills, getting them to understand technology and techniques in sales.</p>
Question 21	<p>[ICT industry] New Products or services - Take people online rather than print</p> <p>[Manufacturing industry] We are trying to expand our export so that is important too. Exchange rate could be a big one for us</p> <p>Very important, because it can make or break a deal basically Exchange rate is the worst in the world for being volatile. Exchange rate and ease of trade as well so tariffs and things like that. This is all to do with exports obviously.</p> <p>[ICT industry] New products_ Take people on line paper on longer- see what global leaders will do - see what happens</p> <p>[Construction industry] What existing competitors are likely to do - we are the trend setters – only what new competitors can do</p>

	<p>[Government industry] Love to do this with my previous company</p> <p>[Finance industries] What existing Competitors do- every year new competitor comes into market but focus on existing competitors as new ones disappear</p>
Question 22	<p>[Retail industry] I know them very well and would say understood but better managed</p> <p>[Manufacturing industry] Is doing is easier to do is easier than likely to do? For what they are likely to do we have no idea so that's not understood. Is doing is pretty obvious because they bring it out to the market so they can see it at the same time as everyone else. Understood but could be managed better because if we could get inside information as to what they are doing that would be great.</p>
Question 23	<p>[Retail industry] Competitor audits – most people phone me</p> <p>[Retail industry] Strategic reviews - Starting to track/ starting benching making too Biggest one rumours around town</p> <p>[ICT industry] Informal use of rumours etc - Small industry so people talk Market research – just kicking off</p> <p>[Finance industries] Competitors Audits - Don't do audits any more</p> <p>[Manufacturing industry] Other: Market feedback, most important factor, feedback from our clients also most important</p> <p>[Construction industry] Informal use of rumours etc- very important – NZ is shit – all rumours and bullshit. Benchmarking – I know what they are doing through Master Builders</p> <p>[ICT industry] Informal- Small industry. Talk between which other \no we should Market research - should be important</p> <p>[Finance industries] Market Research – look at websites searching for other listings and what they are doing - we also get notice from other websites that are active and this gives us a heads up – always looking for buyers and tenants Bench marketing – Ray White offices compete with each other In- build data base on access- all information on</p>
Question 24	<p>[Retail industry] Use of electronic sources – we do that now.</p> <p>[Retail industry] Is it established and implemented? Yes it is implemented through Nissan on our behalf</p> <p>[Retail industry] Training of staff to gather CI -Through Nissan courses no one else does those</p> <p>[Retail industry] Other- all done on here say</p> <p>[ICT industries] Use of electronic sources - Not so important as we don't have 100s of competitors</p>

	<p>[Construction industry] Use of electronic sources- I check everyone's web pages every couple of weeks Training of staff- not trained but will tell you if they know Use of soft information - Do not believe it to I see it Use of counter CI- Never tell anyone of proof what is going on – keep financial private</p> <p>[Finance industries] Computer analysis and audits - We do computer analysis but not audits Do you have any plans to implement competitive intelligence systems? No</p> <p>[Government industry] Well, the smart link is what technology we're using.</p> <p>To give relief to business setups at Queengate because like if they come over, we'll do this for them, we can get them to come around. They might want to come over anyway but we can least give them relief so they don't have to bend over backwards, so they can build here because at the end of the day you know it's going to bring more people into the city.</p>
Question 25	<p>[Finance industries] As per questionnaire – not investment – it is cost of resources we have.</p> <p>[Finance industries] Above \$100k as we have our own market research department which is well established</p>
Question 26	<p>[Finance industries] Yes, we are obtaining to leverage the AMP group strategy resources based in Sydney to supplement our research staff. They have an army over there so we want to get closer to Australia cousins and use there resources.</p> <p>[Retail industry] More focus groups with random off the street people, across section of the market that purchase the product. More money spent through tracking through AD Neilson reporting and things like that.</p> <p>[ICT industry]. Yes, Engaging with a third party who will use his considerable network to see what market is doing. He will keep us updated with anything urgent otherwise he will provide a monthly report to a select group of people in the company who will be more likely to act on it. Then we will analyse whether the investment is of the value and decide whether to grow it</p> <p>[ICT industry] Yes but nothing formal, it's sort of a "Yes" we recognize it because I think there's lots of thought that is going on but not any real tangible plans to my knowledge.</p> <p>[Construction industry] Do not know- just do it. Manually no system out there to use, just do it your self</p> <p>[Government industry] Once other markets start talking to each other – a lot more work Competition is a big sharing issue</p> <p>[Finance industries] Putting in a CRM package to track existing customer needs and what they are wanting and what competitors are offering. Electronically capturing and analysing the data to help develop strategic opportunities</p>

Question 27	<p>[Retail industry] MTA Benchmarking and Super Shop Benchmarking – garages at similar level to us.</p> <p>[Finance industries] I didn't know the answer to that. Go external and find out what competitors are doing. Not something we are contemplating. Don't know how they would do this maybe a third party on our behalf.</p> <p>[ICT industry] No thought has been given to it.</p> <p>[Retail industry] Quarterly reviews for management, monthly reviews for sales managers, all done through AD Neilson and in store competitor analysis</p> <p>[Construction industry] No idea- I just do it and hope sale/product is happy with the customer</p> <p>[Finance industries] Market and Sales. Other works.</p> <p>[Manufacturing industry] Um we do it by feedback from our clients is our most important one and also design and implementation of products and services and we will research if there is a gap in the market to see if there is a new product etc. A lot of our products are made for our clients, so new products come about by our the market telling us there is a gap for a particular products, there is also a huge offshore market that we are hoping to tap into, particular Australia, oh yeah that's a bit different then. Ok I guess from doing the trade shows as well we will un like find out what the opposition are doing as well from trade shows and stuff like that which we are going to be doing soon another one of those. We started planning on doing that next year, another couple in Australia</p> <p>[ICT industry] Do not know how we will measure or benchmark this - just need to capture it and share it and then some how mark a call if it has made a difference or not</p> <p>[Recruitment industry] We would be expected to know at least our top ten competitors are around every different section we work within and within that we expect that the people that are tasked with us in our organisation to know who all those people are, do we want them to come and work here? And whether or not then the other reasons are there to get them to come and work here effectively.</p> <p>[ICT industry] I think on the one hand it's probably product placement, so featuring function based that would be one thing , I think market penetration, customer satisfaction and the "Product" along with the cost.</p> <p>[Finance industries] Comparative competitive information which comes from TMS – (an out source research company). They capture the computer data on how we relate to our competitors ie market share, overall performance. This is presented in graph format with bench marking against competitors and we receive quarterly reports and updates</p>
Question 28	<p>[Retail industry] Integration of competitive intelligence and Strategy - Benchmarking done but not a strategy but I suppose it is all part of it</p> <p>[Finance industries] Use of electronic sources- we are sourced to do these things</p> <p>[Academic industry] Came about by funding by govt, since I have been here, funded by</p>

more students you have greater the funding - but that model has changed – does not mean we are less competitive should mean we are different in the way we approach that competition.

Would you say main competitors are AUT, Massey or smaller ones like Weltec or Poltechs?

No our main competitors - we have different markets -our core market is school leavers who make up 50% of our first year students they tend to study full time and will stay on to study further studies i.e. Honours or Masters. The other market is the mature students who usually work and study at same – it may be first time at university or not be and that they are studying at a higher level - not studying full time - different relationship than school leavers. When we talk about competitors we are talking about school leaver market we competitive predominantly with Otago and Massey. If you are talking about Auckland school leavers it is Auckland Uni , AUT and Otago. If you refer to the South Island Universities, it is Canterbury and Otago.

Market segment is it regional or NZ wide?

10-15 years we had 70% of the school leavers came from the Vic catchment area. Fewer than 50 % now come from this area but it is not because we have not maintained market share in own region but we have actively gone out and said we what students from all over NZ. All Universities are competing in local areas. People still likely to go to local uni and the local Uni will always be the strongest competitor – but all trying to recruitment outside their region and that is where the signs of competition through mass media and advertising came from.

I believe that Vic was a bit slower to start than others- Massey 1st with branding and TV campaigns in 90s and Otago followed suit quickly after, and those institutions and Ak spend more money.

What about % international Students?

In terms of way we are structured with marketing and advertising spend – only do domestic market and international is separate. They are responsible for their own recruitment and marketing of international students which has declined over the years from 15%- 16% of the market to 10-12%. Different and specific to the different markets depending on country- i.e. Asia they use agents, in USA they have relationships with other unis.

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